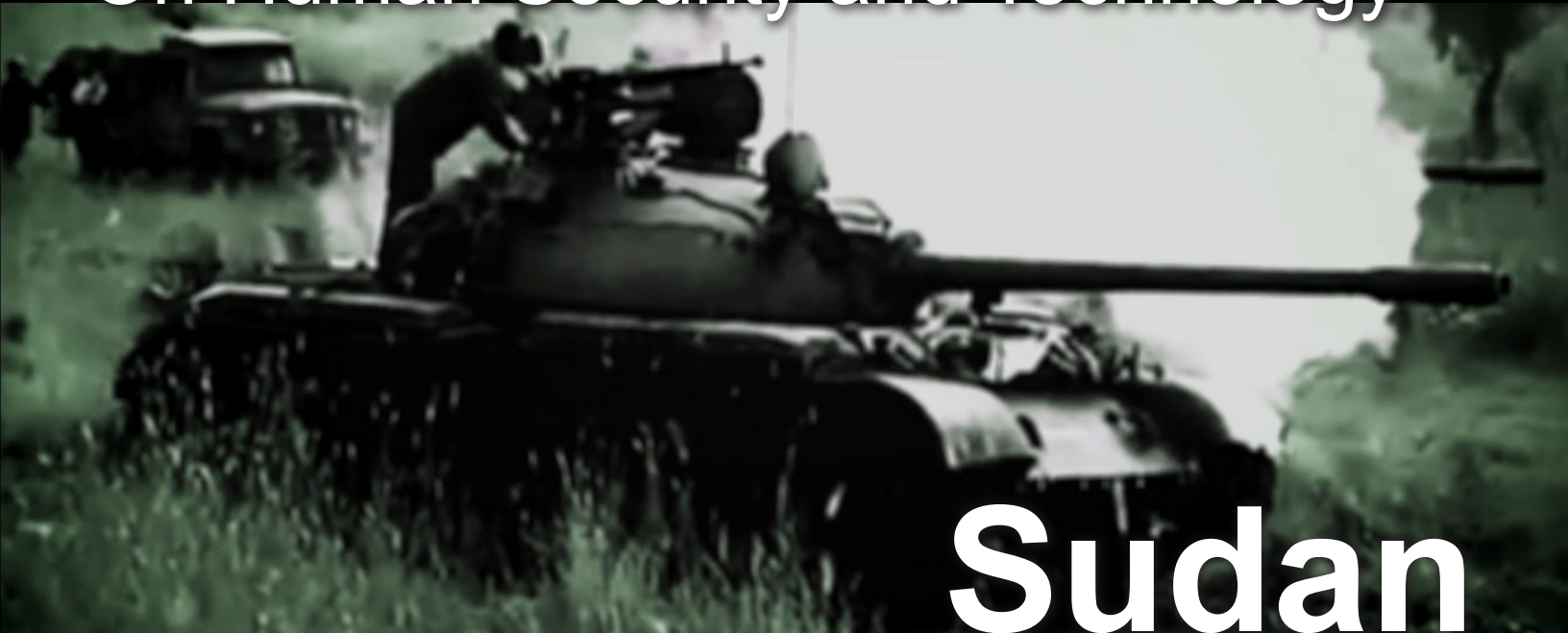




The Signal Program

On Human Security and Technology



Sudan

Anatomy of a Conflict



Harvard
Humanitarian
Initiative

Authors, Study Review, and Acknowledgements

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About The Signal Program on Human Security and Technology

The Signal Program on Human Security and Technology at HHI utilizes leading-edge information management and satellite imagery analysis systems to conduct research and education projects that seek to understand how these technologies can be employed to protect vulnerable populations affected by both human and natural disasters. The Signal Program engages in projects that seek to gather, analyze, and disseminate information in a timely manner in order to provide input for policy decisions by governments and non-governmental organizations. Through this process and the methodologies developed at HHI, The Signal Program promotes the continued professionalization of the humanitarian sector and the development of a culture of evidence-based decision making.

About the Harvard Humanitarian Initiative

The Harvard Humanitarian Initiative (HHI) is a university-wide center involving multiple entities within the Harvard community that provide expertise in public health, medicine, social science, management, and other disciplines to promote evidence-based approaches to humanitarian assistance. The mission of HHI is to relieve human suffering in war and disaster by advancing the science and practice of humanitarian response worldwide.

HHI fosters interdisciplinary collaboration in order to:

- Improve the effectiveness of humanitarian strategies for relief, protection and prevention;
- Instill human rights principles and practices in these strategies; and
- Educate and train the next generation of humanitarian leaders.

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Letter of Introduction

Sudan: Anatomy of a Conflict provides a geospatial history of the conflict along the border region between North and South Sudan from mid-2010 through June 2012. This report is also the first multi-year history of a complex humanitarian crisis derived entirely from archival satellite imagery and data in the public domain.

The primary goal of this report is to scientifically understand the progression, scope, and humanitarian impact of the conflict in Sudan. Analysis of new sources of data from open source reports, satellite imagery and video result in unique visual findings and a detailed narrative about how the conflict has unfolded along the Sudanese border.

The report is also remarkable for its level of granularity. Significant, otherwise unknowable aspects of command and control structures of military units are revealed. Apparent attack patterns are now visible. Eyewitness reports are overlaid with independent, visual confirmations of their allegations. The alleged destruction of entire communities, in some cases house-by-house, has been transformed from unconfirmed rumors in a news story into scientifically cataloged, digital evidence for all to see.

Beyond its academic and practical value, this study's methodology offers human rights investigators and humanitarian practitioners new ways of collecting information about the regions and events central to their work. To date, collecting credible evidence of alleged gross human rights abuses has been hindered by the difficulty and danger of accessing non-permissive conflict and disaster zones.

The challenge of gaining access to places and populations affected by alleged mass atrocities, such as Sudan, is compounded by a second problem: independently corroborating the often limited anecdotal, digital, forensic, or epidemiological data available. The Signal Program's methods not only tell the story of one particular conflict; they hold promise for improving the speed, volume, and accuracy of information that can be collected and analyzed in other atrocity-producing environments.

We have reached a moment when technology once restricted to government agencies and the private sector are now increasingly available to academic and not-for-profit groups. In this context, *Sudan: Anatomy of a Conflict* is a challenge to the current state of the art in human rights and humanitarian practice. It asks of its readers a willingness to change their traditional ways of seeing and understanding armed conflict and its impacts. In return, this study provides new tools for improving responses to humanitarian disasters in the future.

A handwritten signature in dark ink, appearing to read 'M. VanRooyen'.

Michael VanRooyen, MD, MPH, FACEP
Director, Harvard Humanitarian Initiative

Executive Summary

Since January 2011, humanitarian actors, international observers, and United Nations' agencies operating in the Abyei Area, South Kordofan and Blue Nile, Sudan faced increasing restrictions on their access to conflict-affected areas and populations. As a result, the most routinely available source of data about the conflict and resulting humanitarian crisis during this period were the statements and media products of parties to the hostilities themselves. These actors include the Sudan Armed Forces (SAF), the Sudan People's Liberation Army (SPLA), and the Sudan People's Liberation Army-North (SPLA-N). The majority of these accounts are contradictory and pertain to events that often occurred in the absence of third-party observers.

In this context, *Sudan: Anatomy of a Conflict* fuses event data acquired from open source media between mid-2010 and June 2012 with archival satellite imagery of locations relevant to the ongoing conflict in Sudan and South Sudan. High resolution commercial satellite imagery provides data which can independently corroborate or challenge open source reports of events. In a complex environment characterized by conflicting information and restricted access, cross-referencing satellite imagery and published reports can provide otherwise unavailable insights into the scope, severity, and progression of the conflict.

Sudan: Anatomy of a Conflict demonstrates the volume, diversity, and granularity of information pertaining to a non-permissive conflict zone that can be obtained and analyzed remotely. The purpose of this study is to present the most accurate geospatial accounting of a complex crisis possible. Examining the dynamics of the conflict revealed cross-cutting phenomena, patterns and information specific to each affected area. This study provides the public new and previously unavailable information about the conflict in Sudan while demonstrating a methodology that can be applied to the analysis of other complex disasters.

Intentional Targeting of Civilian Populations, Aid Agencies, and Critical Infrastructure

The pattern of the destruction of apparent civilian dwellings analyzed by Signal is indicative of the intentional targeting of civilian populations by armed actors, primarily SAF. The scale of this destruction directly corresponds to the subsequent displacement of affected civilians and often hampers or prevents the return of local residents to these communities.

Signal analysis:

- Documents the intentional destruction of more than 2,000 apparent civilian dwellings and other structures across areas affected by the conflict. In some locations, this study's assessment of the apparent destruction exceeds previously reported accounts of the scope and severity of the damage.
- Corroborates the reported intentional destruction and looting of four separate humanitarian facilities during 2011. These facilities were operated by the World Food Programme, Danish Church Aid, Médecins Sans Frontières and the Government of Sudan's Humanitarian Aid Commission. The destruction of these facilities and looting of goods directly limited the ability of aid organizations to respond to the growing humanitarian crisis.
- Identifies a repeating trend of armed actors targeting critical infrastructure within Sudan and South Sudan. Examples include the targeting of strategic bridges and oil fields in South Sudan by Government of Sudan-aligned forces, the apparent deliberate destruction of two oil collection manifolds in Heglig, and an attack on Talodi's electrical station by SPLA-N during an assault on the city. These types of incidents impact civilians and have broad political and economic ramifications.

Force Mobilization at Strategic Locations

Signal analyzed activity at 33 different military facilities and positions throughout Sudan during the period covered by this study. Through this process, Signal concluded that SAF-aligned forces engaged in a repeating pattern of fortifying and reinforcing strategic strong points prior to the projection of force against military and civilian targets. Signal also identified additional build-up by SPLA-aligned forces in disputed areas.

Signal analysis:

- Identifies six military encampments in Debab, Meiram, and Sitaib that corroborate allegations of Popular Defense Force (PDF) build-up in strategic areas outside the Abyei Area.
- Documents SAF build-up at bases in Nyama, reportedly a base used by the 31st Brigade, Heglig and Muglad prior to the Abyei invasion. Similar build-up was also identified at SAF-aligned locations before fighting in other areas broke out.
- Reveals that SPLA-aligned forces established fighting positions in Todach, Tajalei and Maker Abior, Abyei Area to form a front parallel to the SAF frontline directly to the north. These three locations were later attacked by Misseriya and SAF-aligned forces after they were reinforced by SPLA-aligned forces prior to the invasion of Abyei.
- Presents evidence of white Toyota Land Cruisers at the state police headquarters in Kadugli in June 2011. These vehicles are consistent with those later seen during house-to-house searches and extrajudicial executions that reportedly occurred throughout the town during that time.
- Details the movement of SAF units south of Ad-Damazin, Blue Nile and corroborates SAF's stated intention to reinforce Dindiro prior to launching operations into southern Blue Nile in pursuit of SPLA-N.
- Corroborates SPLA statements that they established camps in three disputed territories between South Sudan and East and West Darfur.

Identification and Evidence of Armed Actors Engaging in Operations

Signal's review of SAF media products revealed apparently new evidence directly connecting specific SAF units to individual operations and combat actions. In cases when armed actors in this conflict operated outside a formal military command structure, historical data provided critical information about their alleged involvement in incidents of violence.

Signal analysis:

- Confirms SAF 31st Brigade's participation in the May 2011 invasion and subsequent razing of Abyei town. The 31st Brigade allegedly led the 2008 destruction of Abyei town as well.
- Confirms that the 4th Infantry Division, 154th, 157th and 160th mixed Infantry Battalions participated in the initial SAF operations in Blue Nile between September and November 2011. These operations included critical battles against SPLA-N at Dindiro, Sali and Kurmuk. SAF Airborne and Special Forces units were involved in an airborne operation at Geissan during this time.
- Identifies inconsistencies in traditional Misseriya migration patterns corroborating the alleged involvement of specific Misseriya tribes in attacks on Todach and Maker Abior in late February and early March 2011.
- Shows that SAF-aligned forces moved in at least three lines of attack into and around Abyei town during the May 2011 invasion. Within the lines of attack, evidence of looting, razed structures and tank tracking are present.

Evidence of the Conflict's Humanitarian Impact

Satellite imagery analysis of multiple refugee and IDP camp locations provides evidence of the scope of civilian displacement resulting from the conflict in Sudan. By June 2012, OCHA reported that 665,000 people were severely affected or displaced by fighting in South Kordofan and Blue Nile and that there were 205,000 refugees from these locations there.

Signal analysis:

- Documents more than 6,000 apparent UNHCR family tents present at refugee camps in Doro and Jammam, Upper Nile, South Sudan, and Sherkole in Ethiopia in 2011 and 2012.
- Identifies hundreds of tents, including 15 UNHCR disaster relief tents capable of sheltering 600 civilians in total, assembled outside the United Nations Mission in Sudan's base in Kadugli, South Kordofan in June 2011.

About this study

Sudan: Anatomy of a Conflict is the first example, according to available literature, of the collection and retrospective analysis of open source data and archival imagery on this scale relevant to an armed conflict over a multi-year timeframe. The findings of this study are, in many cases, the result of cross-referencing imagery with open source data based on intersecting points to corroborate a reported event. Approximately 40,000 sq km of archival imagery were provided by DigitalGlobe and analyzed by Signal. Over 2,000 collected and logged open source report entries were reviewed as part of this study.

This report combines multiple media reports into a single narrative. However, it should be noted that reports carry their own inherent biases and limitations. These factors are noted in the text of the report when possible and all material referenced in the study is cited by its primary or secondary source. Publicly available information about actions allegedly taken by the actors involved in the conflict were also analyzed within the context of previous historical precedent and the influence of natural resources, environmental and weather factors. This report does not evaluate whether alleged acts documented by this study may constitute violations of international humanitarian law or Sudanese domestic law.

In addition to chronicling events and patterns related to the conflict in Sudan, this study also aims to help determine the feasibility and efficacy of applying this methodology during other complex humanitarian disasters. This approach may help identify patterns, and in some cases, predict trends in other complex disasters. A detailed explanation of the methodology employed for this study can be found in the appendix at the end of this report (See page 127).

Acronym List

ACJPS	African Center for Justice and Peace Studies
AP	Associated Press
APC	Armored Personnel Carrier
AU	African Union
AUHIP	African Union High-level Implementation Panel
AUPSC	African Union Peace and Security Council
CPA	Comprehensive Peace Agreement
CRP	Central Reserve Police
DCA	Danish Church Aid
FEWS NET	Famine Early Warning Systems Network
GNPOC	Greater Nile Petroleum Operating Company
HAC	Humanitarian Aid Commission
HART	Humanitarian Aid Relief Trust
HET	Heavy Equipment Transport
HRW	Human Rights Watch
ICC	International Criminal Court
ICRC	International Committee of the Red Cross
IDP	Internally Displaced Persons
IFRC	International Federation of Red Cross and Red Crescent Societies
JEM	Justice and Equality Movement
JIU	Joint Integrated Unit
MSF	Médecins Sans Frontières
NCP	National Congress Party
NEC	National Elections Commission
NISS	National Intelligence and Security Service
NUP	National Umma Party
OCHA	UN Office for the Coordination of Humanitarian Affairs

PCA	Permanent Court of Arbitration
PCP	Popular Congress Party
PDF	Popular Defense Forces
RCSO	Resident Coordinator Support Office
RPG	Rocket-propelled grenade
SAF	Sudan Armed Forces
SMC	Sudanese Media Center
SNPS	Sudanese National Police Services
SPLA	Sudan People's Liberation Army
SPLA-N	Sudan People's Liberation Army-North
SPLM	Sudan People's Liberation Movement
SPLM-N	Sudan People's Liberation Movement-North
SRCS	Sudan Red Crescent Society
SRF	Sudan Revolutionary Front
SSLA/M	South Sudan Liberation Army/Movement
SSP	Satellite Sentinel Project
SSUM	South Sudan Unity Movement
TBC	Technical Border Committee
UNAMID	African Union – United Nations Mission in Darfur
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nation's Children's Fund
UNISFA	United Nations Interim Security Force for Abyei
UNMIS	United Nations Mission in Sudan
UNMOS	United Nations Military Observer
UNOSAT	United Nations Operational Satellite Applications Programme
UNSC	United Nations Security Council
WFP	World Food Programme
WHO	World Health Organization

Section 1: Abyei

Mid-2010 to May 2012



Chapter I

Escalation: SAF and SPLA-Aligned Force Deployment Within and Around Abyei Mid-2010 to January 2011

January 2011 was a pivotal moment in the history of Sudan and southern Sudan. The events of that time and the months that followed would help set the stage for the broader conflict to come between Sudanese and southern Sudanese-aligned forces. The 2005 Comprehensive Peace Agreement (CPA), which formally ended Sudan's 22-year long civil war, provided for a referendum process allowing southern Sudan to choose whether it would secede from the North.

The referendum began on 9 January 2011 and lasted until the 15th of that month. Another referendum process to determine the final political status of the disputed Abyei Administrative Area, a territory claimed by both Sudan and southern Sudan, was initially scheduled to be held at the same time. As southern Sudanese prepared to vote, with an estimated 99% later voting for independence,¹ the future of Abyei remained uncertain. With the postponement of the Abyei referendum, the international community's focus turned to ensuring South Sudan's successful separation from the North.²

It was in this context that forces aligned with Sudan and southern Sudan reportedly began deploying armed actors in and around the Abyei Area. Incidents of violence spread largely unchecked throughout the Abyei Area over the following months. These events were set in motion by a failure to resolve the political status of the Abyei Area. These violent incidents would ultimately culminate in the invasion of Abyei town by SAF (Sudan Armed Forces)-aligned forces in May of that year. The May 2011 SAF invasion was the second time in three years that Sudan would attack Abyei town, displacing the local population and razing hundreds of structures.

Origins of the Dispute Over the Abyei Administrative Area

The 2005 CPA accorded special administrative status to the Abyei Area. Citizens of the Abyei Area simultaneously became citizens of West Kordofan, Sudan and Bahr el Ghazal, southern Sudan.³ The agreement created a structure for the Abyei Administration's executive council to govern the area. The CPA also outlined a roadmap for determining the geographic boundaries and managing the security of the territory.⁴ The goal of these arrangements was to allow the residents of Abyei to determine whether the Abyei Area would be part of Sudan or South Sudan.⁵

Northern and Southern officials failed to reach consensus on whether the Misseriya would be allowed to participate in the Abyei referendum. The North argued that the Misseriya had a legitimate right to vote on Abyei's final status. The South claimed the Misseriya, as a nomadic tribe, are not residents of Abyei because they only spend part of the year in the area.⁶ As a result of these long-standing disagreements, the referendum on the status of Abyei was "indefinitely postponed."⁷ Both sides continue to maintain conflicting positions on whether the Misseriya should be eligible to vote in any future referendum on Abyei's status.

The Dinka Ngok

The Dinka Ngok, a subsection of the Dinka ethnic group, and the Misseriya, Arab semi-nomadic pastoralists, both claim rights to the Abyei Administrative Area. These claims repeatedly resulted in violence, often with the involvement of Sudanese and southern Sudanese-aligned forces.

An ethnological comparison of the Dinka and Misseriya peoples shows the distinct differences between the two groups' ways of life. The Dinka Ngok live in the Abyei Administrative Area year-round. Their tukuls, traditional circular houses with mud walls and thatched roofs, are culturally significant to the Dinka. According to a Dinka



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SUDAN: ANATOMY OF A CONFLICT

Chapter I

Escalation: SAF and SPLA Force Deployment Within and Around Abyei Mid-2010 to January 2011

Ngok Paramount Chief, “a village’s tukuls ‘are the centre of the village and community’.”⁸ Throughout Abyei, tukuls are traditionally built in distinct patterns. Four or five smaller tukuls built on legs, often used to store grain, are centered around one large tukul.⁹

The Dinka Ngok live in close proximity to Arab semi-nomadic pastoralists. Attacks on the Dinka by these ethnically Arab groups often include the targeting and burning of the Dinka’s tukuls. The burning of Dinka tukuls by these groups often results in the displacement of the local Dinka population. UNHCR (United Nations High Commissioner for Refugees) explained that the attacks are “often at the instigation of political leaders in Khartoum, who shoot the men and enslave the women and children.”¹⁰ The largest Arab group present near the Dinka in Abyei is the Misseriya.

The Misseriya

The Misseriya claim their rights to the Abyei Area on the basis of their yearly migration through the region every dry season along the river Kiir (Bahr Al Arab) and its tributaries. This migration passes into areas settled by the Dinka inside Abyei and southern Sudan.¹¹ The Misseriya are divided into two sub-groups, the Zuruq and the Humr. The two main sections of the Humr are the Ajaira and Fallaita. These two main sections are further divided into five sub-sections. The Ajair and Fallaita were reportedly separated by “the British colonial administration” to “enforce law and order, collect taxes and transmit administrative orders.”¹²

These seasonal movements by Misseriya groups often lead to clashes with the Dinka. Cattle, the tribe’s primary livestock, dictate the migration patterns of the Misseriya. With increasingly erratic seasonal conditions, the pastoralists actively seek out areas with enough water and grass to sustain their cattle. The Misseriya migration south through the Abyei Area to the river Kiir (Bahr Al Arab) from Babanusa is reported to traditionally begin in September and be completed by January. The Misseriya then establish camps along the river Kiir until approximately May. In May, the cattle begin moving north again before seasonal rains become more frequent in June. By August, the herds have returned to Babanusa.¹³ In September, the cycle begins again.

The Misseriya traditionally migrate from the wet-season grazing areas (makhruf) north of the Abyei Area via three main livestock transit routes (murhals) running through the Abyei Area into southern Sudan. There are three main transit routes: the Western, Central, and Eastern murhals. Each murhal is comprised of three sub-routes, with each sub-route traditionally used by a particular Misseriya sub-group. Misseriya murhals that run through areas permanently settled by the Dinka Ngok are vulnerable to attempts by the Dinka to block their migration through the area.

Mobilization of SAF-aligned Forces in 2010

The CPA authorized only three military elements to be deployed inside the Abyei Area during the interim period: United Nations Mission in Sudan (UNMIS) peacekeepers, Joint Integrated Units (JIUs) comprised of both SAF and Sudan People’s Liberation Army (SPLA) elements, and Abyei Police. As early as August 2010, UN officials in Sudan expressed concern about the “allegiance of the members of the JIUs and Abyei Police to their respective mother units (factions) in the case of security disturbances.”¹⁴

From mid-2010 to early January 2011, numerous reports asserted that Government of Sudan-aligned and southern Sudan-aligned forces were mobilizing within and around the disputed area. Similar reports came from South Kordofan and Blue Nile at that time. Mobilization and deployment of unauthorized materiel and personnel inside the Abyei Area by either party to the CPA constitutes a clear violation of the accord.

These reports coincide with an increasingly volatile human security situation within Abyei during 2010 and early 2011. Sudan People Liberation Movement (SPLM) officials in Abyei accused SAF of supporting the forces responsible for incidents of violence during that time, though SAF denied any involvement. SPLM officials claimed

that SAF undertook a massive mobilization of the Popular Defense Forces (PDF), a Sudanese sponsored paramilitary group, sometime before December 2010 in South Kordofan “so the Misseriya can occupy the land.”¹⁵

The Relationship Between the PDF, Misseriya and the Government of Sudan

The mobilization of the PDF by the Government of Sudan was allegedly undertaken to support the Misseriya's claim of residency in the Abyei Area. The PDF and Misseriya, particularly Misseriya militias, have historical ties dating back to Sudanese President Omar al Bashir's establishment of the PDF and his widespread employment of ethnic militia groups in multiple regions of Sudan.

Bashir's practice of arming certain ethnic groups to fight as government proxies against SPLA and rebel groups reportedly began before he became president and continues to this day. Starting in 1985, Omar Al Bashir served as a SAF Brigadier General in Muglad, South Kordofan.¹⁶ In Muglad, the reported headquarters of the Misseriya, Bashir reportedly “implemented Sadiq al-Mahdi's policy of arming ethnic militias against the SPLA rebels with an alacrity not displayed by other officers.”¹⁷ Sadiq al-Mahdi was Prime Minister of Sudan at the time.

Some of these ethnic militias, known as murahalin, were comprised of the Misseriya, Rizeigat, and Baggara peoples. Murahalin were reportedly armed and trained by the Sudanese government and carried out cattle raids and village attacks on communities aligned with southern Sudan, primarily the Dinka Ngok. They also reportedly conducted joint operations with SAF.¹⁸

After overthrowing the Sudanese government in 1989, Bashir recommitted Sudan to the civil war and passed the 1989 Popular Defense Forces (PDF) Act. Murahalin, including Misseriya fighters, were absorbed into the now-official PDF. However, the militias reportedly negotiated “successfully to restrict their operations to the areas surrounding their migratory routes” and “insisted on campaigning according to their seasonal agenda instead of following the army's strategic priorities.” As a result, tribal leaders of the militias were granted power in a “parallel hierarchy to the military.”¹⁹

The PDF Act established the PDF as a paramilitary force composed of civilians to assist the armed forces and other uniformed forces and contribute to the defense of the nation. The Commander in Chief, President Omar Al Bashir, reserves the right to summon the PDF for training, during crises, catastrophes, war, in anticipation of war and any other situation the Commander in Chief sees fit. PDF training consists of basic military training, civil defense, civics and cultural education.²⁰

PDF recruitment campaigns have resulted in thousands of Misseriya joining the PDF, receiving training and compensation (mostly monetary). These recruitment drives allowed Bashir and his regime to organize armed militias loyal to them under one umbrella. For example, in 2008 to 2009, PDF elements around Abyei were reportedly provided with weapons while recruitment was occurring.²¹ Small Arms Survey reported that camps were created to recruit members from the local civilian population. Many of the new PDF members were Misseriya recruited with the expectation that they would fight for residency in Abyei and other disputed areas.²²

Allowing the militias, including the Misseriya, to operate in their own areas and according to their self-interests offered the Government of Sudan a certain degree of deniability for the actions of the militias. A degree of deniability would exist when the Sudanese government deployed the militias, either alone or alongside SAF, to accomplish a mission that was also in the self-interest of the militia's predominant ethnic group. This parallel chain-of-command allowed local ethnic leaders to maintain control of their militias while still allowing SAF to utilize these seemingly independent forces.

Mobilization of the PDF around the Abyei Area

In late 2010, the SPLM spokesman in Abyei, Wor Majak, reported that 2,000 PDF militia were mobilized out-

side of Abyei. An unidentified “Western observer” reported a dozen militia camps along Abyei’s northern border before the referendum. According to Misseriya leaders, the recruitment of Misseriya to the PDF units was led by the PDF Chief in Muglad, Issa Abdul Mola.²³ The Misseriya’s only permanent marketplace is located in Muglad,²⁴ which has historically been considered the headquarters of the Misseriya leadership.

In July 2010, the African Union High-Level Implementation Panel (AUHIP) was reportedly told that PDF forces operating inside the Abyei Area “pass through SAF bases and checkpoints without being stopped.”²⁵ The apparent failure of SAF forces to curtail the PDF’s freedom of movement inside Abyei supports accusations of collaboration between SAF and PDF. Also in July 2010, Misseriya leaders reported that SAF opened two Misseriya training camps in Debab and Meiram.²⁶ The establishment of PDF training camps in Debab and Meiram offered SAF and the PDF multiple strategic and operational advantages. Their proximity to the Abyei Area and the readily available pool of potential recruits from the local population made them well-positioned for any future combat operations within Abyei.

Debab and Meiram are located north and north-east, respectively, of the Abyei Administrative Area. Meiram and Debab are two of the five Misseriya Administrative Units.²⁷ Meiram is located on the main road connecting South Kordofan to Northern Bahr el Ghazal, which the Misseriya use to travel south during their seasonal migrations in search of water and graze lands for their herds. Debab is located between Muglad and Heglig, Sudan’s main oilfield. Debab is also located along a traditional Misseriya migration route.

Though traditionally nomadic and semi-nomadic pastoralists, changes in the Misseriya economy and their traditional migration patterns have attracted a growing number of Misseriya to more urban areas, which include Debab and Meiram.²⁸ According to Village Development Committee records, Debab’s population grew from approximately 200 families in 1998 to 2,033 families in 2008.²⁹ Though recent population estimates are not available, the Misseriya population in Meiram traditionally doubles annually during the dry season migration.³⁰

Figure I-1



Meiram Camp A

7 April 2011 | 12:16 PM EAT
Muglad, South Kordofan



Meiram Camp B

7 April 2011 | 12:16 PM EAT
Muglad, South Kordofan



Meiram Camp C

7 April 2011 | 12:16 PM EAT
Muglad, South Kordofan

SPLA also reportedly recruited fighters from Debab in 2006. A 2009 Humanitarian Policy Group Report noted:

According to some reports, around 13,000 Misseriya fighters joined the SPLA in 2006, with a further 10,000 joining from the Debab camp. It is believed that the SPLA sought to recruit Misseriya and Rizeigat militia as a fifth column or advance guard in the event of a resumption of hostilities with the National Congress Party (NCP). The SPLA used Debab as a recruiting station, aiming for one battalion (600–800 men). Thousands turned up, chiefly because of the \$150 a month pay on offer. The NCP argued that the recruitment was a violation of the CPA and sent an army unit to confront the SPLA, which eventually backed down.³¹

It was also reported two years prior that PDF camps were being established in Meiram and Debab, and in other locations. On 29 January 2008, it was reported that PDF established a camp in Muglad for more than 10,000 'Mujahideen'. The camp, called Martyr Ombaya, was purportedly commanded by Bakheet Mohamed Ali. Ali told reporters at that time that the camp was to protect the rights of the Misseriya. He also added that, "There are efforts for establishing branches (camps) in al Meram, al Mugadama, al Sitaib, al Dibab and Omrakiz."³²

Identification of PDF Camps

Signal identified five encampments, three in Meiram and two in Debab, which are consistent with the reported opening of PDF camps in these locations. In imagery captured 7 April 2011, Signal analysis identifies three apparently fortified encampments in Meiram, approximately 15 km from the Abyei Area border. Two of the encampments contain installations consistent with ammunition storage facilities. One of those encampments has two berms consistent with artillery positions. The third encampment also has two berms consistent with artillery positions [Figure I-1].

Analysis of satellite imagery taken on 14 March 2011 in Debab identifies the presence of two encampments, approximately 45 km north of the Abyei Area borderline. The first encampment, situated in eastern Debab has

Figure I-2



Debab Encampment
14 March 2011
Debab, South Kordofan



Debab Checkpoint Encampment
14 March 2011
Debab, South Kordofan

a circular fortification with vehicle security berms installed around the perimeter. Within the fortification are at least 18 tents and other structures, 4 vehicles, and a berm for towed artillery. The second fortified encampment has been identified in western Debab, approximately 3 km from the eastern encampment. Situated between roads running southeast and southwest from the town, the fortified encampment has at least 20 tents and buildings within its walls, a guard post at the entrance, and the presence of heavy vehicle tracking [Figure I-2].

Signal also identified, in imagery taken on 22 March

2011 of Sitaib, a fortified encampment located 29 km north of the Abyei Area boundary. This is consistent with the reported 2008 “efforts for establishing” a PDF camp in Sitaib. Structures consistent with an ammunition storage facility are visible within the encampment walls. On 5 April 2011, imagery taken of southern Sitaib shows a fortified encampment situated between two roads running south and southwest out of the town. Inside the encampment, a white vehicle consistent with a Land Cruiser is in an apparent security position at the entrance. Several tents and other structures have been installed along the interior walls [Figure I-3].

Figure I-3



Sitaib East Encampment
22 March 2011
Sitaib, South Kordofan



Sitaib Southwest Encampment
5 April 2011
Sitaib, South Kordofan

Movement of SAF-aligned Forces Within South Kordofan

In 2010 there were reports of “significant unexplained movements of tanks and troops” in South Kordofan, as well as new reports of SAF-aligned militias being armed.³³ *Africa Confidential* reported on 19 November 2010 that Misseriya militia started to gather in Diffra. Eric Reeves, Ph.D., a professor at Smith College, contends that this trend is consistent with a broader build-up of militia units in South Kordofan, which the Small Arms Survey began documenting in 2008.³⁴

Under an agreement signed between the SPLM and NCP on 6 December 2010, all oil fields—including Diffra, Abyei’s main oil field, were to be protected by JIU forces operating under the CPA. However, this agreement was reportedly abrogated by SAF-aligned forces. North Sudanese “oil police” allegedly continued their presence at Diffra. According to official numbers, 100 oil police were reported to be stationed at Diffra but independent observers and SPLM officials claimed in late 2010 that as many as four battalions were deployed in and around the area.³⁵ The oil police operate “under the auspices of the Presidency” of Sudan.³⁶

In mid-December 2010, the press secretary for the Abyei Administration claimed that SAF “‘was continuing to increase its military presence in South Kordofan,’ in areas from which the assault on Abyei will later be launched.”³⁷ During the same period towards the end of 2010, the UN reported increasing insecurity along the main road from Kadugli to Abyei, especially the Heglig-Nyama road.³⁸ Active SAF bases, visible in satellite imagery captured during that period, appear present in Heglig and Nyama before the SAF invasion of Abyei.

Aerial Bombardments in Bahr el Ghazal

SAF also reportedly engaged in aerial bombardment inside southern Sudan during this timeframe. On 11 and 12 November 2010, the village of Kiir Adem in Northern Bahr el Ghazal, southern Sudan was reportedly attacked by SAF aircraft. Both MiG fighters and Antonov transport planes were reportedly involved in the attack. According to reports of the incident, the bombing wounded seven SPLA troops and five civilians.³⁹

Later, on 24 November, SAF reportedly conducted a second aerial bombardment raid over two days that wounded four SPLA troops and two civilians. The bombing reportedly targeted an SPLA army base and a nearby strategic bridge in Kiir Adem. However, Colonel Al Sawarmi-Khaled Saad, SAF spokesman, denied the attack. There were conflicting reports claiming helicopter gunships and fighter jets were involved in that attack.⁴⁰ SPLA reportedly moved three anti-aircraft guns to the area, at least one of which was mounted on a cargo truck. The SPLA spokesman told the *Associated Press* (AP) that they would resist responding to the SAF attacks.⁴¹

Signal analysis of a GeoEye image taken on 16 November 2010, days before the alleged aerial bombardment, confirms the presence of a facility consistent with an SPLA encampment in Kiir Adem. The apparent installation is in proximity to a bridge spanning the river, part of the main road connecting Northern Bahr el Ghazal to South Kordofan. Fighting positions (foxholes) consistent with ones commonly found at SPLA installations are located north, south and southwest of the encampment. Additionally, Signal identifies ground tracking consistent with the measurements of T-55 main battle tanks, although no objects consistent with tanks were seen in the area. The location of this base and bridge are consistent with the reported location of the bombed SPLA base in Kiir Adem [Figure I-4].

The UN Secretary General report to the United Nations Security Council also noted that on 6, 8 and 9 December 2010, SAF aircraft reportedly bombed the area of Timsaha, located in Western Bahr el Ghazal. The report noted, however, that the attack did not appear to be targeting SPLA positions there.⁴²

SPLA Presence Inside and Around the Abyei Area

Matt Brown of the Enough Project reported on 22 November 2010 that SPLA entered the Abyei Area “as members of the joint North-South Abyei Police unit and has maintained a presence in Abyei’s southeast corner.” Brown also noted that the Small Arms Survey “indicated that UNMIS has also found ‘some evidence’ that the southern army is arming the population.”⁴³ However, Brown also noted that *Africa Confidential* was reporting that SAF and SPLA had both supposedly withdrawn from Abyei.

Figure I-4



Kiir Adem
16 November 2010
Northern Bahr el Ghazal, southern Sudan



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SUDAN: ANATOMY OF A CONFLICT

Chapter I

Escalation: SAF and SPLA Force Deployment Within and Around Abyei
Mid-2010 to January 2011

Accusations of SPLA forces being present continued through the end of 2010. On 13 December 2010, *Radio Miraya* reported that SAF accused SPLA forces of moving into the Abyei Area with “10 military trucks and 15 Toyota land cruiser vehicles.” Deng Arop, Head of the Abyei Administration, responded to this claim by stating that SAF had troops inside the Abyei Area.⁴⁴

Investigations into Alleged Build-up

In late October 2010, the Joint Defense Board, created by the CPA to oversee the operation of the JIUs and the coordination between the two contributing armies, expressed its intention to probe reported build-ups of SAF-aligned forces in Abyei and SPLA in the Nuba Mountains of South Kordofan.⁴⁵

In the 31 December 2010 United Nations Security Council (UNSC) report of the Secretary-General on the Sudan, the UN noted that UNMIS was able to verify only “minor adjustments to the deployment of both forces along the border, but did not confirm any significant build-up.” However, the document said that “those reports were hampered by the lack of access to key locations.”⁴⁶

Chapter II

Prelude to Invasion: Violent Clashes in Abyei January to May 2011

Southern Sudan's Referendum

The southern Sudan referendum, which determined the future of South Sudan, lasted from 9 to 15 January 2011. The people of southern Sudan overwhelmingly voted for secession with 99.57% of voters choosing to secede from the north to form a separate state.⁴⁷ On 7 February 2011, President Omar Al Bashir issued a decree officially accepting the results of the referendum, paving the road for South Sudan to officially secede from Sudan. Bashir noted before the referendum that he would accept the outcome of the voting regardless of the result, asserting, "Peace is our ultimate goal."⁴⁸ As noted previously, the Abyei Area referendum did not occur due to voter eligibility disputes between the NCP and SPLM.

Implications of Referendum on JIUs and UNMIS

The Joint Integrated Units (JIUs) were established following the signing of the CPA and were mandated to consist of "equal numbers from the Sudanese Armed Forces (SAF) and the Sudan People's Liberation Army (SPLA) during the Interim Period."⁴⁹ The JIUs' total strength was expected to reach 39,000 troops, but there was never full deployment. JIUs faced lack of unit cohesion, lingering tensions between the troops from each party and a dearth of training and required resources.⁵⁰ Additionally, the JIUs faced command and control challenges. Although command and control was supposed to be defined by a single entity, the Joint Defense Board, two chains of command reportedly remained for the SAF and SPLA JIUs.⁵¹

The results of the referendum affected the status of the JIUs deployed in the Abyei Area, elsewhere in Sudan and the soon-to-be nation of South Sudan. Following the referendum in January 2011, the JIUs were required to disband in accordance with the 2005 CPA.⁵² An agreement was reached by SAF and SPLA to dismantle the JIU elements by 9 April. Two exceptions were the JIUs present in the oil fields in Unity and Upper Nile, southern Sudan and those stationed in Abyei. The JIU's mandate for these specific areas was extended to 9 July, the day South Sudan officially seceded from the North.⁵³

Following the referendum results, the Government of Sudan also stated publicly that they would not allow for an extension of the mandate of the United Nations Mission in Sudan (UNMIS) after the secession of South Sudan on 9 July 2011.⁵⁴ UNMIS was established through the United Nations Security Council Resolution 1590, which was issued after the 2005 signing of the CPA to "support implementation of the Comprehensive Peace Agreement."⁵⁵

January 2011: First Attacks Inside the Abyei Area

On 7 January 2011, two days before the southern Sudan referendum, Misseriya militias reportedly launched attacks on police units stationed in Maker Abior, Abyei Area. Fighting continued for three days which led to dozens of deaths and "established a pattern that was largely repeated during the heavier clashes of February and March."⁵⁶

Soon after, a United Nations source reported to *Reuters* that "there were reports Misseriya fighters were today [January 10] re-grouping in the settlement of Golih Langar [Goli], 16 miles (25km) north of Abyei town, the headquarters of UN peacekeepers in the region and international aid groups."⁵⁷ Goli is approximately 18 km from Maker Abior and a main village along the Misseriya migration route.



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SUDAN: ANATOMY OF A CONFLICT

Chapter II

Prelude to Invasion: Violent Clashes in Abyei January to May 2011

Southern Sudan-aligned officials reported that the Misseriya attacked with heavy artillery alongside Government of Sudan-aligned militias.⁵⁸ Other accounts accused PDF of joint involvement in the attacks alongside the Misseriya, who attacked with anti-tank weapons and artillery.⁵⁹ A witness from Maker Abior reported, “They came in waves, they wore uniforms and tried to surround out (sic) village.”⁶⁰

A Misseriya leader, Mokhtar Babo Nimirik, accused southerners of starting the fighting in Maker Abior because they did not want the Misseriya to move their cattle south for water.⁶¹ Other accusations of responsibility were made by both Dinka Ngok and Misseriya leaders. A Dinka Ngok sultan, Kual Deng Magok, said that the attack was caused by Misseriya attempting to capture the village of Macare [Maker] and ambush southern security forces. Contradicting this account, a Misseriya leader, Hamdi al-Doudo, claimed that the movement of approximately 1,500 SPLA-aligned forces into the area, which the Misseriya use as a transit route to access grazing fields, was what triggered the attacks.⁶²

Outside of Maker Abior, other attacks reportedly occurred during this period in Miakok, Todach and Shegei. Some of those injured in the attacks reportedly went to a hospital in Balilal, which was “serving as the headquarters of militia group. This is where the attacks against Abyei and other places in the south are planned.”⁶³

Kadugli Agreements

In response to the deteriorating security situation inside the Abyei Area following the attacks, two meetings were planned. The first, known as Kadugli Agreement I, occurred on 13 January 2011. The meeting was attended by government officials, district commissioners from Abyei and southern Sudan and Dinka and Misseriya chiefs. Despite an international warrant for Haroun’s arrest issued for allegedly committing crimes against humanity in Darfur, UNMIS transported South Kordofan Governor Ahmed Haroun to the meeting via UN helicopter on 11 January 2011.⁶⁴

They met to address key Dinka and Misseriya concerns raised by the attacks and outlined a tentative agreement relating to the grazing rights of the Misseriya. The plan allowed the Misseriya to carry a certain number of weapons on their grazing route and determined which murhals (livestock routes) could be used by the different groups during their annual migration. The Eastern (Nama-Domboloya-Unity State) and Western (Mugadama-Mayram-Northern Bahr el Ghazal State) murhals could be used, but the Central mural through Abyei was to be avoided by transiting Misseriya. The agreement forbid grazing through Abyei to avoid “friction with returnees resettling in the areas just north of Abyei town.”⁶⁵ This tentative plan was never finalized because follow-up meetings in late February were cancelled or postponed.

The Kadugli Agreement II meetings began on 17 January 2011 to discuss the overall security situation in the Abyei Area. The meeting agreed that SAF would open the main road leading to Abyei town and that SAF would escort returnees to the northern Abyei border. JIUs would provide escort until the 1956 border and SPLA would provide the final escort for the returnees into southern Sudan. The Government of Sudan also agreed to replace the Juba Police in Abyei town with two JIU battalions, one comprised of SAF forces and one comprised of SPLA forces. Further, Misseriya would be allowed an opened grazing mural, although Dinka and Misseriya civilians present in those areas would have to be disarmed. As agreed, the Juba Police were withdrawn but SAF, however, maintained control of the roads north of Abyei. Resistance from both Dinka and Misseriya communities reportedly stalled the disarmament process and the subsequent opening of a mural.

The most critical setback to the implementation of the Kadugli Agreement II was the deployment of the JIU battalions. The SAF soldiers selected to staff the JIU unit in Abyei town originated from a unit Small Arms Survey identified as the “31st Battalion.” These soldiers were not approved for deployment by the Abyei Administration because of their alleged involvement in the 2008 SAF invasion of Abyei town, according to Human Rights Watch and others. A small SAF force comprised of troops from other units was later deployed instead.⁶⁶

Misseriya Migration Following the Kadugli Agreements

The 2010 to 2011 seasonal migration of the Misseriya through the Abyei Area south to the river Kiir was delayed. Traditional Misseriya migration patterns during the dry season report that the Misseriya arrive in the south by January and stay until their northern migration begins in approximately May. In 2011, however, the UN reported that their migration south for water was expected to begin in early February.⁶⁷ Despite reports in February that Dinka Ngok were blocking the Misseriya transit routes,⁶⁸ Misseriya herders were seen grazing their cattle at the Nyamora river north of Abyei as of 24 February but their cattle were reportedly moved north on 25 and 26 February.⁶⁹ This northern movement is not consistent with traditional Misseriya migration patterns and potentially corresponds with the outbreak of hostilities on 27 February in Todach.

By the beginning of March, the Misseriya reportedly entered the Abyei Area and were witnessed grazing cattle at a river 30 km from Abyei town.⁷⁰ By 5 May 2011, the month that Misseriya traditionally would finish grazing their cattle around the river Kiir, the UN reported that their migration south was stalled and would not likely move further south due to the end of the dry season. It was also reported during this time that Misseriya who traditionally migrate along the Eastern and Western murhals were travelling by the Central murhal through Abyei in search of water and grazing lands.⁷¹

Under the tentative provisions set forth at the Kadugli Agreement I meeting, the Central murhal was not supposed to be used as a transit route. This restriction was a result of increased tensions in the area due to the presence of returnees directly before the referendum. However, the search for resources in the area led to an increased number of Misseriya tribes present in the murhal in search of water and lands to graze their cattle.

Increased Armed Misseriya Presence and Activity

Convoy Attacks

Once southern Sudan voted to secede, Southerners in the North and Northerners in the South had to return to the nation they wanted to reside in after independence. Attacks on convoys of returnees travelling to southern Sudan were a clear symptom of the escalating insecurity in the Abyei Area. In multiple cases, the alleged attackers were Misseriya and/or armed nomads. For example, on 10 January heavily armed nomads reportedly ambushed and looted a civilian returnee convoy of 23 vehicles, killing 10, in Siteib.⁷² Additionally, the UN reported that on 17 January a convoy of more than 20 buses and a large number of trucks under armed escort was attacked by 200 Misseriya in Balom, south of Diffra.⁷³ Between 7 and 17 January, Misseriya attacks on convoys en route to southern Sudan also reportedly occurred in areas as far east as regions south of Kadugli, South Kordofan. *Africa Confidential* reported that SAF troops responsible for protecting the convoys “showed little interest and did not interfere” when attacks on the returnees were occurring.⁷⁴

Checkpoints

All parties present in Abyei experienced increasing freedom of movement restrictions during this time period. Misseriya-controlled checkpoints were also reported at this time. SPLA accused armed Misseriya of creating roadblocks along the Sudan and southern-Sudan border to block returnees on 11 January.⁷⁵ SPLM officials also claimed on 18 January that on their way back from Maker Abior they were warned by locals that armed Misseriya created roadblocks in Goli.⁷⁶ Goli is a major village along the Misseriya migration route and a permanent village for both Dinka and Misseriya. Additionally, both military and militia elements were reportedly present in Goli.⁷⁷

SAF-aligned Forces Prepare the Battlefield

The deterioration of the security situation in the Abyei Area, culminating in the SAF sacking of Abyei town in May 2011, was the result of apparent strategic assaults by SAF-aligned forces, including the PDF and Misseriya mi-

litas, against SPLA-aligned positions. The attacks between 27 February and 21 March at Todach, Maker Abior, Noong, Tajalei, and Dungop and the surrounding areas targeted both SPLA-aligned police positions and civilian dwellings.

Following the attacks, according to Signal analysis of satellite imagery and other sources, SPLA-aligned forces established fighting positions in Todach, Tajalei, and Maker Abior, causing a front line to form between both parties within the Abyei Area. Joshua Craze, author of *Creating Facts on the Ground: Conflict Dynamics in Abyei*, traveled to Todach, Maker Abior and Tajalei shortly after 4 March and reported that, “the police had returned to their original positions and were digging foxholes.”⁷⁸

Variance in Traditional Misseriya Transit Patterns in February and March 2011

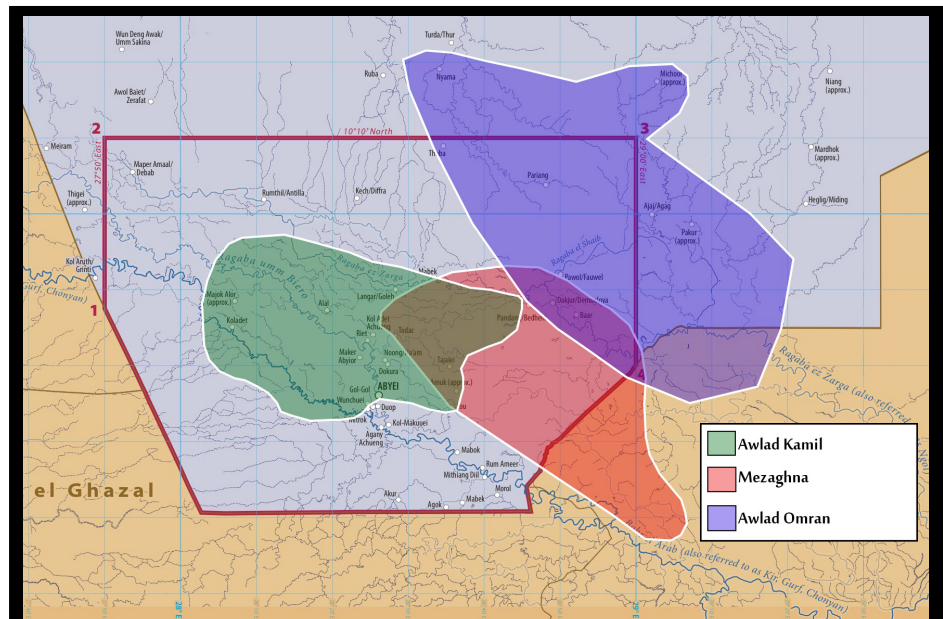
SPLM officials accused Misseriya of leading the attacks that occurred from 27 February until 21 March. The movement of Misseriya through the areas that were attacked is not uncommon during their annual migration south to the river Kiir. However, the location of specific tribes purportedly involved in the attacks and the direction of their movements are inconsistent with traditional Misseriya migration patterns during that time of year.

In 2011, the Misseriya migration south was expected to begin by late February but there were reports of the Misseriya moving their cattle north before the attacks on Todach and Maker Abior. These movements do not correspond with the traditional southern cattle movement by the Misseriya at that time. The southern migration is critical for the Misseriya’s cattle to be able to access water and forage.

Specific Misseriya tribes were also directly accused of participation in the clashes at Todach and Maker Abior. In the Todach assault, Mezaghna and Awlad Kamil were accused of attacking on two separate days. Additionally, PDF from Awlad Omran were accused of attacking Maker Abior. Todach and Maker Abior are located in the Misseriya’s Central mural. The presence of the Mezaghna and Awlad Omran in the Central mural is inconsistent with their traditional seasonal movements.

The Mezaghna traditionally move through the Eastern mural. The Awlad Kamil, the other group accused of being involved in an attack on Todach, partially share a migration route with the Mezaghna during their migration southwestward through Abyei. The Awlad Kamil are also known to camp at Goli, a site identified by Signal and others as a SAF-aligned base.

The Awlad Omran, a tribe accused of having attacked Maker Abior, also traditionally move southeast through the Eastern mural from Nyama, South Kordofan into Unity during the dry season. The path of their movement overlaps with the movement of the Mezaghna.⁷⁹



Traditional Misseriya Dry Season Migration Routes

Source: Ian Cunnison, *Baggara Arabs, Power and the lineage in a Sudanese Nomad Tribe*. (Oxford: Clarendon Press, 1966)

The only tribe whose usual seasonal migration route takes them and their herds through the areas attacked is the Awlad Kamil. If accurately reported, the involvement of the other two tribes, Mezaghna and Awlad Omran, indicates that they were not transiting through their traditional murhal in late February, early March 2011.

Todach

Clashes erupted on 27 February 2011 in Todach, 15 km northeast of Abyei town. The first attack reportedly targeted a police post, killing seven policemen. A second attack that afternoon left ten dead, bringing the total estimated casualties for the day to 17.⁸⁰ One report said that the attacks were carried out in two waves, at 4:00 am and 11:30 am, by heavily armed members of Mezaghna, a Misseriya tribe.⁸¹

Ahmed Dudu, leader of the Mezaghna tribe, reportedly ordered cattle to be pulled from the area before he allegedly led the attack against Todach.⁸² This is consistent with the report that Misseriya herders moved their cattle north on 25 and 26 February, the days preceding the attack. Small Arms Survey reported that Dinka Ngok accused the Misseriya of their involvement in the attacks following their decision to move their cattle north of the attacked areas.⁸³

Hassan Musa, Misseriya leader of the Awlad Omran, confirmed that the Mezaghna participated in the attacks. However, he claimed that Dinka Ngok, supported by SPLA-aligned personnel camouflaged as police in Dira, Goli, Todach and Diffra, had been setting up checkpoints in the area, blocking access to grazing routes.⁸⁴ SPLA spokesman, Colonel Philip Aguer Panyang, denied that there were any SPLA in Abyei.⁸⁵ The alleged attackers

Figure II-1



Apparent SAF Buildup and Razed Structures at Todach - Before
19 December 2010 | 11:46 AM EAT
Todach, Abyei Area



Apparent SAF Buildup and Razed Structures at Todach - After
3 March 2011
Todach, Abyei Area

from Sunday's clashes in Todach were reportedly witnessed on the day of the attack in Diffra, Dira, and Goli, purportedly preparing for another attack.⁸⁶

On 28 February, Todach was reportedly attacked again. Raids in the morning and the afternoon left an estimated 90 dead. During these raids, tukuls in Todach were razed.⁸⁷ The clashes on 28 February also occurred between Misseriya and SPLA police stationed in the area but SPLA accused a different Misseriya tribe, Awlad Kamil, of attacking.⁸⁸ SAF's 31st Brigade was also accused of being involved in the attacks. A deputy SPLM chairman stated:

There was another heavy attack today which saw the use of heavy artillery and tanks. It was carried by the Sudan Armed forces. The three units of the Sudan Armed Forces stationed in Tumisah [Timsah] and Nyama launched the heavy attack. They used a Misseriya as curtain yesterday on Sunday to initiate attack which followed today.⁸⁹

The 31st Brigade is reportedly stationed in Nyama. After the 31st Brigade invaded and took control of Abyei in May 2008, force was re-stationed to Nyama at the end of July 2008.⁹⁰ A report two years later from *Sudan Tribune* also stated that Nyama is "a military outpost hosting members of the Sudan Armed Forces (SAF) of Brigade 31."⁹¹

Figure II-2



Todach Roadside Camp Buildup - Before
19 December 2011 | 11:46 Am EAT
Todach, Abyei Area



Todach Roadside Camp Buildup - After
3 March 2011
Todach, Abyei Area

During the attacks the JIU forces did not intervene to quell the violence, Small Arms Survey reported.⁹² *South Sudan News Agency* reported that these JIU forces were under SAF command.⁹³ As the police moved back into their positions at Todach on 7 March, they reportedly ran into Misseriya militia and clashes broke out again.⁹⁴

Signal analysis of satellite imagery captured on 3 March 2011, three days after the attack on Todach, reveals the destruction of structures within an encampment. This includes tukuls and tents that were clearly intact in imagery taken on 19 December 2010. The 3 March imagery shows a specific pattern of burn marks consistent with intentional burning, evidenced by the apparent absence of scorched earth between the razed structures. Analysis shows as many as 50 structures were burned.

The 3 March imagery also reveals that an apparent defensive perimeter of fighting positions was constructed after 19 December. The fighting positions face north towards the emerging front line of SAF-aligned forces. The construction of this perimeter sometime before 3 March corresponds with "reports that the unit there had recently improved the location's defenses within the past two weeks or so,"⁹⁵ before the attack on Todach. The disposition of the perimeter shows that the force there established the fighting positions to protect their location from a potential threat located north [Figure II-1].

The 19 December imagery also documents another encampment, 500 meters from the previously identified encampment, in Todach consisting of tukuls, fenced-in structures, and tents. The location of this encampment is consistent with the reported location of the JIU encampment in Todach. New fighting positions, shown in the 3 March image, surround the encampment and were constructed sometime after 19 December 2010. Despite the February 2011 attack on Todach, the imagery reveals no apparent damage to the JIU encampment. This is consistent with reports that SAF-led JIU forces failed to intervene to stop the attackers, who were reportedly SAF-aligned forces [Figure II-2].

Maker Abior

Signal analysis of imagery taken on 9 March 2011, identifies that within an estimated 6 sq km area, including Maker Abior and Noong, approximately 230 structures were burned. Out of these 230 destroyed structures, approximately 150 were located in Maker Abior itself. This evidence is consistent with reports describing the 2 March attacks on Maker Abior and Noong [Figure II-3].

On 2 March, an SPLA-aligned police post outside the village of Maker Abior was attacked by Misseriya militia. The militia reportedly “slipped along the river and surprised the police. They killed all the police officers on duty and then crossed the Nyamora, razing the village of Wungok.”⁹⁶ UNMIS RCSO (Resident Coordinator Support Office) reported that the Misseriya attack prompted women and children to begin leaving Abyei town. Also, witnesses said they saw the cattle herds of Misseriya nomads moving north,⁹⁷ a pattern similar to Misseriya movements reported before the Todach attack. Security officials said that the local population of Maker Abior began to flee when the police station was destroyed.⁹⁸

Juac Agok, a senior SPLM member, accused SAF and PDF of carrying out the 10:00 am attack on Maker Abior, which reportedly extended as far as Yura. Members of the PDF involved were allegedly from the Misseriya tribe Awlad Omran, according to Agok. Hassan Musa is the leader of the Awlad Omran. Agok also reported that the attackers used machine guns mounted on vehicles, mortars, rocket-propelled grenades (RPGs) and tanks. An SPLM deputy chairman stated that the use of tanks in the attacks was evidence of SAF’s role because tanks are “purely part of heavy weapons of regular forces.”⁹⁹

The April 2011 Small Arms Survey update on Abyei included confirmation of reports about the Maker Abior attack. The report stated:

Sources in the United Nations Mission in Sudan (UNMIS) confirm that helicopters were used to ferry out the wounded following the 2 March attack on Maker, and civilian witnesses reported seeing militia fighters in SAF uniforms, as well as the uniform of the Central Reserve Police (CRP), also known as Abu Tira. Witnesses also report SAF vehicles, disguised with mud, being used in the attack.¹⁰⁰

In addition, dead Government of Sudan-aligned soldiers found at Maker Abior allegedly included troops from the 31st Brigade.¹⁰¹ One source reported that three SAF units from Tumisah [Timsah] and Nyama launched the attack.¹⁰² As noted earlier, the 31st Brigade is reportedly stationed in Nyama.

The SPLM released a statement on 2 March 2011 that accused Lieutenant General Salah Abdullah Gosh and the Minister of Science and Technology Issa Boushra of creating a plan to “change the demographics on the ground by settling the Misseriya in territories historically for the Dinka Ngok,” which failed for its “third consecutive time” and lauded the Juba police for confronting the attackers.¹⁰³

Abyei police and civilians present at the attacks at Todach and Maker reported that some of the attackers wore SAF uniforms and others the uniforms of CRP. NCP officials rejected claims that government forces had played any part in the attacks.¹⁰⁴ Achuil Akol noted that the militias used 12.7 mm machine guns mounted on land cruisers, 60 mm mortars, rocket-propelled grenades, and small arms.¹⁰⁵

Figure II-3a

Satellite Imagery Overview: Razed Structures, Maker Abior Region, Abyei Area

9 March 2011 | 11:43 AM EAT

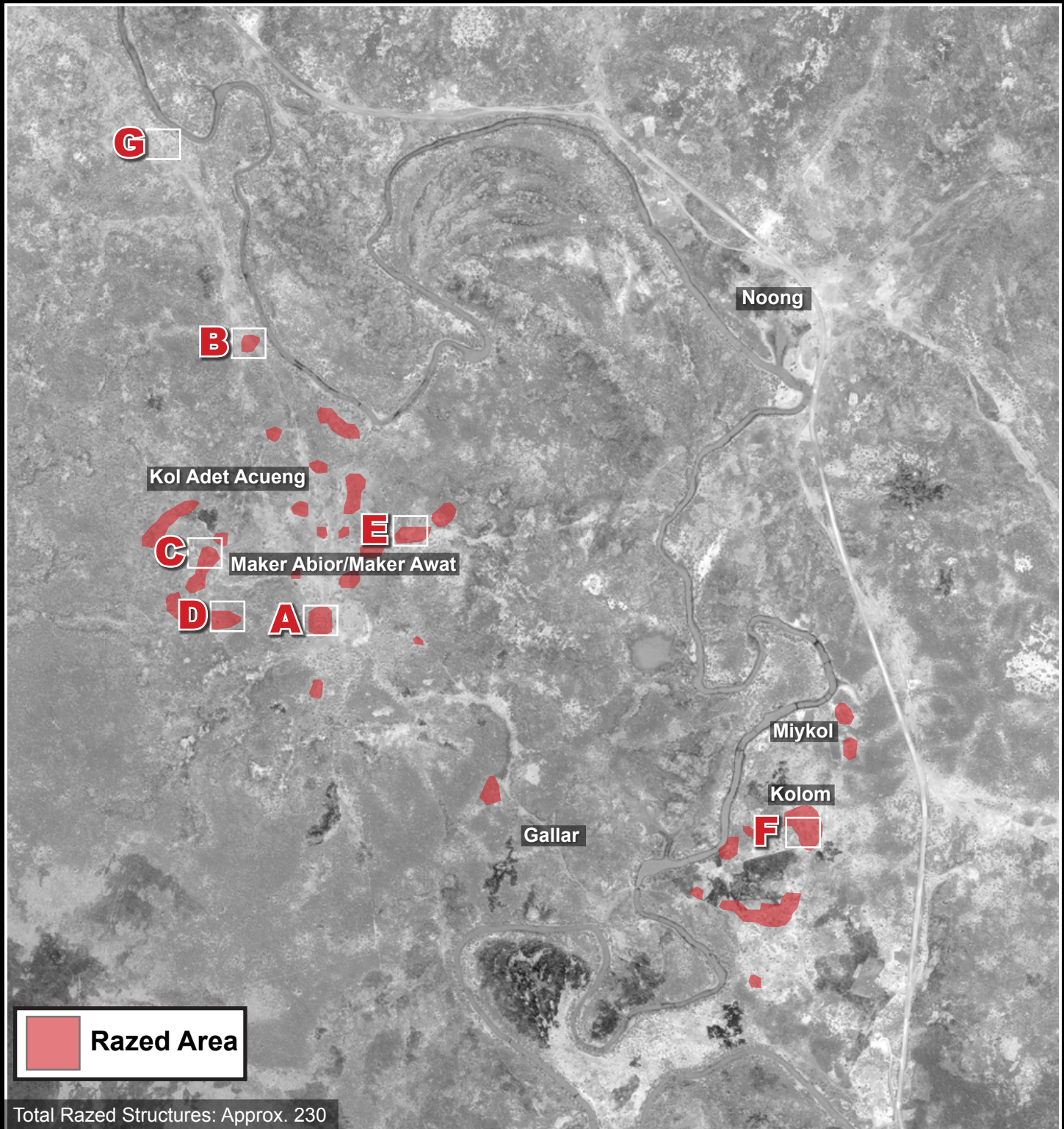


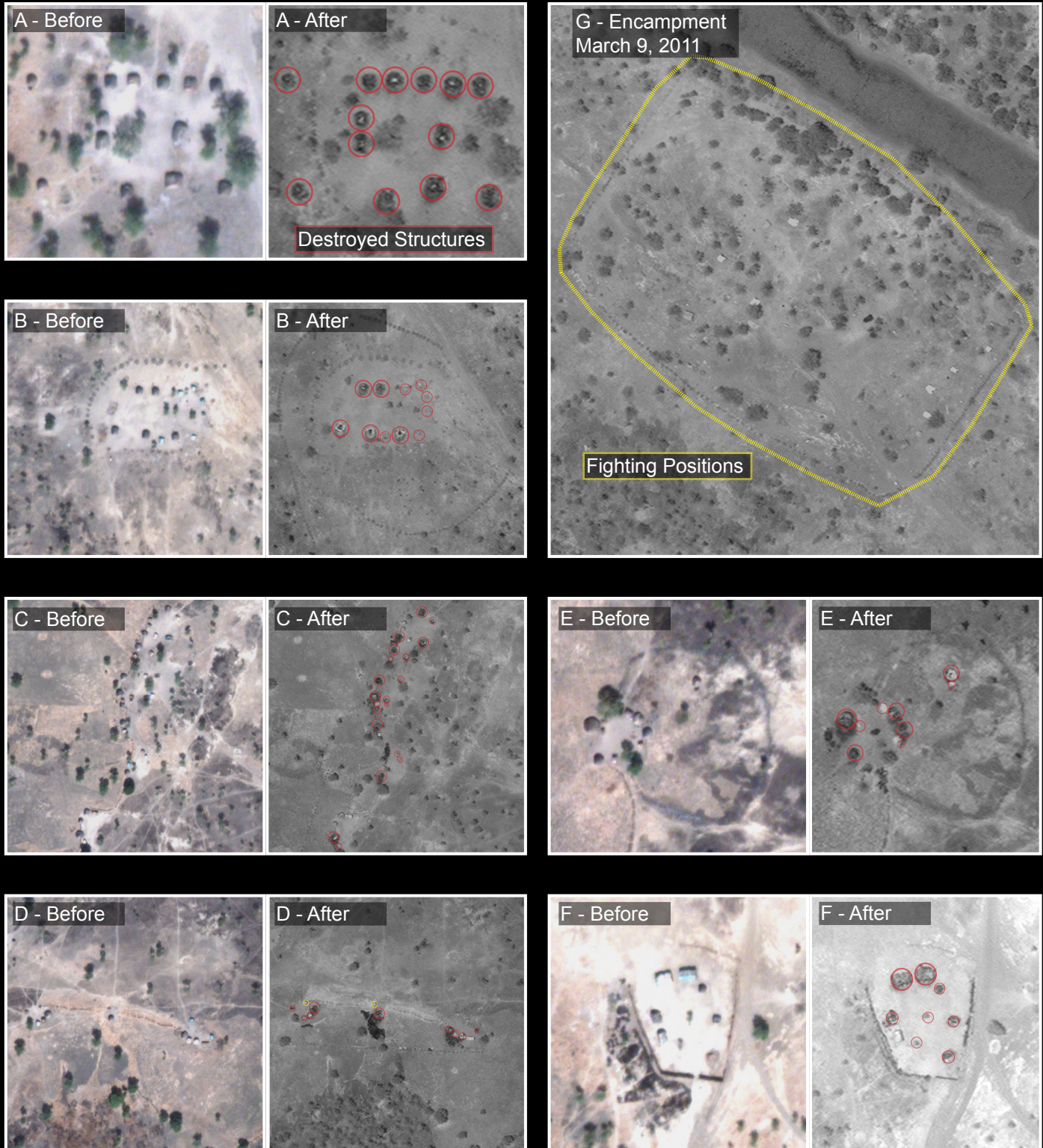
Figure II-3b

Before Images

19 December 2010 | 11:46 AM EAT
Maker Abior Region, Abyei Area

After Images

9 March 2011 | 11:43 AM EAT
Maker Abior Region, Abyei Area



Noong, which is approximately 3.5 km northeast Maker Abior, was also reportedly attacked by SAF, PDF and Misseriya on 2 March, the same day as the other attack.¹⁰⁶ Of the three JIU battalions deployed throughout the Abyei Area, one of the battalion headquarters was located in Noong.¹⁰⁷

Tajalei

On 4 March 2011, the police in Tajalei reportedly received information that an attack was being planned on the town. Approximately 2,000 residents were evacuated, many of whom headed towards Abyei town. The next day, Tajalei was attacked and several hundred structures were reportedly burned to the ground. Officials reported that more than 100 people were killed, including police officers. A resident of Abyei reported that the attackers destroyed the police station, tukuls and watering holes for animals.¹⁰⁸ In an *Agence France-Presse (AFP)* report, an Abyei Administration official blamed Misseriya and SAF for carrying out the attack.¹⁰⁹ The attack on Tajalei is corroborated by Signal's analysis of imagery captured immediately preceding and following the clashes.

Imagery from 3 March shows two different encampments apparently in strategic positions to protect Tajalei: a north camp and a west camp. By 6 March, both camps have been destroyed. The north camp imagery shows what appears to be a long line of tents with accompanying fighting positions. A large tukul surrounded by additional structures is located on the west end of the camp. By 6 March, the day after the attack, all apparent tents, the large tukul, and the additional structures appear to have been destroyed. Analysis shows that approximately 80 structures in the north camp appear to have been destroyed.

The west encampment is slightly smaller in size than the north camp and shows a crescent shape formation of tents. Behind those tents are additional structures and large tukuls, one on the north end of the crescent and another on the southeast end of the crescent. All structures and the tukuls were destroyed between 3 and 6 March 2011, however the majority of the tents at the foxholes appear to remain undamaged as of 6 March. Signal analysts also documented approximately 30 burned structures in the west camp [Figure II-4].

During the same time period mentioned above, the imagery is evidence that the majority of Tajalei village, including several dozen tukuls, buildings, and structures consistent with civilian dwellings, was razed. Approximately 240 structures in Tajalei village, in an estimated 2.5 sq km area, were burned

Razing in Tajalei Map
6 March 2011
Tajalei, Abyei Area

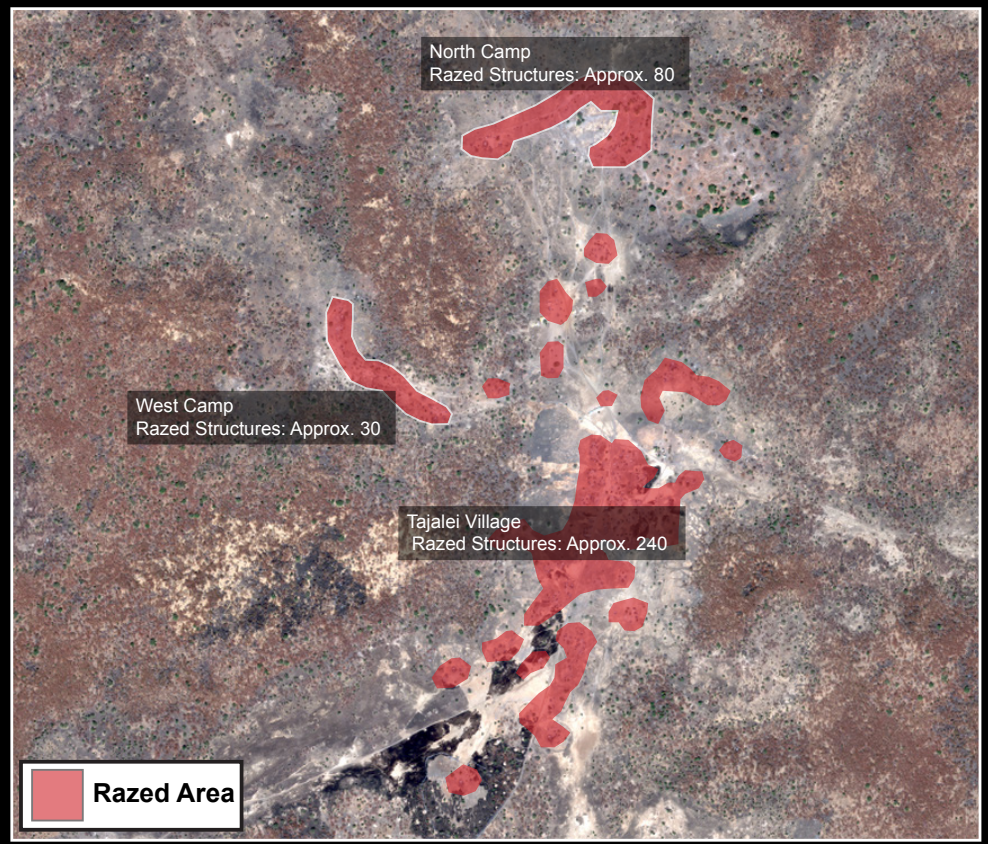


Figure II-4



Razing of Tajalei Western Encampment - Before
3 March 2011
Tajalei, Abyei Area



Razing of Tajalei Northern Encampment - Before
3 March 2011
Tajalei, Abyei Area



Razing of Tajalei Western Encampment - After
6 March 2011
Tajalei, Abyei Area



Razing of Tajalei Northern Encampment - After
6 March 2011
Tajalei, Abyei Area

[Figures II-5].

Abyei's chief administrator Deng Arop Kuol accused Misseriya and SAF of being behind the attacks but an NCP representative blamed attacks on SPLM. The NCP representative argued that SPLM had been arming its supporters in Abyei, actions the Misseriya viewed "as a threat to their movement in the area and access to water for their cows."¹¹⁰

The NCP issued a statement that Misseriya attacked in retaliation to SPLM armament which confirmed the involvement of Misseriya in the attacks. Spokesman for the Abyei Administration, Charles Abyei, told Reuters that the attack showed "the intention of the government wanting to occupy the entirety of the area, hence why they have kicked out the civilians. The town civilians of the northern part of Abyei have been displaced." He also repeated previous claims that the Misseriya are fighting alongside the PDF.¹¹¹

Then United Nations spokesperson in Sudan, Hua Jiang, reported, "We sent out a patrol to verify the facts on the ground, but the patrol was not permitted to get to the village, where the bulk of the houses allegedly were." She claimed that southern Sudanese forces were restricting access to the site. "We are going to make another attempt tomorrow," she said.¹¹²

Figure II-5



Tajalei Village Destruction - Before
3 March 2011
Tajalei, Abyei Area



Tajalei Village Destruction - After
6 March 2011
Tajalei, Abyei Area

Dungop

Similar incidents occurred again when Dungop was reportedly attacked on 21 March. Small Arms Survey conducted interviews with residents of Dungop. The residents said that Misseriya militia attacked the village.¹¹³ However, the Abyei Administration accused PDF of entering the village between 1:30 and 2:00 am and killing civilians. Lieutenant Mabek Lual from the JIU force in Tajalei reported that JIU soldiers conducting reconnaissance observed Misseriya herders following their cattle from Todach to Tajalei, placing them southwest of Tajalei the day before the attack.¹¹⁴

Patterns of Attack by SAF-Aligned Forces

There are many conflicting claims about what factors led to the alleged attacks by SAF-aligned forces against primarily Dinka towns and SPLA-aligned garrisons in the Abyei Area between 27 February and 21 March 2011. However, Signal's review of available data relevant to the assaults on Todach, Maker Abior, Tajalei and Dungop reveals important commonalities between the incidents. These repeating patterns indicate coordinated action by Misseriya, PDF and SAF elements to achieve multiple objectives in the Abyei Area before the May 2011 invasion of Abyei town.

These attacks targeted strategic SPLA-aligned positions in front of the emerging SAF frontlines that were being built-up and reinforced in Sudan and the Abyei Area. A Small Arms Survey report revealed garrisons of at least 300 SPLA-aligned police officers per town stationed in Tajalei, Todach, and Maker Abior, as well as an additional force of another 300 police officers in Abyei.¹¹⁵ The official total force agreed upon for these units was 300 police officers¹¹⁶ meaning that the actual force deployed by the SPLA may have been as much as four times the allowed troop level.

The locations attacked, the short intervals between attacks, and the apparent targets of the attacks resulted in immediate civilian flight en masse from the area in each case. Additionally, the large scale burning of civilian dwellings, particularly tukuls, resulted in civilian displacement and limited the ability of the population to return to the attacked area. The raids had a secondary effect of causing civilians to flee Abyei town as well.

This apparent strategy of instigating civilian displacement employed by the Misseriya and other SAF-aligned militias has repeatedly been used before in Sudan. As noted before, the use of militias offers the Government of Sudan some form of deniability. In Douglas Johnson's book, *The Root Causes of Sudan's Civil Wars*, he examines similar strategies by armed actors in this region during the initial phase of the second Sudanese civil war:

In the early years of the war (1984-8) the government relied heavily on surrogate forces raised from tribal militias (subsequently incorporated into the PDF), the most prominent being the Murahalin (Misiriyya and Rizaiqat of Southern Kordofan and Southern Darfur)... These forces adopted tactics which were aimed at denying the SPLA a civilian base of support; thus civilian settlements were attacked at least as often, if not more often, than units of SPLA troops. In Abyei (Southern Kordofan) and northern Bahr al-Ghazal, the attacks had begun the war and were aimed at driving people away from their settlements: houses were burned, crops destroyed, cattle seized and people abducted and enslaved.¹¹⁷

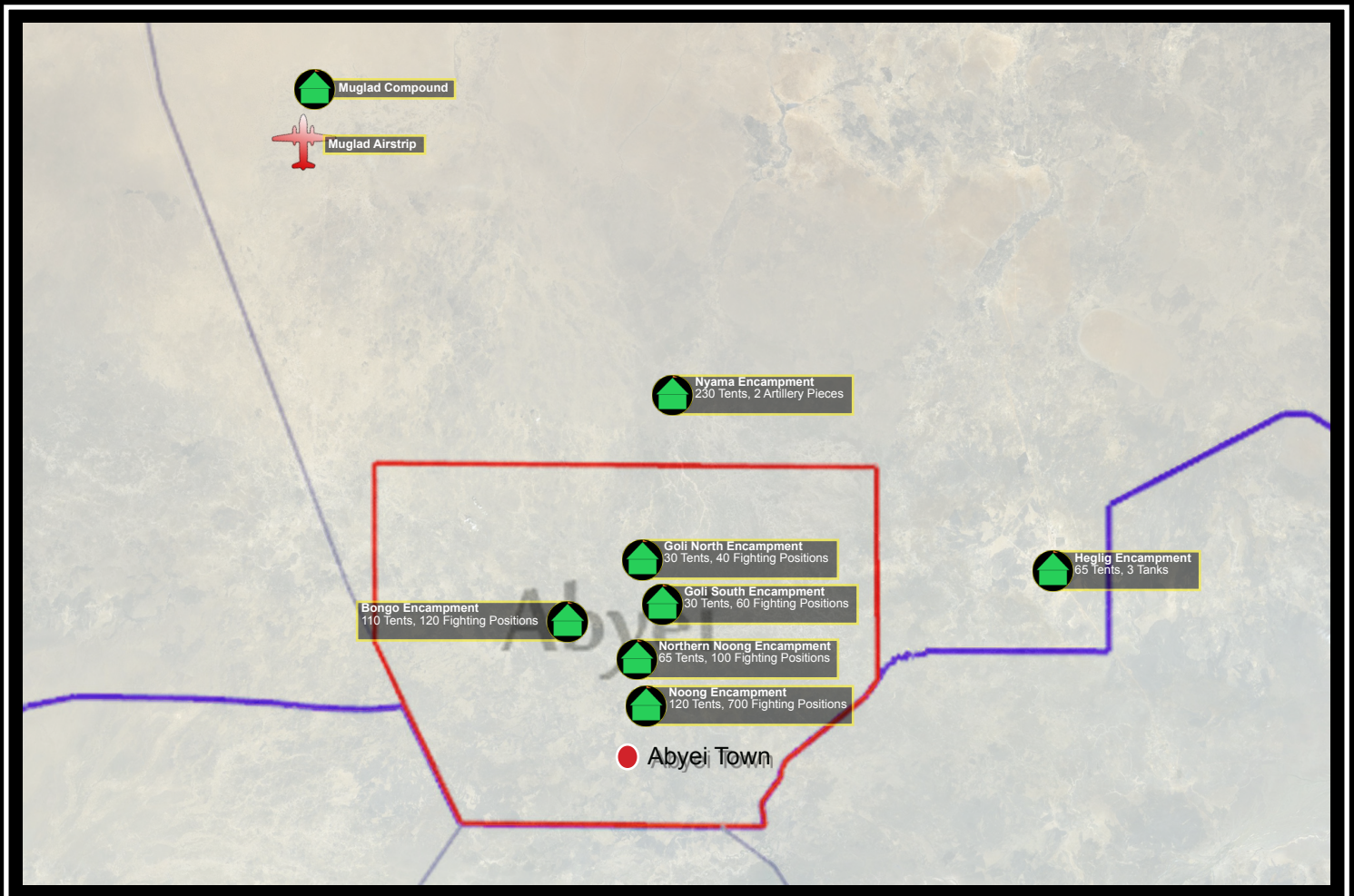
There are distinct similarities between allegations of SAF involvement in the 27 February attack on Todach and the 2 March attack on Maker Abior. At both locations, forces from SAF's 31st Brigade were reportedly involved in the fighting. The 31st Brigade would ultimately lead the May 2011 invasion of Abyei, according to Signal's analysis of videotaped statements by SAF officers.

Three SAF units from nearby Timsah and Nyama were accused of launching the attacks on Todach and Maker. The accusations did not specifically name the three units involved. However, the 31st Brigade is reportedly stationed in Nyama. After the 31st Brigade invaded and took control of Abyei in May 2008, the JIU commander stated that the 31st Brigade was re-stationed to Nyama at the end of July 2008.¹¹⁸ A report two years later from *Sudan Tribune* also stated that Nyama is "a military outpost hosting members of the Sudan Armed Forces (SAF) of Brigade 31."¹¹⁹

In Depth A

Build-up of Armed Actors Before Abyei Invasion

December 2010 to May 2011



IN DEPTH: A

Build-up of Armed Actors Before Abyei Invasion

SAF-aligned and SPLA Build-up

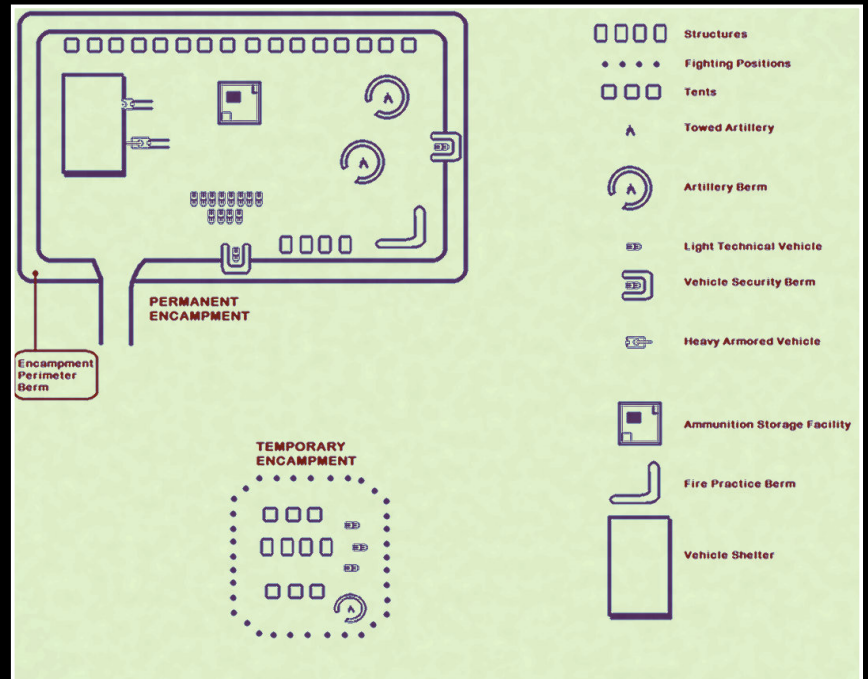
By the end of March, the UNMIS force commander, Major General Moses Obi, stated that “We have evidence that both sides have militarized Abyei. We have seen all sorts of armed elements that ordinarily are not supposed to be there. The weapons they are holding are higher than the scale that we would expect from the police.” Those weapons reportedly included RPGs, multi-barrel rocket launchers and mobile mounted machine-guns.¹²⁰ On 14 April, the UNMIS Head of Office in Abyei reported rumors of “impending attacks” as weapons became more visible in Abyei town.¹²¹

Despite rumors, UNMIS had difficulty verifying the claims because of freedom of movement restrictions placed on their patrols by militias and unauthorized military forces.¹²² Signal analysis of build-up by both SAF-aligned and SPLA-aligned forces in the Abyei Area is consistent with Small Arms Survey’s account that by April, “the territory north of Abyei town was in the hands of militias and almost totally deserted by civilians.”¹²³

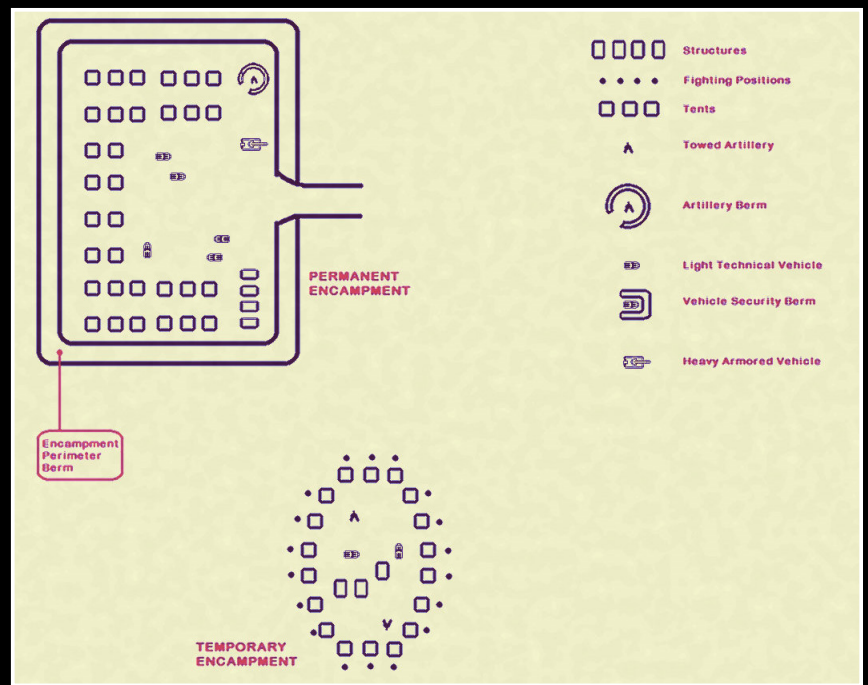
SPLA Infiltrate Abyei

A Small Arms Survey report based on ground visits by their researchers revealed garrisons of at least 300 SPLA-aligned police officers per town stationed in Tajalei, Todach, and Maker Abior, as well as an additional force of another 300 police officers in Abyei.¹²⁴ The total police force in these four locations was approximately 1,200 personnel. These police, also known as the Juba Police, were sent to the Abyei Area following the 2008 violence. The force was mandated to reinforce the current police force and to assist in maintain-

Typical Visual Attributes of SAF Operating Base



Typical Visual Attributes of SPLA Operating Base



ing peace. The official total force agreed upon for these units was 300 police officers,¹²⁵ meaning that the actual force deployed by the SPLA may have been as much as four times the allowed troop level.

UNMIS privately noted to Small Arms Survey that police officers in Abyei were basically “SPLA in police uniforms.”¹²⁶ This statement is consistent with claims made by Misseriya herders that the southern police force at that time was made up of SPLA forces disguised as police members. The Misseriya claimed that the disguised SPLA forces repeatedly attacked their herders and limited their migration movements.¹²⁷

According to reports by the Enough Project, these police units are “often as heavily armed as the JIUs and sometimes move in civilian clothing.”¹²⁸ The possession of heavy weapons by both the police and other SPLA-aligned units at that time increased the difficulty in distinguishing between the two forces. The presence of SPLA forces in “disguise” would have constituted a violation of the CPA by the SPLA.

These activities constituted a violation of the CPA by the SPLA because they failed to redeploy its existing contingents of unauthorized forces south of Abyei after the agreement was signed.¹²⁹ The cap on authorized forces allowed by the agreement was designed to limit the number of armed actors in Abyei to only the JIUs and authorized police units. The SPLA buildup to a total of as many 1,200 supposed Juba police officers was as much as four times the authorized force strength permitted under the 2008 Abyei Roadmap agreement for that particular unit.

SAF-aligned Build-up

On 20 March, *Sudan Tribune* reported that Sudan’s Federal Ministry of Interior deployed 1,500 northern Sudan police to Goli, Diffra and Bongo. SPLM officials did not approve the movement of forces and accused the NCP of “intending to forcefully take control of areas where oil is drilled.”¹³⁰ SAF spokesman Saad denied the accusations of build-up¹³¹ but Signal analysis of available imagery from that timespan corroborates claims of increasing numbers SAF and SAF-aligned units present at Goli and Bongo.

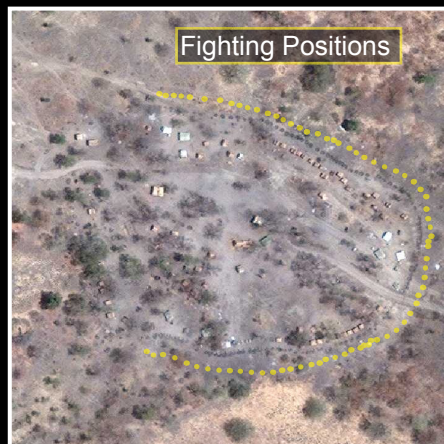
Bongo

According to Signal analysis, between 12 February and 8 March 2011 an installation comprised of several tents and structures within a horseshoe shaped perimeter of fighting positions was constructed in Bongo (also known

Figure ID A-1



Bongo Camp Buildup A
12 February 2011
Bongo, Abyei Area



Bongo Camp Buildup B
8 March 2011
Bongo, Abyei Area



Bongo Camp Buildup C
19 March 2011 | 9:09 AM EAT
Bongo, Abyei Area

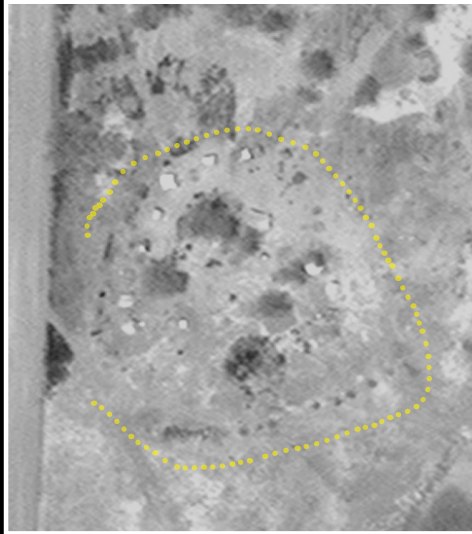
as Alal). Imagery taken on 19 March shows an increased number of tents and other similar structures within a perimeter recently enclosed by newly added fighting positions. *Sudan Tribune* reported the deployment of northern police to Bongo one day after this image was taken. [Figure ID A-1]

Goli

Figure ID A-2



Goli Southeast Camp - Before
19 December 2010 | 11:46 AM EAT
Goli, Abyei Area



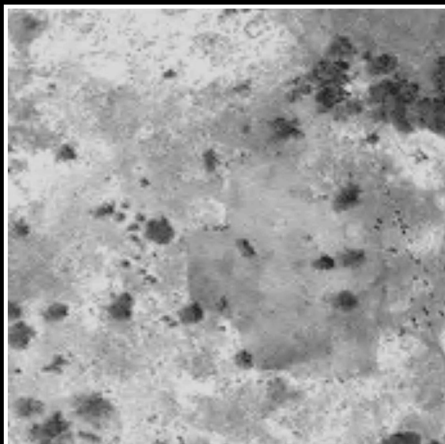
Goli Southeast Camp - After
9 March 2011 | 11:43 AM EAT
Goli, Abyei Area

Signal analyzed four images taken of Goli on 19 December 2010, 9 March, 21 March and 28 March 2011. Between 19 December and 9 March, an installation of tents in a circle formation surrounded by a perimeter of fighting positions was constructed [Figure ID A-2].

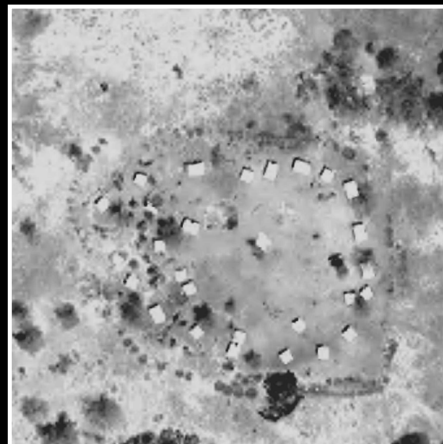
Another installation, 250 meters northwest of the one previously established, was built between 9 March and 21 March. This installation was built during the timeframe during which northern police were reportedly deployed to Goli.

Imagery from 28 March 2011 shows the northwest encampment contains a new protective fortification surrounding the tents, with the addition of approximately six vehicle security positions constructed in the fortification. The smaller encampment to the southeast shows an increase in fighting positions on the northeast perimeter [Figure ID A-3].

Figure ID A-3



Goli Northwest Camp - A
9 March 2011
Goli, Abyei Area



Goli Northwest Camp - B
21 March 2011
Goli, Abyei Area



Goli Northwest Camp - C
28 March 2011
Goli, Abyei Area



PROGRAM ON
HUMAN SECURITY & TECHNOLOGY
Harvard Humanitarian Initiative

SUDAN: ANATOMY OF A CONFLICT

In Depth: A

Build-up of Armed Actors Before Abyei Invasion
December 2010 to May 2011

Figure ID A-4



Goli Northwest Camp - Before
29 April 2011 | 12:14 PM EAT
Goli, Abyei Area



Goli Northwest Camp - After
24 May 2011 | 11:09 AM EAT
Goli, Abyei Area

Analysis of imagery taken on 29 April and 24 May 2011 determined that the northwest camp in Goli was cleared of the tents and structures during this time period. [Figure ID A-4].

Additionally, during this time, the southwest camp shows the presence of tracks consistent with those of T-55 tanks, as well as the presence of two heavy equipment transports [Figure ID A-5].

Figure ID A-5



Goli Southeast - Before
29 April 2011 | 12:14 PM EAT
Goli, Abyei Area



Goli Southeast - After
24 May 2011 | 11:09 AM EAT
Goli, Abyei Area

Nyama

Figure ID A-6



Nyama Camp Buildup - Before
9 March 2011 | 11:43 AM EAT
Nyama, South Kordofan



Nyama Camp Buildup - After
29 April 2011 | 12:14 PM EAT
Nyama, South Kordofan

The Nyama encampment, based on analysis of imagery taken on 9 March 2011, shows the presence of three heavy equipment transport vehicles, two pieces of towed artillery, consistent with 105 mm M101 Howitzers, and approximately 190 tents and other structures along the perimeter and within the encampment fortification. Imagery analyzed from 29 April 2011 shows an increase of approximately 40 new tents and other structures within the walls of the encampment. [Figure ID A-6]

Heglig

Figure ID A-7



Heglig Camp Buildup - Before
24 April 2011
Heglig



Heglig Camp Buildup - After
13 May 2011
Heglig

Signal analysis of imagery taken of Heglig between the dates of 24 April and 13 May 2011 shows an increase in the number of tents and structures from 26 to 70 within the main Heglig SAF encampment. Additionally, in the 13 May imagery, there is the presence of approximately seven light vehicles, and what appear to be three heavy armored vehicles, partially covered by a vehicle shed within the encampment [Figure ID A-7].

Muglad

Figure ID A-8



Muglad Airstrip Fuel Tanks - Before
3 February 2011
Muglad, South Kordofan



Muglad Airstrip Fuel Tanks - After
25 February 2011
Muglad, South Kordofan

Imagery analysis documents the installation of a fuel storage facility at the northwest end of the Muglad airstrip between the dates of 3 and 25 February 2011. An aircraft consistent with a Mi-8 transport helicopter is identified on the airstrip apron in the 3 February image. It appears to have departed by 25 February. In later imagery taken on 16 March, the airstrip appears to have two Mi-24 attack helicopters and an aircraft consistent with an Antonov An-24 or An-26 transport plane. On 19 March 2011, updated imagery shows the Antonov has departed, and by 24 March 2011, imagery shows a Mi-8 on the airstrip. By 28 March, imagery shows that one Mi-24 and one Mi-8 are in different positions than on the 24 March image [Figure ID A-8, ID A-9].

Signal analysis of imagery taken on 19 March shows the presence of at least 10 units of heavy armor consistent with T-55 main battle tanks. Seven of the tanks appear to be loaded onto the back of heavy equipment transports, and at least three appear to be off-loaded. Additionally, there are at least twelve light vehicles and three cargo trucks located approximately 20 meters northeast of the tanks [Figure ID A-10].

Figure ID A-9



16 March 2011

19 March 2011

24 March 2011

28 March 2011

Helicopter Gunships and Other Aircraft at Muglad Airstrip
Muglad, South Kordofan

Figure ID A-10



Tanks, HETs, and Vehicles at Muglad Base - Before
19 March 2011
Muglad, South Kordofan

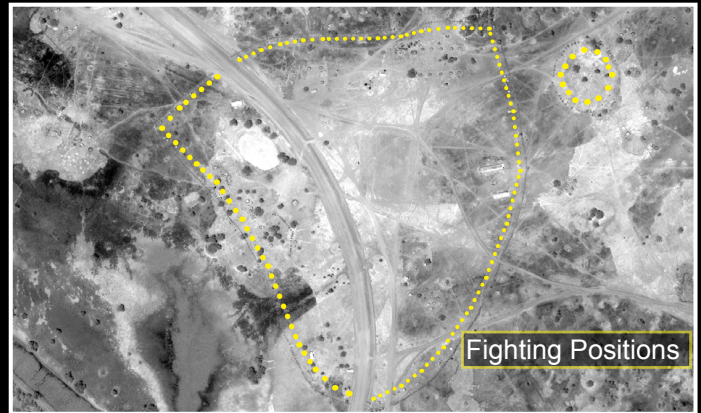


Tanks, HETs, and Vehicles at Muglad Base - After
28 March 2011
Muglad, South Kordofan

Figure ID A-11



Noong Camp Buildup - Before
19 December 2010 | 11:46 AM EAT
Noong, Abyei Area



Noong Camp Buildup - After
9 March 2011 | 11:43 AM EAT
Noong, Abyei Area

Noong

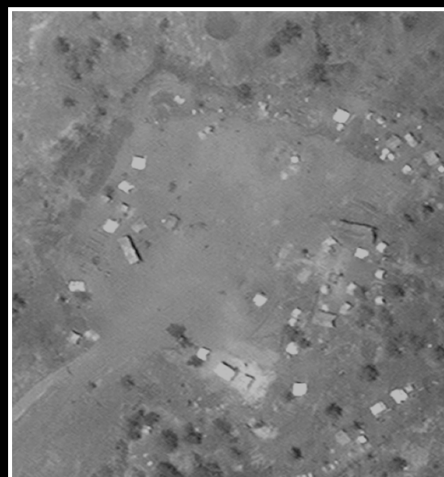
Signal analysis documents build-up at two locations in Noong. However, Signal cannot identify the armed actors present at these locations during this time. Imagery captured between 19 December 2010 and 3 March 2011 reveals the installation of fighting positions on the west side of the encampment in Noong. Imagery of 9 March 2011 shows a completed perimeter encircling the encampment composed of fighting positions [Figure ID A-11].

Another encampment, north of the Noong encampment, was built between 19 December 2010 and 9 March 2011. Newly erected tents and similar structures appear in the image. By 19 March, newly dug fighting positions encircle the tents and similar structures [Figure ID A-12].

Figure ID A-12



Northern Noong Camp Buildup - A
19 December 2010 | 11:46 AM EAT
Noong, Abyei Area



Northern Noong Camp Buildup - B
9 March 2011 | 11:43 AM EAT
Noong, Abyei Area



Northern Noong Camp Buildup - C
19 March 2011 | 12:09 PM EAT
Noong, Abyei Area

Chapter III

The Fall of Abyei May 2011

Imagery taken 26 May 2011 reveals three apparent lines of attack by SAF-aligned forces into and around Abyei town. One attack area, outlined in blue on the image, shows evidence of a possible movement of SAF-aligned forces from Dungop towards Abyei town, SAF's apparent northeastern flank. Dungop was attacked on 21 March by PDF and Misseriya forces. Approximately 166 structures were razed in the area, with no signs of heavy armor tracking visible within the attacked area.

The SAF-aligned western flank's apparent area of attack is outlined in green. This area runs south of Abyei town towards Banton Bridge. Additionally, it stretches west of the main road that runs south. Again, no tank tracking is visible but there is apparent fresh tracking consistent with light vehicles. An estimated 84 razed structures are present. This attack pattern differs from the first area because there is evidence of apparent heavy looting. The evidence suggests that this second attack line occurred over a longer period of time, involving different units and/or materiel.

The area of the western flank merges with tracking consistent with heavy armored vehicles on the main road in Banton. This area is outlined in yellow. Heavy tank and other vehicle tracking is visible. Approximately 78 structures appear razed, including 35 structures on the south end of the Banton Bridge. The bridge itself was recently destroyed. There is a large amount of apparently fresh, non-tank tracking on the eastern road leading into Banton. T-55 tank tracking is present on the main road south to Banton from Abyei town and through the surrounding area [Figure III-1].

The Dokura Incident

An UNMIS report, "UPDATE ON THE ATTACK AND OCCUPATION OF ABYEI BY SAF," marked not for public citation or distribution, claimed that a UN escorted SAF JIU convoy in Dokura was allegedly attacked by SPLA on 19 May 2011.¹³² At the time of the attack, Dokura was allegedly controlled by SPLA-aligned police.¹³³ Some time after the attack, SAF reportedly began shelling and bombing SPLA positions in Todach, Tajalei, Noong, Leu, Maker Abior, Awolnom and Marial Achack.¹³⁴ At least four of these locations were the sites of previous attacks and the razing of villages by SAF-aligned forces in January, February and March 2011.

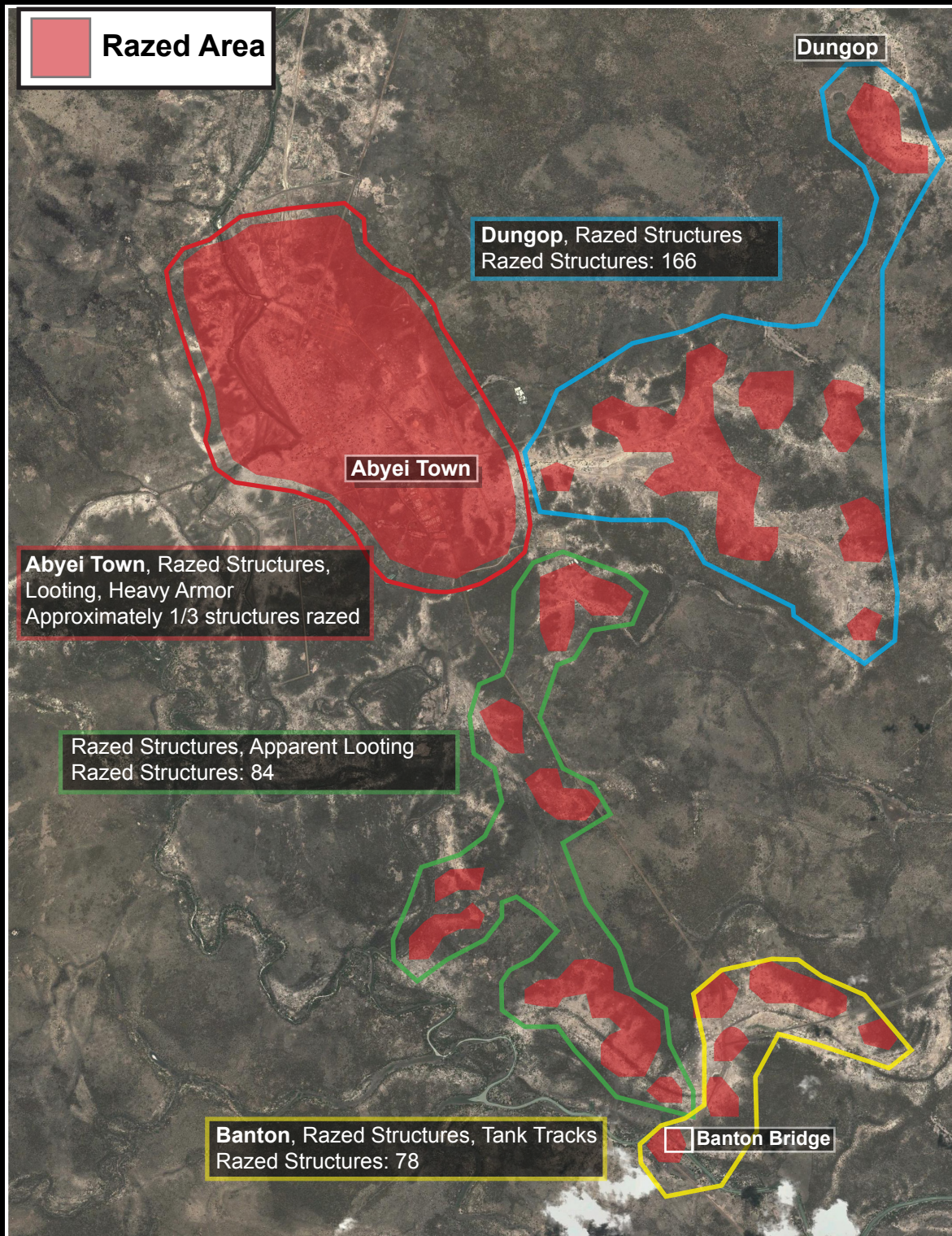
Colonel Philip Aguer, SPLA spokesman, denied the accusations that SPLA shot at the UN escorted SAF JIU convoy. He contended that the shot fired at the convoy could not have been from SPLA since they were part of the attacked convoy. Additionally, Aguer claimed that SPLA had no presence in the area beside the units operating within the JIU framework. Aguer further accused Sudan of using the attack as a pretense for the invasion of Abyei, claiming that the attack was part of a "bigger picture." He pointed out that the invasion of Abyei was pre-planned as evidenced by SAF's buildup of forces earlier in the year.¹³⁵ Aguer previously said that the initial shot was fired by elements of the SAF JIU contingent present at the Dokura checkpoint.¹³⁶

On 20 May, artillery bombardment was reported in Todach and Tajalei hours after the Sudanese government threatened to retaliate for the attack on its convoy. An UNMIS spokesperson reported hearing exchanges of artillery in Todach and Tajalei but said they did not know who the fighting was between.¹³⁷ SPLA claimed that northern forces attacked SPLA army and police positions in four locations using tanks and long-range artillery.¹³⁸ The UN reported that following the convoy attack fighting broke out in villages north and east of Abyei town, including Abyei town itself.¹³⁹

Figure III-1

Satellite Imagery Overview: Razed Structures, Abyei Area

26 May 2011



The rapid deployment in at least the first 24 hours of artillery and air assets in the bombardment of these locations after the Dokura incident is critical to note. UNMIS Human Rights reported that SAF's attack and invasion of Abyei did not appear to be in retaliation to the convoy attack in Dokura, but that it was a "deliberate plan by the North conceived long before the Dokura incident as evidenced by the SAF troop buildup in the area before the attack."¹⁴⁰ This reported build-up is consistent with Signal analysis of SAF and SAF-aligned unit locations prior to the invasion.

In the months before the attack, SAF apparently prepositioned materiel and vehicles required for artillery bombardment. SAF also enhanced the infrastructure needed to facilitate the high volume and tempo of air strikes that would be brought to bear on Abyei and the vicinity. North-South roads through South Kordofan blocked commercial traffic beginning on 2 May. Relatedly, the week before the SAF attack on Abyei, freedom of movement became increasingly restricted near positions held by SAF-aligned forces.

The Heglig-Goli road was blocked. The UN reported that obstructing this road "blocked the movement of humanitarian vehicles between Abyei and Kadugli."¹⁴¹ As the invasion started, the Muglad-Meiram road to the south also remained closed. The Heglig-Kharasana-Goli road, which leads to Abyei, allegedly remained blocked at Goli. The UN Office for the Coordination of Humanitarian Affairs (OCHA) reported that this blockage created an impediment to the delivery of humanitarian aid to Abyei.¹⁴²

SAF-aligned Forces Take Abyei Town

21 May marked the turning point when the steadily escalating but largely low intensity conflict in Abyei devolved into all-out war. As clashes erupted at multiple locations around Abyei town and rumors of the imminent invasion of Abyei town spread, the Dinka Ngok population reportedly began to flee the town en masse. Meanwhile, according to UNMIS Human Rights, armed youths remained in the town and positioned themselves in "strategic areas."¹⁴³

The UNMIS Human Rights leaked report on the invasion of Abyei stated that, "Abyei is virtually empty and deserted," noting that approximately 30,000 residents of the town, most of which are members of the Dinka Ngok tribe, had fled. They left the town heading south via the Banton Bridge, the main bridge linking Abyei to South Sudan, according to available reports. A visible SAF presence at the bridge reportedly caused the now displaced civilian population of Abyei town and the vicinity to flee even further south.¹⁴⁴ In addition to the civilian population in flight from their homes, all NGO personnel in Abyei were evacuated to Agok, Northern Bahr el Ghazal, southern Sudan early on the 21st.¹⁴⁵

That night, SAF invaded Abyei town and established de-facto military rule of the area. UNMIS Human Rights reported that SAF moved into Abyei to "secure control of the town" as other SAF units deployed south of Abyei town.¹⁴⁶ The movements of SAF identified by UNMIS are consistent with the attack patterns identified by the Signal Program through imagery analysis.

Heavy fighting between SAF-aligned and SPLA-aligned forces broke out. There were reports of heavy weapons being used, including artillery, tanks, mortars and heavy machine guns. The heaviest fighting was reported around the UNMIS compound, allegedly between SAF and SPLA-aligned police personnel.¹⁴⁷

In imagery captured on 26 May, SAF presence is indicated by vehicles consistent with 10 T-55 tanks, three of which are on Heavy Equipment Transports (HETs), three 105 mm artillery pieces, and two infantry fighting vehicles (IFVs). These tanks, IFVs and artillery are all facing south, towards the Baton Bridge. Extensive tank and light armor tracking is also visible, along with destroyed structures throughout the area. [Figure III-3]

Approximately 1.6 km north of this section of Abyei town, three more armored vehicles consistent with T-55 main battle tanks have been identified. These tanks appear to be parked with their turrets facing west. Approximately

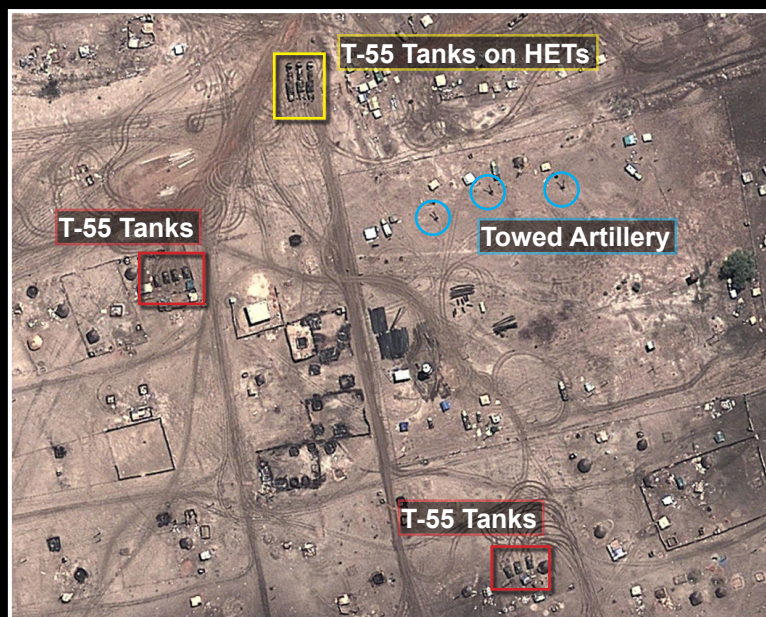
500 m east of these tanks, an additional vehicle consistent with a T-55 tank can be seen loaded on the back of a heavy equipment transport that appears to be traveling northwest [Figure III-2].

Residents who fled Abyei gave consistent accounts detailing SAF's apparent order of battle. The attack began with aerial bombardments of Abyei town. Pairs of armed men shooting and moving through the town on motor-bikes were then observed. Soon, larger armed groups moved in by Land Cruiser. Some reported being shot at from aircraft overhead as they attempted to flee. People who remained in Abyei town reported witnessing tanks moving into the town center on 21 May.¹⁴⁸

In a video prepared by SAF for the series "Jounoud Al Watan," made available online on 23 May 2011, Major Abd Al Latif Kabir, who introduces the video, saluted the "bravery and steadfastness" of the members of the 31st Brigade in their fight for Abyei. He noted that they [31st Brigade] "wrote the finest epics of heroism and sacrifice," calling the battle for Abyei the battle for "steadfastness and dignity." In the video, a SAF officer claims that the forces captured four T-55 tanks from SPLA and one BTR, an armored personnel carrier. This would be the second time in approximately three years that elements of the 31st Brigade attacked Abyei town.

In a later segment of the video, Major Adel Osman Al Sheikh noted that they found two of the tanks after SPLA fled in the opposite direction. SAF soldiers are shown in the segment racing towards parked tanks while waving the Sudanese flag and climbing on top of an apparently captured tank. Defense Minister Hussein, in an address to members of parliament, stated that the forces would remain in Abyei to provide security for the area until an investigation and official condemnation of SPLA had occurred. He expressed confidence that SPLA actions were a clear violation of the CPA. He argued that a solution for the status of Abyei might require a new agreement. Hussein claimed Abyei is part of the north and noted that a referendum would not occur without the participation of its "original citizens", apparently referencing the Misseriya.¹⁴⁹

Figure III-2



Tanks and Towed Artillery in Abyei Town

26 May 2011

Abyei Town, Abyei Area

The Sacking of Abyei Town

President Omar Al Bashir issued a decree on 21 May 2011 dissolving the Abyei Administration and officially removing its chief administrator.¹⁵⁰ The Abyei Administration was the local government for the Abyei Area established for the interim period pending a referendum on the final status of Abyei. Following the decree, the SAF spokesman announced on 30 May that Brigadier Izz Al Din Ousman was appointed as temporary military governor for Abyei. Ousman was Commander of the 31st Brigade at the time of the Abyei invasion, which was reportedly involved in both the 2008 and 2011 SAF invasions of Abyei.¹⁵¹

President Bashir's actions ended Abyei's autonomous rule, and forcibly placed Abyei under Sudan's governance. This unilateral move by President Bashir constituted a violation of core components of the CPA and undermined the role of the Abyei Administration. Bashir's imposition of a military solution to Abyei directly subverted any political process defined by the CPA, exacerbating instability and eliminating mutual accountability in the region. The Government of Sudan tightened its control of Abyei town by moving additional SAF-aligned forces into the area soon after the fighting began. UNMIS reported that on the morning of 22 May, PDF and armed Misseriya from Goli and areas surrounding Abyei were seen moving into the town. The report stated, "[they] began moving from tukul to tukul, and allegedly killed residents trapped therein, mostly Ngok Dinkas."¹⁵² Many of the civilians who were able to flee moved towards Agok. The displaced population continued to face threats to their security even after they had reached southern Sudan. SAF aircraft circled over Abyei and its vicinity. SPLA reinforcements massed in the area and reports of SAF forces moving south continued to be received.¹⁵³

Four days following the SAF invasion and occupation of Abyei, UNMIS reported that SAF denied UNMIS forces access to the town. On 23 May, UNMIS conducted a limited number of patrols through the town. However, SAF restricted UNMIS from stopping and inspecting the town. Due to these SAF restrictions, UNMIS patrols were performed by troops confined to either armored personnel carriers (APCs) or a UN helicopter.¹⁵⁴ These restrictions severely hampered the UN's ability to adequately respond to the crisis.

Confirmation of UNMIS Human Rights Report Findings

1) While SAF were consolidating their control of Abyei town alongside Misseriya militia, who the UN stated was "still in Abyei ostensibly with the consent of SAF," an OCHA situation report claimed that SAF additionally took control of Rumameer, Marial Achack and Mijak villages in the Abyei area.¹⁵⁵

2) On 26 May, SAF blew up the Banton Bridge after repeatedly attempting to do so in the preceding days.¹⁵⁶ This move by SAF effectively cut-off Abyei from South Sudan, hindered movements of Internally Displaced Persons (IDPs) heading south, and rendered the area inaccessible to SPLA seeking to resupply troops in the region or reinforce them with additional units from the south.

Imagery from 26 May shows the apparent destruction of Banton Bridge. A visible crater on the surface of the bridge is consistent with ground photos taken of the damage. Several recent tracks consistent with heavy armor vehicles are visible in curved patterns on the ground on the north side of the bridge. The south side of the bridge shows foxholes in an apparent protective perimeter surrounding several structures that have been destroyed sometime since the last image of the location on 29 April 2011 [Figure III-3].

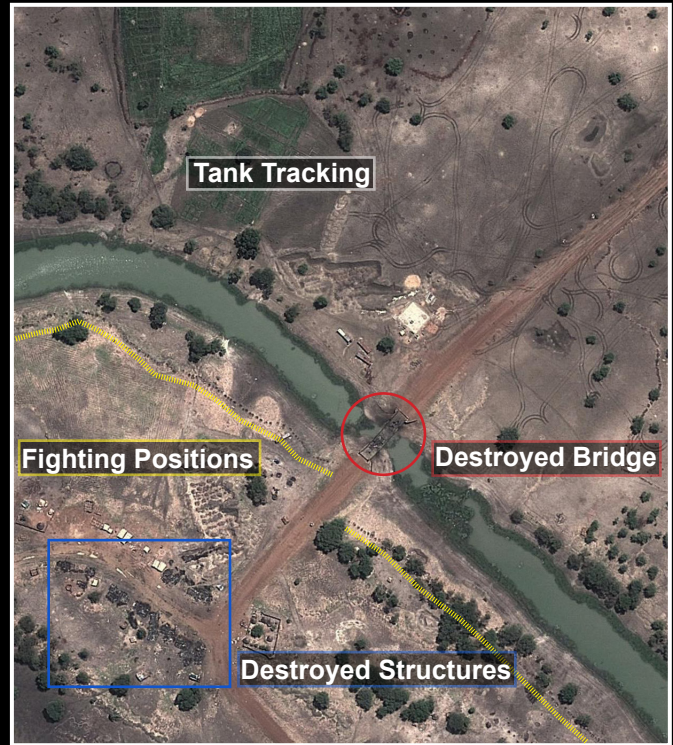
According to the UN, all tukuls and houses in Abyei town were completely looted. The Abyei market and nearby shops were also looted and burned. The World Food Programme (WFP) and United Nations Children's Fund (UNICEF) warehouses, which were fully stocked before the SAF attack, as well as the Médecins Sans Frontières (MSF), AECOM and Humanitarian Affairs compounds have also been plundered.¹⁵⁷

Satellite imagery captured of Abyei on 26 May 2011 corroborates UNMIS reports of the looting of the WFP warehouse and the MSF compound in Abyei town. Scattered debris is visible inside and outside the perimeters of

Figure III-3



Banton Bridge - Before
29 April 2011
Banton, Abyei Area



Banton Bridge - After
26 May 2011
Banton, Abyei Area

the WFP warehouse and MSF compound. This is indicative of looting at these facilities. Looted items from WFP reportedly included “medical supplies, surgical equipment and 800 metric tons of food which was enough to feed 50,000 people for three months.”¹⁵⁸ Additionally, 12 structures in the MSF compound were razed, 10 of which appear to have been burned [Figure III-4].

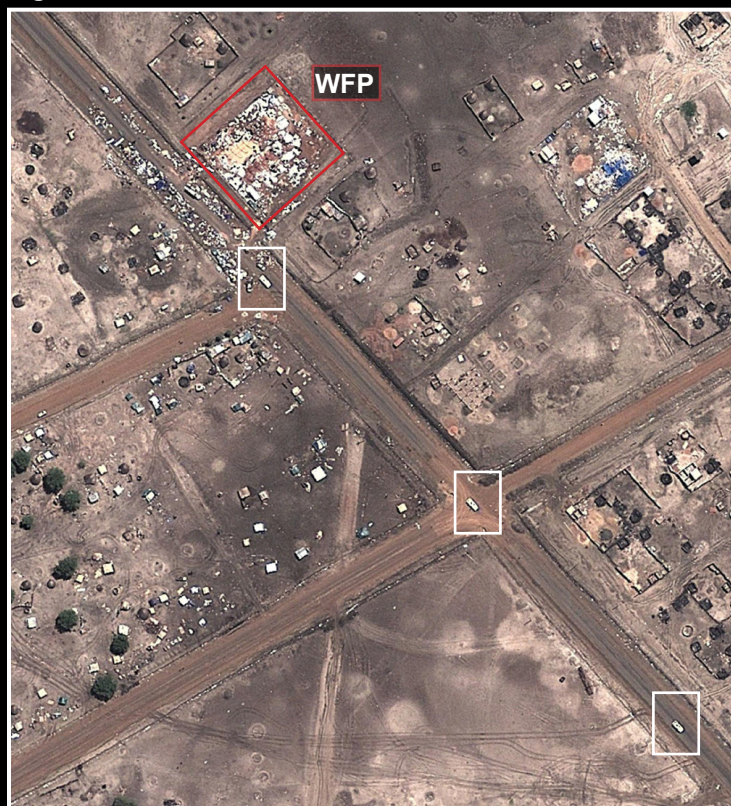
An apparent UN patrol of three APCs, consistent with WZ-551 type, are visible driving along the street in front of the WFP warehouse. The presence of these apparent WZ-551s is consistent with UNMIS statements that they conducted patrols of Abyei town with their personnel confined to APCs.

Additionally, imagery confirms reports of the widespread ransacking of Abyei town and the destruction of tukuls and other structures throughout the town. An image from 26 May shows looted and razed structures in and around the Abyei market [Figure III-5].

UNMIS also reported:

Five days after the occupation, hundreds of young Misseriya armed with AK 47 rifles in civilian clothes were still observed taking every thing [sic] they could lay hands on... Piles of looted items and sacks of WFP bags on the sides of the road were also noted awaiting transportation. Trucks were seen loading the looted goods...SAF elements wearing green military uniform were seeing looting side by side with the Misseriya armed militia...SAF have distributed WFP food stocks among the Misseriya clan leaders.¹⁵⁹

Figure III-4



Looting at WFP and UN Patrol
26 May 2011
Abyei Town, Abyei Area



Looting and Razing at MSF
26 May 2011
Abyei Town, Abyei Area

4) Additionally, UNMIS also reported the razing of houses stating:

"Some houses are still burning. It is estimated that between 15-20 % of house in Abyei town have been completely burned including government buildings. The Abyei market and all the shops have been razed."¹⁶⁰

UN patrols also reported observation of razed tukuls in several villages between Abyei and Agok.¹⁶¹ Analysis of satellite imagery taken over Abyei on 26 May 2011 corroborates reports that Abyei town was razed. Analysts at Signal determined that 33% of the structures in Abyei town were burned.

The UNMIS Human Rights report concluded that the attacks and subsequent occupation of Abyei, in addition to the displacement of the Ngok Dinka from Abyei, was "tantamount to **ethnic cleansing**,"¹⁶² By destroying their homes, looting their properties and inspiring fear and terror, over 30,000 Ngok Dinka have been forcefully displaced from their ancestral homes, leaving the Abyei area now more or less homogeneously occupied by the Misseriya."¹⁶³ However, local officials claimed that up to 80,000 people fled their homes, which more than doubles the UN's estimate.¹⁶⁴

On 25 May, the *New York Times* said that a UN official reported that a "northern Sudanese general revealed this week that there was a plan to send 15,000 Misseriya into Abyei in the coming days, which could have a serious impact on Abyei's delicate demographics. Other United Nations officials estimated that 5,000 to 10,000 Misseriya had already entered Abyei town."¹⁶⁵

UNMIS Human Rights further noted that: "The massive plundering, pillaging, and razing of homes, shops and humanitarian facilities in Abyei by SAF and Misseriya militia is a gross violation of international humanitarian law."¹⁶⁶

The International Community Condemns Sudan's Seizure of Abyei

The UNSC issued a press statement on 22 May 2011 condemning the attack by Southern forces on the convoy in Dokura. The UNSC further condemned the escalation of military operations by

Figure III-5



Abyei Market Razed - Before
12 February 2011
Abyei Town, Abyei Area



Abyei Market Razed - After
26 May 2011
Abyei Town, Abyei Area

SAF. Additionally the UNSC deplored the “unilateral dissolution of the Abyei administration” and called “for it to be re-established by mutual agreement, without delay.”¹⁶⁷

The UNSC urged both sides to “refrain from the use of force,” demanding immediate withdrawals of all the armed “elements” from Abyei.¹⁶⁸ On 23 May 2011, Dr. Jean Ping, the Chairperson of the African Union, expressed concern over the humanitarian situation in Abyei and the status of the displaced population.¹⁶⁹

Alleged UNMIS Inaction

On 4 June 2011, it was reported that the UN was investigating allegations that UNMIS peacekeepers failed to respond during the initial incursion of SAF-aligned forces into Abyei town in May. Peacekeepers allegedly remained in their barracks for 48 hours after the fighting began. The alleged inaction of the Zambian UNMIS contingent serving in Abyei was criticized by diplomats who spoke to *Reuters* on condition of anonymity:

Diplomats described the peacekeepers’ failure to maintain a visible presence in Abyei during a period of heightened conflict -- which they said is crucial for deterring attacks -- in disparaging terms. One senior diplomat described their performance as ‘pathetic.’ Another said it was ‘terrible’... Diplomats said that U.N. officials in New York were livid when they found out the Zambian troops had essentially gone into hiding when the violence escalated.¹⁷⁰

Similarities between the 2008 and 2011 SAF Invasions of Abyei

The invasion of Abyei in 2011 was not the first attack on Abyei town during the CPA interim period. Three years earlier, on 13 May 2008, a similar scenario unfolded in Abyei. Signal identified significant similarities between the events leading up to and during both the 2008 and 2011 attacks.

Following the 2008 invasion of Abyei, an “Abyei Roadmap Agreement” was reached on 8 June 2008. The Roadmap stipulated that a new JIU battalion would be deployed, comprised of elements outside of those of the previous Abyei JIUs. Furthermore, the roadmap agreement included the deployment of police forces in the area, while SAF and SPLA forces were required to redeploy outside of the Abyei Administrative Area. Additionally, the roadmap provided freedom of movement for UNMIS forces north and south of Abyei.¹⁷¹

1) Restricted freedom of movement before the attack

According to a Human Rights Watch (HRW) report, SAF and SPLA restricted UNMIS movements in and around the Abyei Area in weeks before the 2008 fighting. SAF reportedly excluded towns north of Abyei, including Muglad, Meriam and Al Fula, from UNMIS monitoring. SPLA also allegedly restricted UNMIS movements south of Abyei.¹⁷² Restricted freedom of movement throughout the Abyei Area, especially against UNMIS personnel, is consistent with the 2011 invasion.

2) Clashes in Dokura between SAF and SPLA elements

Like 2011, what also began as a seemingly minor violent incident between SPLA police and SAF in Dokura, quickly devolved into heavy fighting between the two parties on 13 May 2008. HRW reported that witnesses claimed South Sudan Unity Movement (SSUM) soldiers, a Government of Sudan-aligned militia absorbed into SAF after the CPA, from SAF’s 31st Brigade clashed with SPLA in Dokura. As fighting continued between both sides, the JIU forces reportedly separated into their SAF and SPLA components. SAF’s 31st Brigade allegedly commanded the SAF JIU forces.¹⁷³

3) SAF’s 31st Brigade led both the 2008 and 2011 attacks on Abyei

Amid allegations of military build-up in the months leading to the 2008 invasion, SAF’s 31st Brigade reportedly led the attack on Abyei that followed the clash at Dokura.¹⁷⁴ Roger Winter, author of “Abyei Aflame,” traveled to Abyei two days following the attack on Abyei town in 2008. Winter published that SAF’s 31st Brigade, who displaced the civilian population and burned the town, were visible in the town while he was there.¹⁷⁵

4) Civilian displacement estimated at over 100,000 people

Like the 2011 invasion, the 2008 violence forced tens of thousands to flee from Abyei. SPLM officials reported that 106,500 people were displaced and sought refuge at 20 sites south of Abyei town. Winter wrote that many people relocated to Agok, Warrap, southern Sudan, which is a three-day walk from Abyei. SAF aircraft also reportedly continued to fly over the displaced populations after both attacks. Winter deemed these acts “terror tactics.”¹⁷⁶

5) Similar reported tactics from both attacks; burning and looting of civilian dwellings and structures

SAF forces, led by the 31st Brigade, and Misseriya reportedly looted and burned the Abyei market and civilian houses throughout the town. HRW reported that by 17 May 2008, half the houses in Abyei were completely destroyed.¹⁷⁷ World is Witness, from the US Holocaust Memorial Museum, released images of destroyed areas; writing, “the entire town has been destroyed and looted.”¹⁷⁸

6) Alleged inaction of UNMIS peacekeepers

Similar to allegations of UNMIS inaction immediately following the 2011 SAF invasion of Abyei, UNMIS also received extremely similar criticism following the 2008 SAF attack. Referencing the 2008 Abyei attack, Richard Williamson, then US Special Envoy for Sudan, said: “We pay a billion dollars a year for UNMIS and they didn’t leave their garrison, while 52,000 lives were shattered and nearly a hundred people perished. The devastation



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was complete ... UN peacekeepers and UNMIS staff in their garrison were as close as 25 feet away.” Al Jazeera reported that the Zambian peacekeepers “preferred to hide out in their rooms for two days rather than go on patrol and protect civilians caught up in the conflict” after the 2011 invasion.¹⁷⁹

Chapter IV

Abyei's Uncertain Future June 2011 to May 2012

Creation of UNISFA

On 12 June 2011, unnamed diplomats reported that President Bashir agreed to pull Sudanese troops out of the disputed Abyei Area prior to southern Sudan's anticipated secession on 9 July of that year. This agreement was widely interpreted as a sign of progress towards a diplomatic resolution to the crisis, coming less than a month before southern Sudan's independence.¹⁸⁰

Following the agreement of the terms of SAF's withdrawal, the UNSC passed Resolution 1990 on 27 June with the expressed goal of demilitarizing of Abyei and supporting the stabilization of the volatile region. The United Nations Interim Security Force for Abyei (UNISFA) was authorized by the resolution to deploy in Abyei. With the UNMIS mandate expiring on 9 July, UNISFA was to replace the outgoing force as the UN presence in the Abyei Area.

UNISFA was tasked with monitoring the contested border area and protecting civilians and humanitarian workers in Abyei. The peacekeepers were given authorization by the UNSC to use force in certain situations as part of its mandate.¹⁸¹ Some reports indicated that many of the 100,000 displaced civilians from Abyei town were waiting for UNISFA deployment to occur as a precondition for returning to their homes.¹⁸²

As of 2 August less than 500 of Ethiopia's promised contribution of 4,200 peacekeepers were deployed in the Abyei region to fulfill UNISFA's mandate.¹⁸³ Even after UNISFA fully deployed to Abyei, SAF-aligned forces continued to maintain their presence in the area. SAF's presence combined with ongoing violence in the area limited the possibility that the displaced population of Abyei would return. The displacement of thousands and the ensuing humanitarian crisis in the wake of the SAF combat action in Abyei effectively remained unresolved.¹⁸⁴

Continued Displacement

One year after the invasion, OCHA reported that only 5,000 people returned to Abyei by the end of March 2012 while 100,000 people still remained displaced. The report described:

The overwhelming majority of more than 100,000 people who fled Abyei and surrounding villages in 2011 remain displaced and are reluctant to return due to the presence of SAF, the risk of landmines and the lack of food assistance and livelihood opportunities. Of the 5,000 estimated returns by the end of March, only 200 were to Abyei town itself, the rest being mainly to villages in the surrounding area.¹⁸⁵

Eric Reeves described a similar situation in a brief he wrote in April 2012. Reeves described the situation of more than 100,000 Dinka Ngok who remained displaced as living "in poor conditions as refugees in South Sudan."¹⁸⁶ By 12 May 2012, the UN began verifying claims made by South Sudan that it withdrew "hundreds of police" from the Abyei Area. The UNSC issued a deadline of 16 May for the Governments of South Sudan and Sudan to pull its forces from the Abyei Area. Removing forces from Abyei was deemed "in accordance with an AU roadmap... endorsed to avert war between the two sides."¹⁸⁷

However, Sudan announced that its forces will only be removed from the Abyei Area "after a joint administrative body is established." Sudan claimed that the joint administrative body was necessary to implement the June 2011 agreement signed by both sides. Under the agreement, the Abyei Administrative Area would be headed by



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one of three nominees from the SPLM approved by the Sudanese government. Conversely, the SPLM had to approve one of Sudan's nominees as well. This process reportedly stalled when South Sudan rejected Sudan's nominees although Sudan claimed to accept the SPLM's nominees.¹⁸⁸

On 28 May, "at the behest of the African Union's (AU) mediator Thabo Mbeki," SAF spokesman Saad announced that Sudan's troops were preparing to withdraw from Abyei on the 29th. The announcement was made as Sudan and South Sudan prepared for talks in Addis Ababa, Ethiopia under auspices of the AU High Level Implementation Panel.¹⁸⁹ On the date set for withdrawal, the *Sudanese Media Center (SMC)* reported that SAF "handed over facilities in Abyei to United Nations peacekeepers."¹⁹⁰

UNISFA in Abyei confirmed that Sudan withdrew its forces on the evening of the 29 May. However, *the BBC* reported that, "the number of police in the areas has been increased to about 200, raising fears that some Sudanese soldiers may have simply changed into police uniforms to stay."¹⁹¹ The continued presence of Sudanese police was reported to "worry" the civilians displaced from Abyei who may try to return to their homes.¹⁹²

Section 2: South Kordofan

January 2011 to June 2012





Chapter V

Ballot Box to Bullet Box: South Kordofan's 2011 Gubernatorial Election January to June 2011

Political Situation in South Kordofan before the 2011 Elections

The Comprehensive Peace Agreement (CPA) called for power sharing in the interim period before the 2011 South Kordofan gubernatorial elections. The agreement mandated that the governorship alternate between the NCP and SPLM until the elections. Preceding the 2011 elections, the governorship was held by the NCP's Ahmed Haroun, who was indicted by the International Criminal Court (ICC) in 2006 for alleged crimes against humanity committed in Darfur. The SPLM leader in South Kordofan, Abdel Aziz al-Hilu, served as his Deputy Governor, in accordance with the power-sharing agreement. Despite the conflicting interests of their parties, they reportedly managed to work together to reduce tensions in the state during the interim period.¹⁹³

Elections elsewhere in Sudan were held in April 2010 but the South Kordofan gubernatorial elections were delayed until 2 May 2011 because SPLM rejected the 2008 state census, which counted 1,406,404 persons in South Kordofan.¹⁹⁴ The June 2010 census, administered by the National Elections Commission (NEC), registered 2,508,256 persons, a significant variance in the state's population between the two assessments. Following the second census, NEC redrew South Kordofan constituencies in November and December 2010.¹⁹⁵

Voter Registration and the Candidates

Voter registration was carried out between 24 January and 24 February 2011. The final voter registry, publically released by NEC on 4 March, counted 642,558 registered voters out of 1,172,406 eligible voters.¹⁹⁶ According to the final list of candidates published by NEC on 27 March 2011, nearly 200 candidates were to run in the elections for state assembly.¹⁹⁷ The two major party candidates were Ahmed Haroun, NCP's candidate, and Abdel Aziz al-Hilu the candidate for the SPLM.

The National Umma Party (NUP) and Popular Congress Party (PCP) withdrew from the gubernatorial and state assembly elections because they claimed the election had become "a contest for which the ruling parties harnessed state resources."¹⁹⁸ The PCP accused the NCP of election rigging because of the redrawing of geographic constituencies and the NCP's use of state-owned media and money to support Haroun's campaign.¹⁹⁹ The Justice Party, in addition to the NUP, blamed the withdrawal of their candidates on "political and security conditions (that) did not favor a free and fair election."²⁰⁰

Campaign Period

The campaign period was supposed to last for 30 days, with a 24 hour "cool-down period" in between the end of the campaigning and the beginning of the election. However, delays in the finalizing of the voter registry resulted in the campaign period starting three days later than planned and lasting until 1 May 2011, the day before the election.²⁰¹

The NCP publically supported Haroun's campaign, with both President Bashir and Vice President Ali Osman Taha visiting South Kordofan to show their support for his candidacy. Taha visited South Kordofan in April 2011 to inaugurate several development projects. Taha held a public rally in Abu Jubeiha where he reaffirmed his government's commitment to implement development projects in South Kordofan. He was accompanied by Haroun, who echoed Taha's commitments. Secretary General of SPLM, Yasir Arman, criticized Taha's visit, claiming that the inauguration of a development project during the ongoing electoral campaign was "a clear violation" of the elections law.²⁰²

On 26 April, President Bashir delivered a speech in Muglad, in which he reportedly threatened war in South Kordofan should SPLM resort to violence in order to win the election. "The movement [SPLM] must submit to the will of ballot boxes or else boxes of bullets will decide the matter," he stated.²⁰³ He also stressed the NCP's position on Abyei, saying, "I say it and repeat it a million times, Abyei is northern and will remain northern."²⁰⁴

To conclude his visit in South Kordofan, Bashir addressed a mass rally at Kadugli Stadium on 28 April. In his speech, Bashir pledged support for the new Kadugli Hospital and the new Military Hospital, which he inaugurated on the same day.²⁰⁵ A day later, *SUNA* reported that Bashir issued a decree awarding the Insignia of Political Achievement to both Haroun and al-Hilu, "in recognition of the two men's role and efforts in the past period."²⁰⁶

At a public rally in Dilling, al-Hilu thanked Bashir for the award but refused to accept it based on Bashir's recent threat to wage war in South Kordofan. "What political achievement is he [Al-Bashir] talking about after he threatens to wage war a mountain to mountain and a state to state," al-Hilu said. Al-Hilu also refused the award because of the use of state-owned resources to support Haroun's campaign, such as the live broadcasting of pro-Haroun rallies by the national media.²⁰⁷

The Carter Center criticized the use of highly inflammatory rhetoric during campaign speeches, to which the Center attributed fear among the citizens of South Kordofan of an increased risk of violence. As an example, the Carter Center cited Bashir's comments that the NCP would return to war in South Kordofan if SPLM did not accept the election results. These threats were made at rallies in support of Haroun in Muglad, Babanusa, Fula and Kadugli between 26 and 28 April.²⁰⁸

The Razing of El Feid

An incident occurring during the campaign period displayed tactics similar to those employed by SAF-aligned forces during the then-ongoing violence in Abyei, a harbinger of the conflict about to erupt in South Kordofan. On 13 April, al-Hilu reported that Haroun's militia, the Central Reserve Police (CRP), also known as Abu Tira, attacked his hometown of El Feid, South Kordofan. The militia reportedly burned over 350 houses, killing over 17 people. A UN source confirmed the violence but did not offer any details.²⁰⁹ Citing an SPLM member, Chinese media ascribed the violence to tribal fighting and said reports indicated 500 houses were burned.²¹⁰

Figure V-1



El Feid Razing - Before
30 December 2010
El Feid, South Kordofan



El Feid Razing - After
16 April 2011
El Feid, South Kordofan

CRP, also known as Abu Tira, is a branch of the Sudanese National Police Services (SNPS).²¹¹ The Government of Sudan reportedly deployed CRP/Abu Tira in Darfur as a paramilitary force to engage in counter-insurgency operations. To this day, Abu Tira continues to be predominantly active in Darfur. Many members of the CRP in Darfur are reportedly members of the Janjaweed, an irregular fighting force that is accused of genocide.²¹² CRP/Abu Tira is reportedly under the command of South Kordofan Governor Ahmad Haroun.²¹³

According to imagery analysis conducted by the United Nations Operational Satellite Applications Programme (UNOSAT) of 16 April 2011 imagery, at least 356 structures in El Feid were razed, in addition to newly burned areas are visible in nearby Um Barmbita.²¹⁴ Signal analysis further corroborates UNOSAT and Satellite Sentinel Project's (SSP) analyses of the intentional burning of El Feid [Figure V-1].

Following this incident, al-Hilu stated, "Haroun is trying to prevent the elections from taking place...The NCP is planning to create insecurity, and we expect worse things to happen. But we are determined to continue the campaign and to win these elections." Led by Haroun, South Kordofan's security committee announced that the incidents in El Feid were a result of local disputes of a tribal nature.²¹⁵ A senior NCP member was quoted saying, "This is fabricated news. This is all political propaganda used in to the election campaign."²¹⁶

South Kordofan Gubernatorial Election

Voting

Voting took place from 2 to 4 May 2011. After casting his own vote in Kadugli, Haroun told reporters: "There is no doubt that we are witnessing... a major turning point in the political development of the state. We are turning from the bullet box to the ballot box." However, al-Hilu did not expect the NCP to accept the election if they lost "because in the last 20 years they continuously rigged the elections," he told *AFP*.²¹⁷

Princeton Lyman, US special envoy for Sudan, described the vote as very important, not just for South Kordofan but for the whole country. At a polling station in Kadugli, Lyman told reporters that, "It shows that the country is moving through this process peacefully."²¹⁸

Results

On 6 May, *Al Jazeera* reported that early figures from 6 polling stations showed that al-Hilu was ahead by 14,000 votes.²¹⁹ Mohi al-Toum Hamed, Deputy Chairman of the NCP in South Kordofan, released a press statement saying that any accurate account will show a substantial win for the NCP and that SPLM was trying to prepare grounds for contesting the results.²²⁰

On 13 May, SPLM announced they were withdrawing from the elections and would not recognize the election's outcome due to NEC and NCP allegedly working together to rig the election results.²²¹ On 14 May, the SMC website, a pro-NCP website, announced that Haroun won the election by 6,445 votes. Quoting independent sources, SMC reported that Haroun received 201,000 votes compared to 194,000 for al-Hilu.²²²

The Carter Center declared the final vote flawed but "peaceful and credible."²²³ A former senior staff member of the Carter Center criticized the evaluation of the election on the grounds that the final report should have given more weight to the irregularities in the entire electoral process, considering the small margin of victory for Haroun.

Post-election Tensions: NCP and SAF Ultimatums

Following the South Kordofan gubernatorial election, tensions in the disputed regions continued to escalate as the NCP ordered all SPLA units in South Kordofan and Blue Nile to move south of the 1956 border by 1 June 2011. The North and South border of 1956 was established when Sudan achieved independence from An-

glo-Egyptian rule on 1 January 1956.

According to the CPA, the only SPLA units to be left north of the 1956 border were those part of the JIUs. SPLA JIU were allowed to remain north of the border after the SPLA 9th Division in South Kordofan and SPLA 10th Division in Blue Nile had redeployed south of the 1956 border. By 2008, the 9th Division claimed it relocated all its forces to Jau but this was not confirmed by UNMIS. Despite SPLA claims, International Crisis Group reported that 3,000 to 5,000 SPLA forces remained in the Nuba Mountains after 2008.²²⁴

According to the *New York Times*, a letter from Ismat Abdul Rahman Zain al-Abideen, the Sudanese military's Chief of Staff, stated that SAF will redeploy north of the 1956 border on 1 June 2011. Western officials allegedly said that the Sudanese army threatened to use force against southern-aligned soldiers that remain north of the border following the 1 June deadline.²²⁵

It was also reported that SAF ordered all SPLA forces in South Kordofan and Blue Nile to disarm by 1 June if they did not move south of the 1956 border.²²⁶ Bashir and Presidential Advisor Nafie Ali Nafie declared that the SAF would have a "free hand" in the state and that any SPLA troops in the North after the deadline would be considered legitimate targets. SPLM argued that any troops present in South Kordofan were ethnic Nuba, whose homeland is in the region, and thus could not be recalled to the South.²²⁷

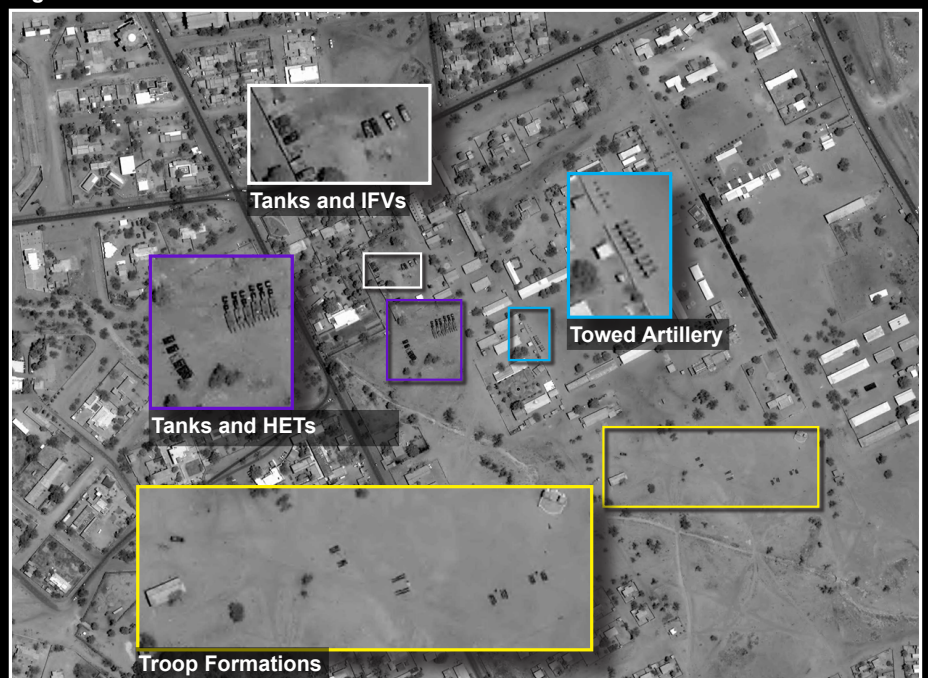
Prepositioning and Reinforcement of SAF-aligned Forces in and around South Kordofan before the Conflict

Similar to the apparent pattern of activity seen prior to the SAF invasion of Abyei, a build-up of SAF-aligned forces was reported in the months preceding the SAF-led combat action in Kadugli, South Kordofan in June 2011. In mid-April 2011, Unity State Minister of Information and Communication Gideon Gatpan Thoar claimed that the Government of Sudan reportedly built up militias at facilities headquartering the SAF's 5th and 14th Divisions.²²⁸ These units are based in El Obeid, North Kordofan and Kadugli, South Kordofan, respectively.

In this period, according to the Sudanese Ministry of Defense, the Commander of 5th Division was Major General Fadel Al Moula Suleiman²²⁹ and the Commander of the 14th Division was Major General Bashir Maqi Al Bahi.²³⁰ These commanders and their units would play an increasingly critical role in the events preceding the outbreak of fighting in South Kordofan, as well as the ensuing conflict itself.

Analysis of images captured on 24 May 2011 documents eight platoon-sized formations of apparent infantry at the SAF barracks in El Obeid, the capital of North Kordofan State. Additionally, Signal identified 13 towed artillery, eight of which are 105 mm M101 howitzers. There are also 9 tanks consistent with T-55 or T-64s and heavy equipment trans-

Figure V-2



El Obeid Barracks
24 May 2011
El Obeid, North Kordofan



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Chapter V

Ballot Box to Bullet Box: South Kordofan's 2011 Gubernatorial Election January to June 2011

ports (HETs) [Figure V-2].

The positioning of these troops, tanks and weaponry at the El Obeid installation at the end of May is consistent with reports of increased SAF activity at the base around the same time. UN Military Observers (UNMOs) monitored the “arrival of SAF assets to El Obeid and the movement of heavy equipment, tanks, materiel, and artillery into Southern Kordofan through Dilling and Kadugli”²³¹ prior to the start of hostilities in Kadugli.

Additionally, on 2 June, al-Hilu wrote a letter to the Commander of the UNMIS forces in Kadugli. The letter expressed concerns over an alleged build-up of the CRP in close proximity to the UNMIS compound, and questioned the legality of their presence under the “rules” of the UN. Al-Hilu also claimed that the weapons and equipment observed being in the possession of CRP personnel at this facility are consistent with those of an armed force.²³²

The reported presence of CRP in Kadugli is consistent with reports that “in May and June, Khartoum reinforced its troops in South Kordofan, in particular with Central Reserve Police (CRP) units.”²³³ After the fighting broke out on 5 June, UNMIS reported that SAF, CRP and Government of Sudan-aligned militias reinforced their positions in Kadugli, causing the human security situation to deteriorate further.²³⁴

Presence of SPLA Troops at Jau

UNMOs (UN Military Observers) investigated accusations made by the Government of Sudan that SPLA was reinforcing its troops during this period at 9th Division headquarters in Jau, which straddles the border between South Kordofan and Unity State. In contradiction of this claim, the UNMOs noted a reduction in the number of troops at that location. The Government of Sudan claimed that this apparent reduction was the result of these troops moving into other parts of South Kordofan, but these accusations were never verified.²³⁵ According to International Crisis Group, a military observer based in Khartoum reported that in March 2011, there were 5,000 to 6,000 SPLA soldiers from South Kordofan in Jau.²³⁶

A previously released UNOSAT report from 14 February 2011 documents the apparent construction of an additional 260 structures close to Jau, Sudan. The report noted the high density of buildings present there, unlike the rest of the town. It also noted that the structures were neither encircled by a fence or within a compound. Additionally, approximately 9,500 meters of road were constructed between 15 and 26 January, connecting the village to north Sudan. The report did not draw any conclusions about the potential identity of the occupants of these new structures, which were possibly tents.²³⁷

During April 2011, SPLA-N reportedly moved troops from Jau into South Kordofan, “so that by the May elections Jaw had been largely emptied of its forces.” In response, SAF allegedly blocked the road from Jau where they arrested and disarmed SPLA soldiers.²³⁸

After the outbreak of fighting in Kadugli, SAF Antonovs and MiG-29 fighter jets reportedly bombed Jau on 10 June. Additionally, the SPLA spokesman suggested that a reported 9 June bombardment of a town in Unity was due to the presence of fighters at the 9th Division base in Jau being from South Kordofan.²³⁹

In Depth B: Military Capacity

Aircraft Capacity

Fighter Jets

Ground strike and air attack fighter jets, such as the Sukhoi, Nanchang and MiG-type aircraft, largely appear to have served in escort, support, and high-value targeting capacities. In some cases, South Sudanese officials accused Sudan of using Sukhois and MiGs, in addition to other aircraft, to conduct air strikes in South Sudanese territory.³⁰⁸ Through imagery analysis, Signal has identified Sukhoi Su-25, Nanchang A-5, and MiG-29 aircraft at SAF controlled airstrips in Sudan.



According to Air Force Technology, “The mission of the MiG-29 is to destroy hostile air targets [...] and to destroy ground targets using unguided weapons.” The MiG-29 is capable of high-speed and “high-angle” movements while in flight.³⁰⁹ Su-25 aircraft are capable of striking stationary ground targets and engaging aircraft traveling at a low-speed.³¹⁰ Like the Sukhoi, the Nanchang is designed for ground and air attacks. The Nanchang is also deployed for close air support of ground assets.³¹¹

Attack Helicopters

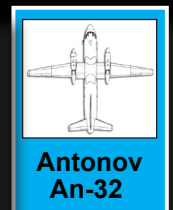
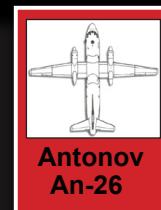
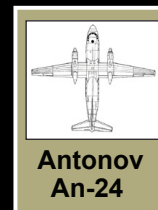
Attack helicopters, such as the Mi-17 and Mi-24, reportedly played a critical role in support and escort of SAF operations. These helicopters have assisted in grounds operations throughout South Kordofan, Blue Nile, and the disputed areas of Heglig and Abyei. Through analysis of imagery, Signal has identified Mi-17s and Mi-24s at SAF controlled airstrips.



According to Global Security, “The Mi-17 is a multirole helicopter,” which can be “heavily armed with an extensive array of rockets, missiles and guns.” The Mi-17 can also be used to transport troops.³¹² Mi-24s are “primarily an attack helicopter, but may also be outfitted for other missions.” Additionally, the Mi-24 “is never employed individually -- always in sections of two.”³¹³ This is consistent with video footage analyzed by Signal which identifies Mi-24s flying in pair in combat operations area.

Transport Planes

Antonovs are Russian-made air cargo transport planes.³¹⁴ In Sudan, these planes are retrofitted for dropping bombs. They are known for manually dropping makeshift bombs the size and shape of barrel filled with explosives and anti-personnel shrapnel.³¹⁵ These “barrel bombs” are notoriously inaccurate and designed to spread fear among the targeted population. The government of Sudan has employed Antonovs for a strategy of harassment bombardment in multiple theaters of operations throughout Sudan.³¹⁶ The Antonov have long-range capability, which would allow the aircraft to conduct harassment bombardment operations further away from where they are based.





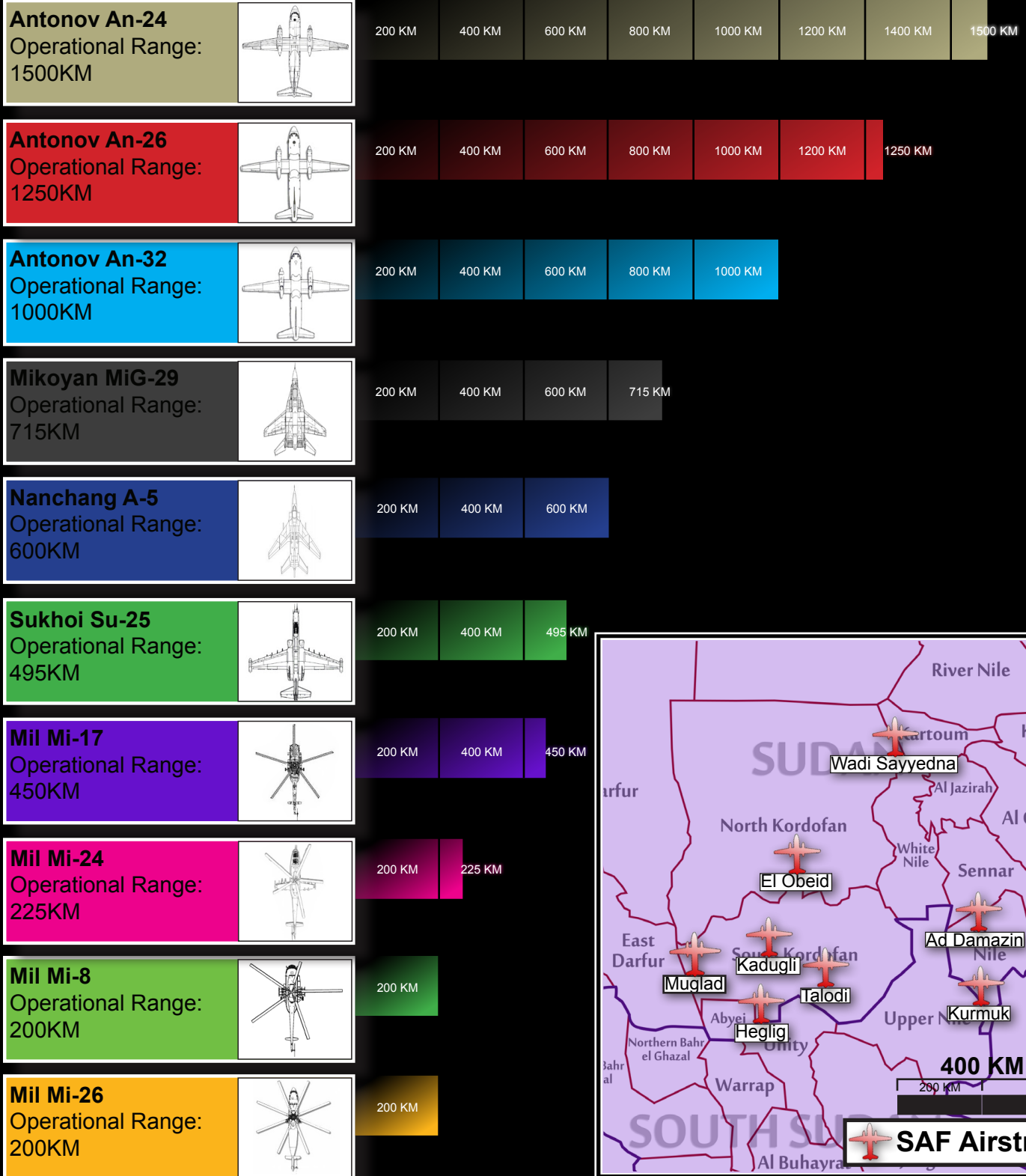
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SUDAN: ANATOMY OF A CONFLICT

In Depth B: Military Capacity

Airbase Range Map

Operational Range Comparison of SAF Aircraft





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SUDAN: ANATOMY OF A CONFLICT

In Depth B: Military Capacity

Vehicle Capacity

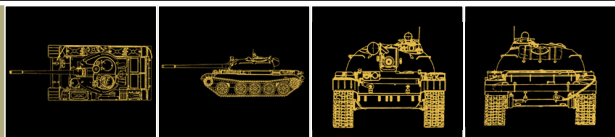
T-55 Battle Tank

Operational Range: 600KM

Guns: 100mm D-10T, 7.62mm SGMT

Speed: 55 km/hr

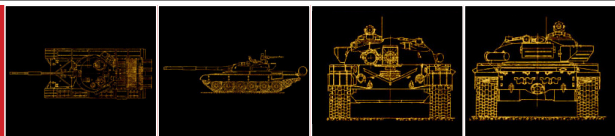
Crew: 4



T-72

Operational Range: 460KM (700 w/ fuel drum) Speed: 60 km/hr

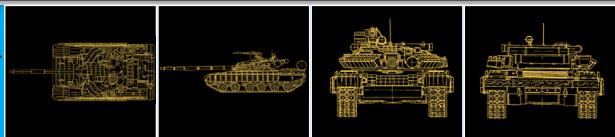
Guns: 125mm 2A46M smoothbore, 7.62mm PKT
coax machine gun, 12.7mm NSVT machine gun Crew: 3



T-64

Operational Range: 500KM (700 w/ ext. tanks) Speed: 60.5 km/hr

Guns: D-81T 123mm smoothbore, 7.62mm PKT
coax machine gun, 12.7mm NSVT machine gun Crew: 3



BRDM-2

Operational Range: 750KM

Guns: 14.5mm heavy machine gun,
7.62mm machine gun

Speed: 100 km/hr (land)
10 km/hr (water)

Crew: 4



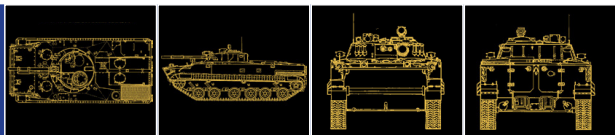
BMP-2

Operational Range: 600KM

Guns: 30mm 2A42 gun, 7.62mm machine
gun, AT-4 Anti-Tank Missile launcher

Speed: 65 km/hr (land)
7 km/hr (water)

Crew: 3 (+7 passengers)



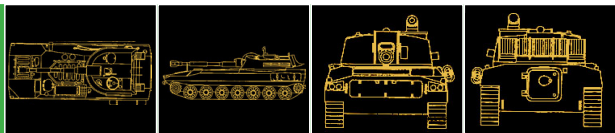
2S1 Gvozdika

Operational Range: 500KM

Guns: 2A18 122mm howitzer

Speed: 60 km/hr (land)
4.5 km/hr (water)

Crew: 4



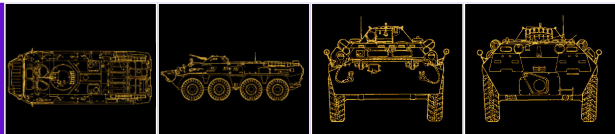
BTR-80

Operational Range: 600KM

Guns: 14.5mm KPVT machine gun,
7.62mm PKT machine gun

Speed: 80 km/hr (land)
10 km/hr (water)

Crew: 3 (+8 passengers)



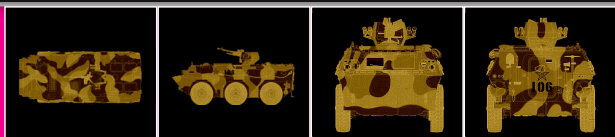
WZ551

Operational Range: 600KM

Guns: 25mm GIAT autocannon, 12.7mm
heavy machine gun, 7.62mm machine gun

Speed: 85 km/hr (land)
7 km/hr (water)

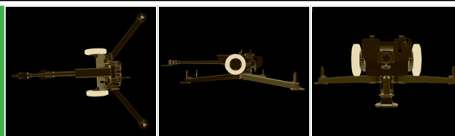
Crew: 3 (+9 passengers)



122mm Model 1963 Howitzer (D-30)

Maximum Range: 17KM

Crew: 5



75mm Howitzer M116 Tower Artillery

Maximum Range: 8.7KM

Crew: 6



Chapter VI

Crisis in Kadugli June to August 2011

SAF Moves into Kadugli

In the days before fighting erupted, Government of Sudan-aligned forces were reportedly deployed throughout Kadugli. According to the International Crisis Group, National Intelligence and Security Service (NISS) and CRP were deployed into Kadugli on 1 and 2 June. Additionally, on 3 June, guns and ammunition were allegedly delivered to approximately 500 PDF soldiers.

On 5 June, SAF deployed tanks into Kadugli and PDF were stationed around the Kadugli market.²⁴⁰ SAF also reportedly deployed tanks to the nearby town of Umm Dorain. The African Center for Justice and Peace Studies (ACJPS) reported that what they refer to as “SAF’s Reserve Forces” entered Umm Dorain through the Al-Kuik checkpoint with approximately 21 tanks on the morning of 5 June. The forces tried to disarm SPLA troops present there, which apparently led to the fighting there.²⁴¹

Sudan Tribune reported that SAF also moved tanks from El Obeid through Dilling to the Kadugli airport and near the WFP compound sometime early on 5 June.²⁴² The leaked draft version of the “UNMIS REPORT ON THE HUMAN RIGHTS SITUATION DURING THE VIOLENCE IN SOUTHERN KORDOFAN SUDAN” also reported that SAF moved military assets to El Obeid, as well as through Dilling and Kadugli.²⁴³

SAF military police reportedly positioned approximately 10 vehicles with heavy weapons around the UNMIS compound around that time. UNMIS confirmed the reports of fighting in both Kadugli and Umm Dorain.²⁴⁴ The leaked UNMIS report noted that after the fighting broke out later that day, SPLA and SAF both assumed positions throughout Kadugli. SPLA reportedly “took a fortified stance” in front of Abdel Aziz al-Hilu’s residence and SAF intensified its bombardments of “SPLA detachments in the Talodi locality.”²⁴⁵ PDF and CRP also allegedly attacked SPLA JIU in Talodi on 5 June.²⁴⁶

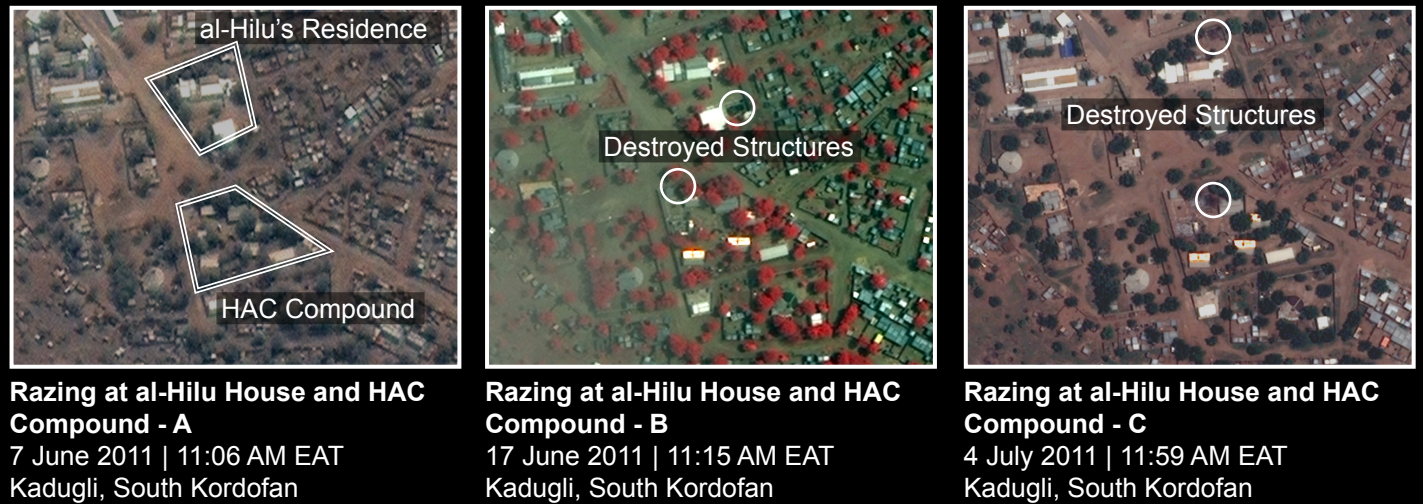
Trading Blame: SAF and SPLA Accuse One Another of Starting the Fighting

Both sides accused the other of being responsible for initiating the fighting. SPLA claimed that SAF attempts to disarm SPLA JIU forces sparked the violence. Conversely, SAF claimed SPLA took over a police station in Kadugli and raided arms from that facility on 4 June, causing fighting to erupt.²⁴⁷

Following the outbreak of fighting, a meeting took place on 6 June in Kadugli between senior NCP and SPLM leadership in an attempt to establish a ceasefire. This meeting included South Kordofan Governor Ahmed Haroun and SPLM officials, including Yasir Arman and Malik Agar. An hour after the SPLM officials departed, the homes of Abdel Aziz al-Hilu, Ramdan Hamzan and other senior SPLM leaders were allegedly attacked by SAF-aligned forces.²⁴⁸

Through review of archival satellite imagery, the apparent destruction of structures is visible at buildings identified as Abdel Aziz al-Hilu’s residence and the Government of Sudan’s Humanitarian Aid Commission (HAC) compound, southwest of Kadugli town. The destruction apparently occurred sometime between 7 June and 4 July. Between 7 June and 17 June 2011, a structure on the southeast corner of al-Hilu’s residence compound was destroyed. A structure on the west wall of the HAC compound, which is 25 meters from al-Hilu’s residence, was also destroyed. By 4 July, two additional structures, one north of the previously destroyed structure at al-Hilu’s residence and another north of the previously destroyed at HAC, appear razed [Figure VI-1].

Figure VI-1



Sudan Defense Minister Hussein announced that after the meeting, Ahmed Haroun's convoy came under attack by SPLA forces. He claimed that SPLA forces blocked all roads leading to the center of the city and that SPLA forces bombarded SAF positions in Kadugli until 2:00 am the next day.²⁴⁹ Additionally, on 6 June, heavy gunfire was reported close to Governor Haroun's residence.²⁵⁰ Governor Haroun accused al-Hilu and Arman of leading "a rebellion against the state."²⁵¹

In addition to SPLA forces inside Kadugli, Hussein said there were SPLA forces in the mountains overlooking Kadugli. Hussein later claimed that all SPLA forces and politicians moved west towards the mountains in the direction of Tafri, taking positions at the top of the mountains there. Hussein noted that all SPLA forces, including JIUs, moved to a compound in the Tafri area, west of Kadugli. He further claimed that SPLA forces continued to shell SAF positions in Kadugli and attacked JIU positions in Um Serdeba and Heiban.²⁵² According to International Crisis Group, al-Hilu ordered SPLA-N forces and officials to move out of Kadugli and into the mountains south and east of the town.²⁵³

SAF Controls Kadugli Town, Restricts Movement and Humanitarian Access

Signal analysis of imagery documents an increase of approximately 35 vehicles at the Kadugli state police headquarters between 2 June and 17 June 2011. The majority of the vehicles in the image are consistent with technicals known to be used by SAF, specifically Toyota Land Cruiser HZJ 79. This model of vehicle was later identified in 4 July imagery showing evidence consistent with reported house to house searches by SAF-aligned forces in Kadugli [Figure VI-2].

Restrictions on freedom of movement throughout and around Kadugli, especially by SAF-aligned forces, prevented civilians from fleeing the town and hindered humanitarian organizations from fully assisting the displaced population after fighting began. As SAF moved into Kadugli on 5 June, troops reportedly blocked all roads leading in and out of Kadugli.²⁵⁴ These activities included establishing checkpoints on the main road heading north from the Kadugli airport.²⁵⁵

As the fighting continued, both SAF and SPLA reportedly constructed roadblocks to the north and south of the city, which prevented civilians still in town from leaving. Freedom of movement was also reportedly restricted in Heiban and Kauda localities. Wounded civilians fled to hospitals in Kadugli,²⁵⁶ but by 10 June the UN claimed that roadblocks in Kadugli prevented civilians from accessing medical and humanitarian assistance. The World Health Organization (WHO) announced at that time that the Kadugli hospital was not open but a medical officer was providing services to IDPs near the UNMIS compound.²⁵⁷

Figure VI-2



State Police Technical Vehicle Increase - Before
7 June 2011 | 11:06 AM EAT
Kadugli, South Kordofan

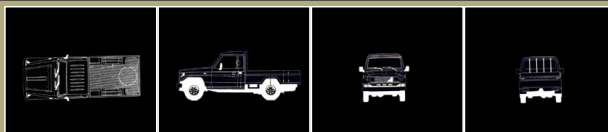


State Police Technical Vehicle Increase - After
17 June 2011 | 11:15 AM EAT
Kadugli, South Kordofan

Toyota Land Cruiser HZJ79

Guns: Optional DShK Heavy Machine Gun, Type 63 Rocket Launcher, etc.

Length: 5.1 m
Width: 1.8m



Imagery collected on 7 June, 17 June, and 6 August show the presence of SAF checkpoints on the main roads leading to and from Kadugli town. Signal was able to identify apparent checkpoints north of the Kadugli airport, behind the Tilo School on the main eastern road, the El Gardud bridge in the center of town, northeast of the SAF 14th Division headquarters, and on the main southern road near Sama village [Figure VI-3].

Government of Sudan-aligned forces also restricted the humanitarian access of aid organizations to the growing population of IDPs located at various positions throughout the city. On 7 June, SAF took control of the Kadugli airport, including UN assets, and shut it off from civilian flights. UN agencies, humanitarian warehouses and homes were looted by PDF militias who fought alongside SAF.²⁵⁸

According to Signal analysis, a compound identified as the Danish Church Aid (DCA) Humanitarian Mine Action, across the street from SAF Soldier Payment Office, appears razed and looted. Scattered debris is visible as of 17 June 2011. Imagery captured on 7 June 2011 shows the DCA compound was intact. Signal's analysis corroborates reports that the Danish Church Aid offices, along with other international NGOs "who previously had mine removal capacity in South Kordofan," were looted and had equipment stolen [Figure VI-4].²⁵⁹

One week after the fighting in and around Kadugli had started, UNHCR's Melissa Fleming stated:

Figure VI-3

Satellite Imagery Overview:

Kadugli Checkpoints



Figure VI-4



Razing and Looting of DCA Compound - Before
7 June 2011 | 11:06 AM EAT
Kadugli, South Kordofan



Razing and Looting of DCA Compound - After
17 June 2011 | 11:15 AM EAT
Kadugli, South Kordofan

For nearly one week now, humanitarian flights have been denied authorization to land in Kadugli despite our efforts to secure such an agreement. Land access is also being hampered by armed militiamen who have set up roadblocks, from which we are hearing reports of harassment of people on the move. Insecurity means our operations are severely constrained and UNHCR is currently unable to reach a warehouse just five kilometers from the UN peacekeeping mission's base in the city. The warehouse contains supplies to assist 10,000 displaced people.²⁶⁰

On 14 June, SAF's restrictions on the freedom of movement of international organizations effectively confined humanitarian personnel to the UNMIS compound.²⁶¹ In response, Hua Jiang, spokesperson for the UN in Sudan, stated the United Nations would "try to protect civilians" and that "the S.A.F. are trying to consolidate their grip over the town."²⁶²

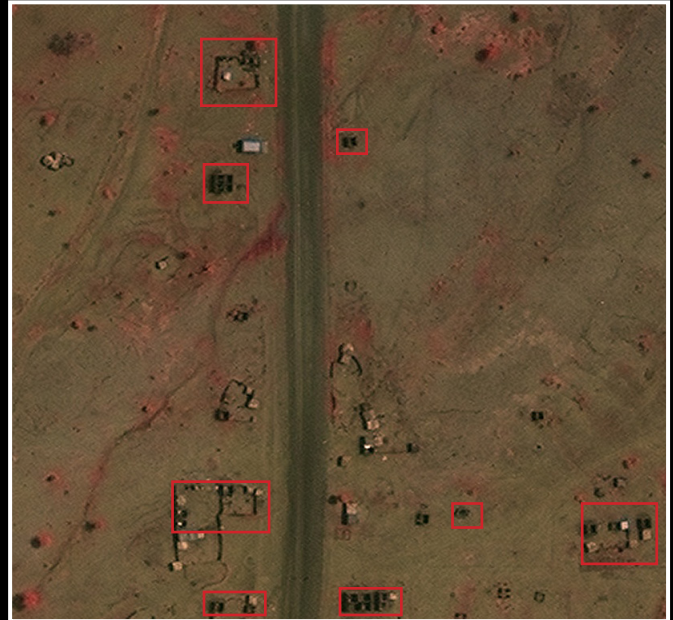
It was not until 21 June, three weeks after the fighting began, that the Kadugli airport was reopened to UNMIS, allowing for three resupply flights to Kauda, Talodi and Julud. However, humanitarian ground access still remained limited. Roads in and out of Kadugli to Talodi and Kauda remained closed.²⁶³ By 30 June, the Government of Sudan still restricted humanitarian access to all locations except certain parts of Kadugli where aid groups already had offices.²⁶⁴

UNMIS officials privately stated that "they have been 'deaf and blind' in South Kordofan ever since the war broke out on 5 June."²⁶⁵ This statement came in light of two confidential reports by UN peacekeepers in South Kordofan obtained by the Observer. The reports allegedly contained allegations of executions and "deliberate targeting of dark-skinned people" and that "active obstruction by state authorities (in South Kordofan) has completely undermined" UNMIS' ability "to fulfill the most basic requirements of its mandate."²⁶⁶

Figure VI-6



Destroyed and Dismantled Structures - Before
2 April 2011 | 11:59 AM EAT
Kadugli, South Kordofan



Destroyed and Dismantled Structures - After
17 June 2011 | 11:15 AM EAT
Kadugli, South Kordofan

Reports of Extra-Judicial Executions and Targeting of Civilian Areas

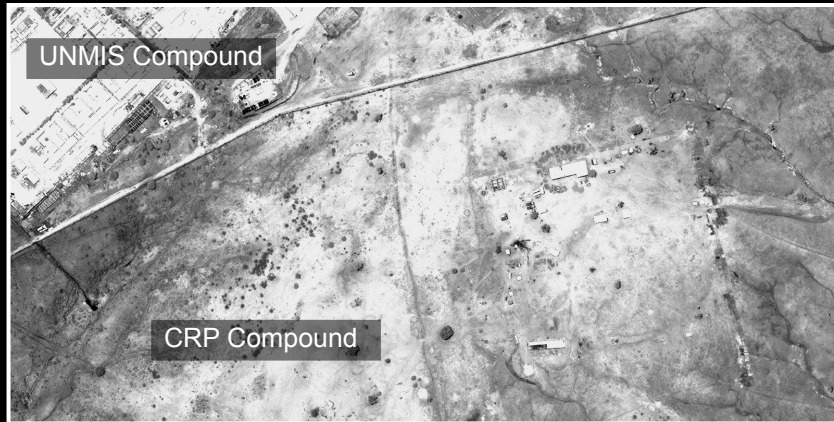
Consolidation of SAF control over Kadugli was followed by Government of Sudan-aligned forces intentionally targeting civilians throughout the town. Reports of the specific targeting of SPLM-aligned neighborhoods in Kadugli soon emerged in the early days of the South Kordofan conflict. People living in the Kalimo neighborhood were reportedly warned by both SAF and SPLA to evacuate. Residents of the neighborhood reported that “SAF was indiscriminately shelling homes where it suspected SPLA elements were hiding. There were also reports that the SAF was conducting house to house searches and systematically burning houses of suspected SPLM/A supporters.”²⁶⁷

An image captured on 17 June reveals dismantled and destroyed buildings along the main road south of Kadugli town. Material consistent with debris appears around one of the destroyed buildings. The buildings were intact as of 2 April. This may be consistent with the reported destruction in Kadugli [Figure VI-6].

UNMIS Human Rights confirmed that SAF and PDF conducted house-to-house searches, performing identity checks on residents. These searches allegedly lead to mass extra-judicial executions in perceived pro-SPLM areas,²⁶⁸ particularly in West Kadugli.²⁶⁹ SAF reportedly employed cattle trucks to detain those perceived as SPLM sympathizers.²⁷⁰ The Sudan People Liberation Movement-North (SPLM-N) reported that forces under the command of Brigadier Ahmed Adam of the SAF 53rd Infantry Brigade began arresting those deemed as supporters of the SPLM-N.²⁷¹ The 53rd Infantry Brigade is reportedly based out of Abu Jubeiha, South Kordofan. Abu Jubeiha is approximately 175 km east of Kadugli.

Julie Flint wrote that the Observer claimed a source not connected to the SPLM/A reported that Major General Ahmad Khamis ordered the execution of 410 reported SPLM sympathizers on 10 June. The alleged sympathizers were reportedly detained by SAF military intelligence, PDF and NISS.²⁷²

Figure VI-7



CRP Compound A
2 June 2011
Kadugli, South Kordofan



CRP Compound B
4 July 2011 | 11:59 AM EAT
Kadugli, South Kordofan



CRP Compound C
19 August 2011 | 12:12 PM EAT
Kadugli, South Kordofan

By 7 June, the human security situation deteriorated further. SAF, CRP and PDF militia reportedly began shelling other, heavily populated areas of Kadugli.²⁷³ The ACJPS reported that districts and neighborhoods within Kadugli were targeted with artillery on 8 June. These areas included Tafri, where SPLA allegedly fled to at the beginning of fighting, Hagar al-Nar, al-Rdif, Gar al-Hajar, al-Zidia, al-Muthalth, and al-Ban Jadid.²⁷⁴

According to imagery analysis, a build-up of forces and defensive infrastructure at a compound confirmed as being a CRP installation occurred between 2 June and 4 July. There is an increase in the number of tents and light vehicles present, as well as indications of active construction taking place on the compound's external fortifications. The light vehicles in the 4 July image are consistent with the size and shape of Toyota Land Cruisers reportedly used by SAF. However, the colors of the vehicles in the compound are inconsistent with those commonly used by SAF. Based on analysis of available imagery and data, Signal concludes that these vehicles are consistent with those reportedly used by CRP during this time [Figure VI-7].

By 19 August, the previously visible construction on external fortifications appears completed, with the addition of approximately 40 additional structures visible within the compound also visible. Light vehicles positioned along the south side of the compound form an apparent security perimeter. The location of the compound and the apparent build-up occurring there is consistent with the claims in al-Hilu's letter to the Commander of UNMIS alleging a CRP buildup near the UNMIS headquarters in Kadugli. The CRP compound is located approximately 100 meters from the UNMIS compound.

Additionally, the Kadugli Catholic Church, where IDPs had been seeking refuge, was reportedly attacked²⁷⁵ and razed during this period of time.²⁷⁶ The UN reported that

Figure VI-8



UNMIS Compound and IDP Tents
17 June 2011 | 11:15 AM EAT
Kadugli, South Kordofan

the attack and razing created a “secondary displacement of thousands of IDPs who had taken refuge in churches and hospitals to the UNMIS compound where they were sheltered in an area adjacent to the compound that was set up specifically to receive IDPs and provide them security and humanitarian assistance (Protective Perimeter).”²⁷⁷

Targeting of IDPs Massing at UNMIS Protective Perimeter

Following this secondary displacement, an additional 6,000 to 7,000 IDPs sought safety as of 8 June inside the UNMIS “Protective Perimeter.” An estimated 6,000 to 10,000 IDPs remained along the main road between the UNMIS compound and airport.²⁷⁸ In response to the increasingly dire humanitarian situation of the IDPs, UNMIS reportedly set up six tents, “with the capacity to accommodate 400 people and has distributed water to the IDPs around the compound.”

The WFP planned to begin food distribution on 11 June for up to 10,000 people although they were unable to access their warehouse in Kadugli due to insecurity.²⁷⁹ In the first five days of fighting, according to OCHA, an estimated 30,000-40,000 people, half of Kadugli’s estimated population, fled the town²⁸⁰ and 73,000 people were reported displaced in South Kordofan in the first month of fighting.²⁸¹

Signal analysis of an image captured on 17 June confirms the presence of IDPs outside the UNMIS compound in Kadugli. 15 tents are present with dimensions consistent with those of UN Disaster Relief Tents,²⁸² are present. These tents have a capacity to hold at least 40 people. The number of these types of tents identified by Signal could accommodate at least 600 IDPs. Markings on top of the tents are also consistent with the placement of the UN logo seen in ground photos of the UN using the same size and type of tents in other, similar contexts [Figure VI-8].²⁸³



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Chapter VI
Crisis in Kadugli
June to August 2011

IDPs inside the UNMIS Protective Perimeter were reportedly targeted by Government of Sudan-aligned forces without any intervention by UN personnel. Despite the clear and present threat to their safety, IDPs were refused entry into the UNMIS compound. According to the *Independent*, eyewitnesses reported that UNMIS peacekeepers stood by while civilians were killed “outside the gates of a UN base before being dragged away ‘like slaughtered sheep’.”²⁸⁴

PDF also reportedly used a list of supposed critics of the government to identify and target civilians present in the IDP camp within the UNMIS Protective Perimeter. Officers from UNMIS’ Egyptian peacekeeping contingent reported that the violence in Kadugli inspired such fear among the peacekeepers that they refused to leave the base. One eyewitness said, “People were crying and screaming and the UN soldiers just stood and watched in their watchtowers.”²⁸⁵

However, Alain Le Roy, Under-Secretary for Peacekeeping Operations at the United Nations at the time, denied claims that civilians were killed inside the UNMIS Protective Perimeter without peacekeepers intervening at a UN press conference on 13 July:

Reporter: I know it may be a thing of the past but these critique by Nuba and SPLM-North that the Egyptian battalion there was too close to the government and that there was a battalion of some sort of government militias that camped next to the UN peacekeepers force. People didn’t feel that there was the objectivity there should’ve been. What do you make of that? Is it true that the government forces were stationed right next to the UN peacekeeping base in such a way that people couldn’t approach for protection?

Le Roy: No, no. I read many things here. First, all peacekeepers had to behave in an impartial manner and we keep saying that to all our peacekeepers. What has happened? As you know, the main issue was in Kadugli. We have a site in Kadugli and we have a safe area that we have built around our same team site in Kadugli. I have read that some people were extracted from this area and were killed in front of the peacekeepers. That is completely wrong. That is completely wrong. It is clear that some civilians have been killed but not, of course, in our site and not in the vicinity, not in the safe area close to our camps. Our peacekeepers- our Egyptian peacekeepers, our Bangladeshi peacekeepers-have protected them from the beginning until today. So that is very clear. At the same time, as we don’t have freedom of movement because there is heavy fighting in Southern Kordofan, it is clear that civilians are being killed where we cannot go because we don’t have freedom of movement. We didn’t have freedom of movement even before 9 July and since 9 July we have no mandate to patrol. That is exactly why we are so concerned.²⁸⁶

Even though ongoing violence against IDPs was being reported at the Protective Perimeter camp, 11,000 IDPs were sheltering outside the UNMIS facility as of 20 June 2011. On that day, UNMIS Human Rights reported that NISS agents, dressed in the uniforms of the Sudan Red Crescent Society (SRCS), Sudan’s national branch of the International Federation of Red Cross and Red Crescent Societies (IFRC), entered the UNMIS Protective Perimeter and requested that all of the IDPs relocate to the Kadugli Stadium by 5:00 pm.

There, they were told, South Kordofan’s Governor, Ahmed Haroun, would provide instructions and updates on the security situation and available humanitarian aid. IDPs interviewed by UNMIS Human Rights said they feared the CRP would forcibly remove them if they did not comply. They also reported that by 5:00 pm approximately 75% of the 11,000 IDPs at the Protective Perimeter had left.²⁸⁷

The IFRC would sometime later state that they were investigating reports of their uniforms being misused, though they had initially refused to either confirm or deny those allegations.²⁸⁸ After an internal investigation, the IFRC said there was no evidence that the SRCS emblem was misused, despite reports that NISS agents had

worn the emblem when present at the Protective Perimeter.²⁸⁹

Whereabouts Unknown: 7,000 IDPs Reported Missing

The next day, according to OCHA, most of the displaced who had sought refuge around the UNMIS compound had returned to Kadugli. However, “Interviews with displaced people and field observations by humanitarian workers indicated that a combination of both incentives through assistance and intimidation were used by local authorities to urge people to return home.”²⁹⁰ By 23 June, the IDP camp outside UNMIS had been emptied of people and tents.²⁹¹

OCHA’s statement, based on interviews they conducted, corroborates reports of IDPs being intimidated and forced to leave the Protective Perimeter. However, the OCHA’s statements initial claim that the IDPs returned to Kadugli conflicts with remarks made a week later by a UN spokesperson.

The UN stated on 28 June that it was concerned about the unknown fate of 7,000 IDPs reportedly forced from the camp. Those IDPs, as previously mentioned, were reportedly threatened with forced removal if they did not comply with instructions to move to Kadugli Stadium to hear an address by Haroun.²⁹² The IDPs allegedly went missing, with no further information regarding their whereabouts available after the time of Haroun’s scheduled “address” at the Kadugli Stadium on 20 June.

UNMIS and SSP Report Existence of Alleged Mass Graves

The leaked UNMIS report contained three specific allegations of mass graves being present in Kadugli as a result of recent action by SAF-aligned forces. One grave was reportedly “located in a valley southeast of the Murta bus station near the Kadugli police training centre.” UNMIS Human Rights also interviewed two men who reported seeing mass graves between the SAF 14th Division Headquarters and the Kadugli Market. Lastly, an UNMIS contractor reported witnessing a “bulldozer” dumping bodies in and covering a mass grave in Al Gardut Locality in Tilo.²⁹³

SSP also identified three excavated areas consistent with mass graves near the Tilo School. Less than a week after the UNMIS report was leaked, and following SSP’s release of visual evidence of the apparent mass graves near Tilo, Sudan’s Foreign Ministry Spokesman denied these allegations of the existence of mass graves.²⁹⁴ He also added, “Any talk of human rights violation is null and void and is baseless.”²⁹⁵

SSP would later report seven additional sites consistent with newly created mass graves and other visual evidence consistent with human remains apparently interred in Kadugli during the summer of 2011.²⁹⁶

The Sudan Red Crescent Society and the Disposal of Human Remains

The IFRC stated that the SRCS was the only humanitarian organization left in Kadugli as of 16 June. SRCS Disaster Management Director, Rahama Mohamed Ibrahim, stated that SRCS volunteers were handling human remains, in addition to the evacuation of the injured and wounded. SRCS also stated at that time that they needed to buy additional body bags and emergency materials.²⁹⁷

By mid-June, SRCS reported that its Emergency Action Team had collected 25 corpses and transferred them to the hospital.²⁹⁸ As mentioned previously, other international humanitarian organizations besides SRCS were present in Kadugli at this time. However, the Government of Sudan severely restricted their access to the civilian population and their overall freedom of movement.

On 27 July, the Government of Sudan admitted that its authorities in South Kordofan employed trucks in Kadugli to collect human remains for burial during this period. Al Obaid Marawih, the Foreign Ministry Spokesperson,

said that human remains being left out in the rain spurred local officials to collect them for burial because of “fear of an epidemic outbreak.” He did not specify whether the human remains were buried individually or en masse, nor any other additional details about the final disposition of the corpses.²⁹⁹

The Executive Director of SRCS, Meriekha Al Daw Meriekha, also confirmed that SRCS received two vehicles from the Ministry of Health and a “loader for excavation” from the government in Kadugli. He also said that a criminal evidence team worked alongside the SRCS corpse management team.³⁰⁰

Reports conflict on what orders Governor Haroun gave SRCS about how they should dispose of human remains in Kadugli. Marawih said that Governor Haroun ordered them to bury the bodies.³⁰¹ On 24 August, SSP released a report citing alleged eyewitnesses who claimed seeing SRCS workers bury bodies in two holes on 23 June in the Hilla Gadida area, which is located southeast of Tilo village.

A different self-identified witness observed SRCS workers placing approximately 75 corpses into two additional holes at the site two days later. After placing them in the holes, the SRCS workers “poured fuel on the bodies and burned them.”³⁰² Reports of SRCS workers burning bodies is consistent with statements made by South Kordofan Governor Haroun that “he had instructed the Sudanese Red Crescent to burn any bodies they found of people killed in the fighting.” His statement was made as part of his blanket denial of the existence of alleged mass graves in Kadugli.³⁰³

SRCS statements about the number of bodies they collected and buried varied throughout the fighting, despite Haroun’s claims that there were no mass graves being dug in Kadugli at that time. In mid-June, SRCS reported its team collected 25 corpses.³⁰⁴ On 5 August, *Radio Dabanga* reported a statement by Osmaan Jaafar, Secretary General of SRCS, which gave a new number of corpses buried in mass graves by SRCS.

Osmaan “asserted one grave consisted of 59 bodies, while another held 11 civilians, including two children and a woman. He added that 48 bodies in a third grave belonged to soldiers from both sides. The secretary general stated that 55 of the bodies had already decomposed.” *Radio Dabanga* also suggested that the graves he described may be the same SSP identified near the Tilo School.³⁰⁵

In September 2011, SRCS released a statement saying that it collected and buried 59 bodies since fighting erupted in South Kordofan at the beginning of June,³⁰⁶ which is inconsistent with the figures previously stated by the organization. Osman created further controversy in early August when he denied accusations that he was a militia leader in Kadugli and that he worked for Governor Haroun.³⁰⁷

Chapter VII

South Kordofan's Widening Conflict June to December 2011

A Policy of Bombardment: The Government of Sudan's Indiscriminate Targeting of the Nuba

Following the eruption of fighting in Kadugli during June 2011, the Government of Sudan began a campaign of aerial bombardment primarily targeting the Nuba population in South Kordofan.

The Nuba

The Nuba are a multi-ethnic group who inhabit the Nuba Mountains in South Kordofan, Sudan. The group is composed of several religions, ethnicities and languages. They are traditionally subsistence farmers. Though historically isolated, Nuba tribes did engage in conflict with the Anglo-Egyptian colonial rulers of Sudan and successive national governments.³¹⁷

The targeting of the Nuba Mountains by Government of Sudan-aligned forces led the Nuba people to align themselves with the South during the first and second Sudanese civil wars.³¹⁸ Between 1992 and 1993, approximately 100,000 Nuba were killed.³¹⁹ In 1992, a jihad was declared against the Nuba by then Governor of Kordofan Abdel Krim Al-Husseini.³²⁰ The following year a fatwa was issued, stating that Muslims in Nuba areas were not "true believers."³²¹

The indiscriminate targeting of civilian areas in the Nuba Mountains was employed by the Government of Sudan. These tactics continue to this day. Suleiman Rahhal writes that in 1992:

A large number of armed forces including Mujahadin and Arab militias were sent to the Nuba Mountains. Backed by the indiscriminate aerial bombing and shelling, the army destroyed villages, looted, abducted women and children, killed tens of thousands of men and women and displaced hundreds of thousands of Nuba.³²²

The Nuba population was denied the right to vote in the January 2011 referendum, another measure taken by the Sudanese Government perceived as discrimination against the population.³²³ Many in the Nuba Mountains believe that they were betrayed in the referendum process, with the Government of Sudan failing to keep its promises of greater autonomy, development assistance and democratic elections since the end of the civil war in 2005.³²⁴

The Rainy Season: Attacks Throughout South Kordofan

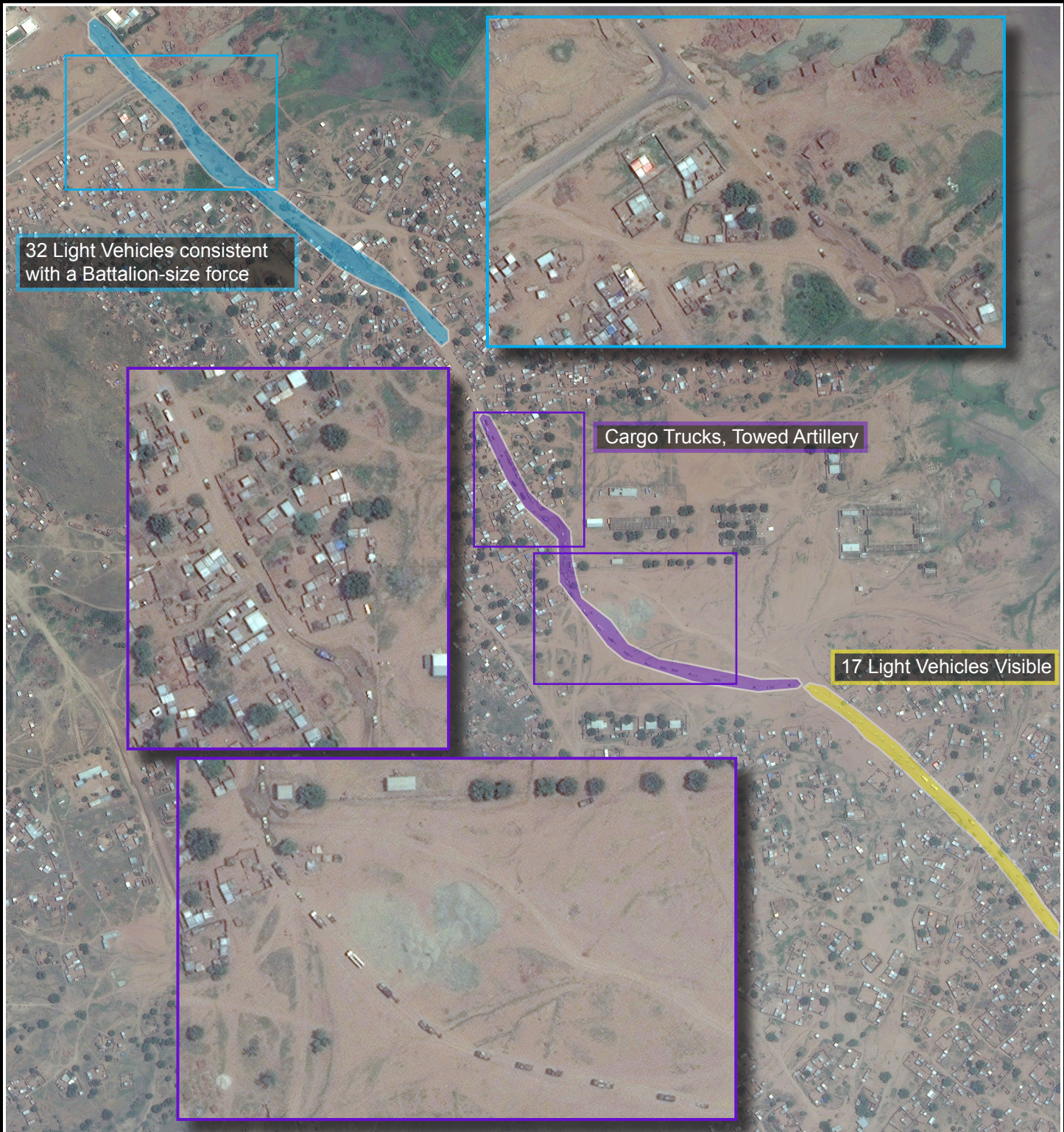
Despite the arrival of the rainy season in South Kordofan, traditionally a period of reduced fighting, both SAF and Sudan People Liberation Army-North (SPLA-N) forces engaged in heavy combat with each other. Although definite figures are not available, SPLM-N estimated there were 12,000 SAF in South Kordofan as of June 2011. The totality of Government of Sudan forces, including PDF and CRP, reportedly range from 40,000 to 70,000. Additionally, SPLA-N in South Kordofan reportedly number as many as 30,000.³²⁵

The leaked UNMIS report stated that since the beginning of the conflict, "SAF has carried out daily aerial bombardments into the Nuba Mountains."³²⁶ UNMIS noted that these bombardments "start from early evening at about 18:00 and last until daybreak" and also "targeted civilian facilities such as airstrips."³²⁷

Figure VII-1

Satellite Imagery Overview: Kadugli Convoy

4 July 2012 | 11:59 AM EAT



For example, SAF allegedly bombed the Kauda airstrip on 14 June. Aid workers speculated that the bombing was an attempt to prevent humanitarian assistance from reaching the region, leaving the Nuba people without a supply line for receiving aid.

The same day, SAF reportedly intensified its multi-day bombing campaign on Kadugli and the surrounding area. These bombings were reported in the wake of SPLA fighters allegedly obtaining control of a large portion of Kadugli, including some SAF barracks. Aid workers claimed the bombings targeted civilian centers.³²⁸

Bombings continued through the end of June and into July in areas such as Kauda,³²⁹ Kurchi,³³⁰ Umm Dorain,³³¹ Talodi,³³² and Kadugli. Kadugli was reportedly bombed every day from 30 June until 5 July.³³³ These areas, along with other locations repeatedly targeted, were primarily populated by Nuba people. In one specific instance on 4 July, OCHA reported that SAF helicopter gunships “engaged in offensive air operations” west of Kadugli.³³⁴

Additionally, South Kordofan, particularly the Nuba Mountains region, continued to experience continuous shelling by artillery, mortar and other stand-off weapons during this time. According to OCHA, 11 out of the 19 localities in South Kordofan were affected by fighting during the summer of 2011.³³⁵

AUHIP Framework Deal Rejected by Sudan

On 16 June 2011, two weeks after the outbreak of fighting in Kadugli, the African Union High-Level Implementation Panel (AUHIP) announced that both sides agreed to engage in ceasefire talks and return to the negotiating table to address outstanding issues in South Kordofan. The announcement came in the midst of escalating tensions between the SAF and the newly created SPLM-N.

The SAF spokesperson said simultaneously that they would continue operations in South Kordofan until they cleared out the rebellion but cease fire arrangements were still being discussed. Yasir Arman, Secretary General of SPLM-N, also confirmed reports of a potential deal.³³⁶

The initial framework paved the way for bilateral talks on the cessation of hostilities, the integration of SPLA-N soldiers into the Sudanese army, and the NCP's recognition of SPLM-N as a legal political party in Sudan. The deal, which was signed by Bashir's chief negotiator and presidential assistant, Nafie Ali Nafie, and SPLM-N officials on 28 June in Addis Ababa, Ethiopia, was subsequently rejected by President Bashir.

In a 7 July 2011 address, Bashir declared that he would not negotiate with “arms carriers” and that they “will firmly confront whoever carries arms.”³³⁷ Bashir also refused to recognize SPLM-N as a legal party because he viewed them as an extension of a foreign party,³³⁸ a reference to the ruling party in South Sudan. Bashir added that he will not negotiate with SPLM until they abide by the security arrangements stipulated by the CPA, and that any dialogue between the parties had to occur in Khartoum and not outside of Sudan.³³⁹ Two days later, South Sudan officially seceded and became an independent nation.³⁴⁰

Major Battles Between SAF and SPLA-N

With the collapse of the AU agreement, fighting continued between SAF and SPLA-N forces as lines of military control between the two forces shifted repeatedly throughout South Kordofan. Two of the most important battles between the Sudanese army and the rebels during this timeframe occurred at Al Hamra and Al Tais, South Kordofan.

SPLA-N Claim Victory at Al Hamra

SPLA-N reportedly attacked SAF forces in Al Hamra, Um Dorain Locality, 24 km from Kadugli, on 1 July 2011.³⁴¹ SPLA-N released a series of videos displaying what they claimed to have captured from the SAF base as a re-



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sult of the attack. The SPLA-N video shows what the narrator identifies as weapons belonging to SAF. SPLA-N reported they seized heavy artillery, munitions, mortars, anti-aircraft guns and large trucks.

SPLA-N additionally reported capturing two armored vehicles and four Land Cruiser pick-up trucks.³⁴² A Global Post report from 21 July 2011 stated that the town of Al Hamra was “destroyed” during a “full-scale” battle between SAF and SPLA-N, with huts and trucks burned.³⁴³

Differing Accounts: The Battle at Al Tais

Al Tais, 25 km from Kadugli in Buram Locality, witnessed major clashes between SAF and SPLA-N forces in mid-July. There were disputed reports about the scope and role of the Justice and Equality Movement (JEM), a rebel force primarily active in the Darfur region, in these attacks. SPLA-N and JEM claimed they carried out a joint attack on SAF, fighting together as a combined force for the first time.³⁴⁴ The groups claimed they destroyed the SAF garrison at Al Tais in a series of attacks occurring from 10 to 17 July. SPLA-N and JEM reported killing 150 SAF soldiers, capturing infantry and ground weapons, munitions and other military equipment.³⁴⁵

The Sudanese Army offered a different account of what occurred in Al Tais. SAF stated they repulsed an attack launched by the forces of SPLM.³⁴⁶ SAF's spokesperson Saad denied the involvement of JEM in the attacks, stating that the claim “lacks credibility and evidences (sic).”³⁴⁷ However, the Commander of SAF's 5th Brigade located in Al Tais, reportedly a reserve force,³⁴⁸ Brigadier Fadul al-Mula Mohamed Ahmad, stated that JEM's top military commander in South Kordofan, Brigade General Al-Toom Totom, was captured during the clashes.³⁴⁹ SAF's spokesperson reported that the JEM commander was being held in custody by the army, and would later be transferred to the “competent judicial bodies.”³⁵⁰

Small Arms Survey reported that by the end of August 2011, SPLA-N forces controlled three localities: Heiban, Buram, and Um Dormain. SPLA-N also controlled large amounts of land but not key cities. These cities were SAF-controlled locations. The rebels held a large part of Dalami; a large section of Kadugli but not Kadugli town itself; a large part of Dilling but not Dilling town; large parts of Talodi; less than half of Laghawa; and a small area of Rashad. Additionally, Talodi town itself was repeatedly under siege by SPLA-N. Small Arms Survey stated, “SPLM-N now controls more territory than the SPLA ever did during the civil war- twice as much or more, according to one senior SPLM-N official.”³⁵¹

A Two-Week Ceasefire

On 23 August, President Bashir announced a two-week cessation of hostilities in South Kordofan.³⁵² The ceasefire announcement came two days after talks between Malik Agar, Governor of Blue Nile and Commander in Chief of the SPLA-N, and Bashir ended in a stalemate, with both sides unable to reach a solution to the on-going crisis in South Kordofan.³⁵³ The meeting between Bashir and Agar was facilitated by Ethiopia's then-Prime Minister Meles Zenawi.³⁵⁴

The two-week ceasefire was reportedly violated within the first few days following its agreement and was never truly implemented. Small Arms Survey reported aerial bombardment the same day the ceasefire was announced and that “in the following week 15 bombing incidents and two ground attacks were reportedly carried out by SAF-aligned forces.”³⁵⁵ Yasir Arman labeled Bashir's ceasefire announcement as “not serious,” adding that the announcement is “an attempt to cover up human rights violation (sic), genocide and ethnic cleansing committed by Al-Bashir's forces in South Kordofan.”³⁵⁶

On the day he announced the ceasefire, Bashir restricted humanitarian access to South Kordofan. He banned all foreign agencies from South Kordofan, adding that all humanitarian operations would be achieved through the Sudan Red Crescent Society. This announcement contradicted his previous statement a week earlier that the Government of Sudan would allow six UN agencies access to South Kordofan.

Access for UN agencies was made contingent on those groups being supervised by Sudan's humanitarian coordinator.³⁵⁷ Even when their presence was permitted in South Kordofan, international humanitarian staff were required to obtain a travel permit from Sudan's HAC. OCHA stated that this requirement negatively affected operations by hindering the UN's ability to bring international staff into South Kordofan.³⁵⁸

SPLA-N Offensive

Clashes between SAF and SPLA-N rebels also reportedly broke out in an area where some SPLA-N rebels had been present between Kadugli and Dilling. On 22 September, a UN source told *AFP*, that SPLA-N attacked a checkpoint in Kurgul, 35 km south of Dilling. Two private buses and an NGO vehicle were reportedly caught in the attack that killed 12 SAF soldiers.³⁵⁹

On the same day, the rebels claimed they killed 60 SAF soldiers in an attack on a SAF position in the Rashad area, near the South Sudan border. The rebels reported that after the fighting they controlled Khor al-Dalib, Rashad Locality. *Sudanese Media Center* reported that 30 rebels were killed in the fighting.³⁶⁰

SPLA-N attacks against SAF in Rashad Locality continued into October. On 1 October, rebel forces reportedly attacked a SAF and Government of Sudan-aligned militia convoy according to *Radio Dabanga*.³⁶¹ SPLA-N movements throughout South Kordofan also reportedly prompted civilian displacement. OCHA noted that local media released reports of civilian displacement following the movement of SPLA-N forces into Abu Jubeiha Locality and Sadeed, Al Tamar, Al Hamra, Almitaimir and Jadeid.³⁶²

Fighting in Talodi Locality escalated in the fall of 2011 as the rebels attempted to capture Talodi, a SAF garrison town, while SAF strove to clear SPLA-N from the area. Talodi was a strategic location in South Kordofan for rebels. Control of Talodi could open a direct route into South Sudan. The International Crisis Group noted that Talodi is located in an area that "could become an alternate route from rebel held areas to South Sudan- specifically to Malakal in Upper Nile and from there to the second SPLM-N front in Blue Nile."³⁶³

The capture of Talodi would strengthen the foothold of the SPLA-N in South Kordofan. As a major SAF garrison town and an urban area, Talodi represents a major strategic gain. At this time, rebel forces controlled "a considerable amount of territory in South Kordofan, though largely in difficult to reach mountain areas."³⁶⁴

Sudan Vision published on 26 October that SAF attacked a SPLA-N camp in Ingarto, northwest of Talodi. The SAF spokesmen said, "SAF is combing the area in preparation at present for the purpose of capturing remnants of the rebels."³⁶⁵ SPLA-N denied SAF's claims and said that they repulsed SAF at Ingarto, Abu al-Hassan and Abri.³⁶⁶

On 1 November, SAF reported that more than 700 SPLA-N forces attacked Talodi. According to SAF spokesman Saad, "The armed forces waited for the invaders to arrive on three fronts with equipment and on several vehicles, but in an hour the armed forces and popular defence forces beat back the attack, causing heavy losses."³⁶⁷ Governor Haroun applauded SAF and PDF for their role in Sudan's purported victory against the rebels.³⁶⁸ SPLA-N spokesman reported that the rebels continued their advance on Talodi into 2 November while SAF bombed the area.³⁶⁹

Escalating Border Tension

Tensions along the South Kordofan-Unity border escalated through the end of 2011. On 10 November, SAF reportedly bombed Yida refugee camp in Unity, South Sudan, which hosted 21,000 refugees at the time of the attack. Yida camp is approximately 10 km from the South Kordofan border. Journalists from *Reuters* and *BBC* witnessed the bombing while reporting from the camp. The *BBC* correspondent witnessed a large plane heading

north after an explosion occurred. Samaritan's Purse, a humanitarian aid group working at the camp, reported that the bombs hit a school, a marketplace, and a location near the outskirts of the camp.³⁷⁰

UNHCR reported after the attack that they planned to relocate refugees to camps farther South from the borders with South Kordofan and Blue Nile. However, the heavy rains had made the roads there impassable.³⁷¹ The SAF spokesman denied accusations SAF had bombed the camps, saying, "This information is completely false. We didn't bomb any camps or areas inside the borders of South Sudan."³⁷²

On 1 December, *AFP* reported that SAF captured Toroge, South Kordofan from SPLA-N. Toroge is approximately 20 km from Jau along the Kadugli-Jau road which leads into Unity, South Sudan. A Sudanese official quoted by *SUNA* reportedly said that the capturing of the rebel stronghold was an "important victory."³⁷³ International Crisis Group reported that after SAF gained control of Toroge, they stationed forces north of the lake in Jau which straddles the South Kordofan-Unity border. These SAF units were purportedly located only a few kilometers from SPLA 4th Division and SPLM-N 9th Division bases that are east and south of the lake.³⁷⁴

Two days later, clashes erupted in the disputed area of Jau according to OCHA. The fighting did not apparently reach Yida refugee camp, which is only a few kilometers south of Jau, but did prompt the relocation of NGO personnel from the camp. At the time, UNHCR estimated 20,000 people from South Kordofan had fled to South Sudan.³⁷⁵

The next day, *Sudan Tribune* reported that SAF "briefly" took over Jau, South Sudan at 6:30 pm. A South Sudanese official claimed that SAF was then moving towards Yida and that SAF was attacking the area because they believed it was a SPLA-N "hideout."³⁷⁶ *Reuters* reported SAF's confirmation that they attacked the SPLA base, "the headquarters of the SPLA in South Kordofan," at 4:30 pm. The rebels denied having a presence there because the town is part of South Sudan according to the 1956 border.³⁷⁷ SPLA reportedly regained control of the area on 8 December at 10:00 pm.³⁷⁸

Figure VII-2



Razed Structures in Jau
6 December 2011
Jau, South Kordofan

Imagery taken on 6 December 2011 of Jau reveals the burning and razing of at least 70 civilian dwellings and other structures along the northeast coast of Lake Abiad, which straddles the border of South Kordofan and Unity. The burned area documented is within the territory of South Kordofan. Several groups of structures appear burned, though the areas between these groups of structures are unaffected. This indicates intentional burning of the structures [Figure VII-2].

OCHA's 2011 Humanitarian Assessment of South Kordofan

Impact of the Fighting in South Kordofan

The escalating combat between SAF and SPLA-N in South Kordofan during this time resulted in significant civilian displacement. Additionally, the fighting hindered the movement of returnees, both before and after South Sudan's secession, to both Sudan and South Sudan.

In the reporting period April to June 2011:

- 73,000 people were displaced by conflict in South Kordofan
- 48,000 people received food aid by the end of June
- After the outbreak of violence in June, the returnee rate slowed to only 1,000 people per week.
- April 2011 statistics revealed that 16,000 southerners returned to southern Sudan while 4,000 returned in June 2011

Despite providing these figures, OCHA noted that restrictions of access hindered their ability to complete a full assessment of the displaced population. Fighting reportedly affected 11 out of 19 localities in South Kordofan. Vulnerable populations in SPLM-N controlled areas were only able to receive aid from staff that were present there before the fighting erupted.³⁷⁹

In the reporting period July to September:

- 200,000 people were internally displaced or severely affected by the conflict
- 75,000 displaced from the Kadugli area by the end of September
- 135,000 people received food aid by the mid-August
- 10,000 refugees from South Kordofan in Unity, South Sudan by mid-September
- Over 1 million people in total were affected by fighting in the state

The humanitarian situation continued to deteriorate further as fighting continued to affect 11 of 19 localities throughout South Kordofan. On 30 August, the first time since the outbreak of fighting in June, limited aid supplies were allowed to be transported from areas controlled by the Government of Sudan into SPLM-N controlled areas.³⁸⁰

At the end of August, Valerie Amos, Under-Secretary General for Humanitarian Affairs, demanded that Government of Sudan and SPLM-N remove restrictions imposed on humanitarian organization. Amos explained that the situation in South Kordofan had reached a critical point and that international aid agencies were unable to replenish food stocks and deploy personnel over the past six weeks.

Amos further stressed that aid supplies were depleted, creating a life-threatening situation for vulnerable popula-



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tions in South Kordofan. Amos warned that if humanitarian agencies are not granted “immediate and unhindered independent access,” parts of the state would “face potentially catastrophic levels of malnutrition and mortality.”³⁸¹

In the reporting period October to December:

- 300,000 people internally displaced or severely affected by the conflict
- 22,000 refugees from South Kordofan in Unity, South Sudan
- Between 60 and 110 refugees arrived a day in Yida, Unity, South Sudan

The Government of Sudan continued to restrict international organizations from travelling into areas controlled by the SPLM-N. Additionally, the fighting affected civilians' ability to grow and harvest crops. The Famine Early Warning Systems Network (FEWS NET) estimated that 3.2 million people in Sudan were reported to be food insecure by November 2011. In South Kordofan specifically, 50% of last season's cultivated land was reportedly not cultivated this year because of the conflict. Further, only 15% of the land was reportedly cultivated in the areas affected the most by the conflict.³⁸²

Chapter VIII

Caught in the Middle: Conflict Continues in the Nuba Mountains January to June 2012

The fighting between SAF and SPLA-N forces in South Kordofan spanned multiple areas of the state in the period between January and June 2012. The most numerous and severe reports of threats to human security in South Kordofan during this time were documented as occurring throughout the Nuba Mountains, the eastern areas of Rashad, Al Abbasiyya and Talodi, and the southern areas of Buram, Toroge, Jau. Fighting eventually affected the disputed oil-rich area of Heglig as well.

The Kauda Valley

Ryan Boyette, an American aid worker reporting from the Nuba Mountains since June 2011, said that, “The Sudanese military has been relentlessly bombing the Nuba Mountains since June, killing hundreds of civilians, trying to quash a dug-in rebel movement. At the faintest sound of approaching aircraft, many Nuban people scramble up the steep, stony mountain sides to take cover in caves.”³⁸³

New York Times columnist Nicholas Kristof, reporting from South Kordofan in February 2012, wrote that, “Tens of thousands of Nuba have been living in caves since June when the government began going house to house, killing families with rebel ties and driving out international aid groups.”³⁸⁴ The situation in the Nuba Mountains would deteriorate further as famine conditions threatened the survival of the remaining civilians.

US Ambassador to the UN Susan Rice warned in mid-January that, “this conflict has affected more than 500,000 people, and if there is not a substantial new inflow of aid by March of this year, the situation in Southern Kordofan and Blue Nile will reach Stage 4 of an emergency, which is one step short of full scale famine.”³⁸⁵ Three days after Ambassador Rice’s comments, Sudan rejected opening aid corridors to South Kordofan and Blue Nile unless national Sudanese organizations and HAC were involved. *SUNA*, Sudan’s official news agency, reported that this requirement is “to ensure that aid does not reach rebel fighters.”³⁸⁶

The Humanitarian Aid Relief Trust (HART) reported that aerial bombardment in the Nuba Mountains had been occurring on a daily basis and into the night. HART reported that various types of munitions were used by SAF. The delegation noted that SAF completely relied on Antonov transport planes and helicopters to conduct aerial bombardment until November 2011. Since then, SAF began to use “long-range shells (Uishi missiles)” and “incendiary bombs to burn buildings, grass and crops.”³⁸⁷

Helen Hughes, an arms control researcher at Amnesty International, stated to the *New York Times*, “They [the rockets] arrive without any warning. And they are being used indiscriminately, which is a violation of international humanitarian law.” “Western experts” identified the rockets as Chinese-manufactured Weishi truck-launched rockets. The Government of Sudan did not deny the use of rockets and claimed they are “part of combat.”³⁸⁸ Ryan Boyette explained that over 70 rockets have been fired into the Nuba Mountains, killing more than 18 civilians by March of 2012.³⁸⁹

Civilians in the Nuba Mountains were unable to fully plant and/or harvest their crops that year due to the constant threat of harassment bombardment. According to HART, “The sustained aerial bombardment has also prevented people from planting or harvesting crops, causing serious and escalating malnutrition and associated diseases. Heiban County has been most affected, with an estimated 80% crop failure.”³⁹⁰

Figure VIII-1



Apparent Bombardment by an Aircraft Consistent with an An-26

8 March 2012

Angarto, South Kordofan

Imagery taken on 8 March 2012 of South Kordofan reveals the presence of two pairs of smoke plumes 1.7 km apart from each other. Both pairs are rising from two separate orchards approximately 1 to 2 km outside Angarto village. These plumes, based on shape, size and color are consistent with the result of aerial bombardment. Measurements of the shadows produced by the plumes indicate that the southernmost pair of plumes was from munitions detonated before those at the northernmost point. An aircraft consistent with the Antonov An-26 can be seen in flight approximately 3 km northwest of the northernmost pair of smoke plumes. This is indicative of aerial bombardment in progress targeting areas with no visible military presence. These findings are consistent with reports of harassment bombardment of civilian areas throughout the region [Figure VIII-1].

Encirclement of the Kauda Valley

The Government of Sudan's continuation of harassment bombardment and ground operations throughout South Kordofan in 2012 resulted in the human security situation around and inside the Kauda Valley growing increasingly dire.

The Satellite Sentinel Project noted that:

According to estimates by the United Nations, the US Government and others, at least 200,000 Nuba people within the Kauda Valley and surrounding area are at risk due to a worsening food crisis. Constant harassment bombing has prevented civilians from safely cultivating their land. The situation is also compounded by an influx of Nuba civilians seeking refuge in the Kauda Valley and Nuba Mountains with little to no access to their principal food sources or humanitarian aid. The Kauda Valley and Nuba Mountains are now the last strongholds of what is left of the indigenous Nuba population in Sudan.³⁹¹

On 3 March 2012, President Bashir pledged that he would pray in Kauda soon. Bashir gave instructions to open PDF camps to allow the creation of seven new brigades.³⁹² Bashir predicted that the final battle against

SPLA-N would be in Kauda, with 80,000 PDF reportedly willing to defend the state. Bashir declared, “Just like we prayed in al-Kurmuk, we will soon pray in Koda, God willing.”³⁹³ Abdallah Al-Haili Mohamad, the General Coordinator of the PDF, stated that PDF was ready to defend the “homeland” and called for “mobilizing all, young and old to defend the belief and the homeland.”³⁹⁴

Aerial bombardment of the Kauda Valley and Nuba Mountains reportedly continued after this pledge was made. An Antonov and MiG reportedly bombed Kauda on 22 March 2012. The ordnance from the aircraft fell on “empty land” but “created fear among the civilians.”³⁹⁵ Al-Hilu alleged that President Bashir ordered “‘extensive aerial bombardment’ to aid ground attacks by SAF and the PDF against areas under their (SPLM-N) control in the Nuba Mountains, but also in Blue Nile and in Darfur.”³⁹⁶ Bombing continued throughout April. A SAF Antonov reportedly dropped two bombs at 5:11 pm in civilian areas of the Kauda Valley on 29 April. Civilian homes were reportedly destroyed and four young men were injured. This was apparently the second bombing in Kauda in 5 days.³⁹⁷

In April 2012, *Al Jazeera* released a video in which South Kordofan Governor Haroun addressed the troops in regards to the military operations in Nuba Mountains: “You must hand over the place clean. Swept, rubbed, crushed. Don’t bring them back alive. We have no space for them.”³⁹⁸ The SAF campaign against the Nuba Mountains resulted in a siege of the area. SAF essentially cut off access to the area while continuing bombardment of the civilian population, their farms and villages. Haroun was quoted as saying, “I salute the Antonov, the gunships, the MiGs and artillery, supporting you [SAF] by bombing villages. When you go on your mission, if you find them, kill them, sweep them away, eat them. Do not bring me any prisoners of war. We have no quarter for them.”³⁹⁹

In an address at a military base in Talodi on 4 May 2012, Omar Al Bashir announced he hoped to perform prayers the coming Friday in the rebel stronghold of Kauda. Bashir made similar claims earlier in March 2012. In his address, Bashir denounced SPLA-N leader Abdel Aziz al-Hilu, describing him as “a mere façade of the foreign powers.” Bashir demanded that the armed forces defeat what he described as the “enemy.” He stated, “We came here to tell the people of Talodi that we are standing by your side and we will wage a campaign to liberate and purge Sudan of the traitors who sold their country out.” Echoing Bashir, Governor Haroun affirmed that their next goal was the liberation of Kauda.⁴⁰⁰

Kidnapping of the Contractors

On 28 January 2012, Chinese road construction workers came under attack in Al Abbasiyya, South Kordofan. SPLA-N attacked their base and kidnapped 29 workers, in what they described as a move to protect civilians caught in the middle of a firefight between SPLA-N and SAF. The Chinese Foreign Ministry’s Head of Consular Affairs reportedly met with Sudan’s Ambassador to China in Beijing during which time he “urged him to actively conduct rescue missions under the prerequisite of ensuring the safety of the Chinese personnel.”⁴⁰¹ SPLM-N Spokesperson Arnu Ngutulu Lodi admitted that SPLA-N had captured the workers stating, “Yes, we have captured them [...] I want to assure you right now they are in safe hands.”⁴⁰² According to the China Digital Times, the site attacked was the “the work camp operated by Power Construction Corp of China.”⁴⁰³

Governor Haroun made conflicting and subsequently disproven statements in the days following the attack. Additionally, Sudanese authorities intimated that a successful rescue mission had occurred. There were also inaccurate statements made about both the status of the hostages and the number of Chinese workers in SAF custody. It quickly became clear that 29 Chinese workers were in SPLA-N control. Two days after the hostages were taken, the Chinese Ambassador to Ethiopia, Xie Xiaoyan, met with the Chairman of the SPLM-N, Malik Agar and Secretary General Yasir Arman at an undisclosed location to negotiate the return of the kidnapped Chinese workers.⁴⁰⁴ SPLM-N did not agree to immediately release the hostages and made the following requests:

The SPLM-N calls upon China to contribute to the humanitarian operation and to ask Khartoum

government to open safe corridors for humanitarian operations and access, which has been denied by the National Congress leadership, and to call again upon China to support the SPLM-N's demand of an international investigation on the war crimes; to stop the genocide by Khartoum and the impunity which encourages more crimes against Sudanese people; and to support the demand of the SPLM-N of a holistic approach that will end the tragedy and misery of the Sudanese people and bring a just peace to Sudan. Likewise, the SPLM-N asked the Chinese delegation to convey to Khartoum that they should stop any military operations in the area where the Chinese are present until their safe evacuation.⁴⁰⁵

At the time when the Chinese workers were abducted, SPLA-N reportedly controlled 10 villages in the Al Abbasiyya area. According to OCHA, SPLA-N controlled the villages of Kody Ali, Gardod Alzibil, Kunjurkum, Kadorbat, Mahala, Mundaraya, Karmogiya, Gardod Albasha, Jabal Ahmer, Gardod Godig as of 28 January 2012.⁴⁰⁶ Fighting between SAF and SPLA-N continued through the first week of February in areas between Rashad and Al Abbasiyya. Clashes reportedly displaced 30,000 people in the area during the last week of January.⁴⁰⁷

On 6 February 2012, *Sudan News Agency* published a statement made by the Commander of the 53rd brigade that SAF was working to control the entire area and free the hostages.⁴⁰⁸ The next day, SPLA-N released the Chinese workers they had captured in late January.

The Chinese workers were reportedly flown out of Kauda to Kenya by the International Committee of the Red Cross (ICRC).⁴⁰⁹ Following the release of the workers, *Sudanese Media Center* announced that state authorities opened the roads connecting Rashad, Abu Jubeiha and Al Abbasiyya to prepare for the return of IDPs who left due to fighting.⁴¹⁰

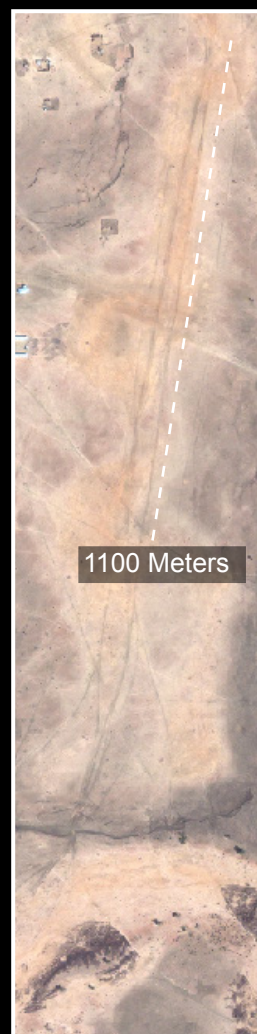
Battle for Talodi

Fighting expanded around the strategic SAF-garrison town of Talodi as the rebels repeatedly attempted to gain control of the area. Though military operations

Figure VIII-2
Talodi Airport Improvements
Talodi, South Kordofan



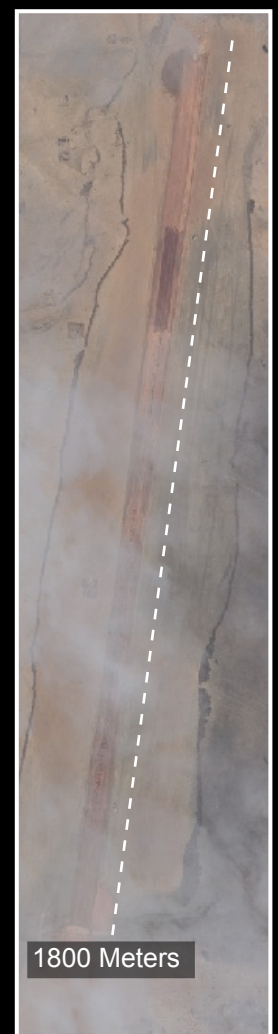
Closeup on Construction of Airstrip
22 December 2011



29 November 2011



22 December 2011



12 January 2012

were ongoing in the area, infrastructure development projects in Talodi continued. On 1 January 2012, Talodi Locality Commissioner Al Maqboul al Fadil al Hajjam reported that Omar Al Bashir would attend the inauguration of the 1800 meter-long airport⁴¹¹ [Figure VIII-2].

Major General Bashir Mekki Al Bashir, Commander of the SAF 14th Infantry Division at the time, reported that SAF was regaining territory and imposing its control over areas. He declared that areas such as Talodi are “red lines which can never be conquered.”⁴¹² On 29 February, SAF reportedly countered an attack by the rebels, with additional reinforcements sent to secure Talodi and surrounding areas. Talodi Commissioner Al Fdil Al Iman reported that development of the Talodi airport, roads within Talodi and a town hospital were ongoing despite the violence.⁴¹³ In a statement released that day, SRF reported that one of their factions attacked the areas of Maslouh located 7 km from Talodi. SRF claimed that they captured the area and inflicted damage and losses upon SAF forces.⁴¹⁴

OCHA reported that on 18 March 2012 state authorities and UN personnel left Kadugli for Abu Jubeiha and Talodi in a 10 day monitoring mission to assess humanitarian needs ahead of the rainy season.⁴¹⁵ On 29 March, fighting broke out between SAF and SPLA-N in Om Dual, Talodi Locality. SRCS claimed 17,000 people fled the area. IDPs in Liri sought shelter in schools, government buildings, houses and under trees.⁴¹⁶ Local authorities reported that 6,000 IDPs arrived in Abu Jubeiha and Kalogi due to the increased fighting in the Talodi area.⁴¹⁷ UN personnel visited Talodi the day before the fighting started and reported that about 50% of the city’s population had already fled.⁴¹⁸

SAF and SPLA-N both reported participating in deadly battles at Talodi on 30 March 2012. It should also be noted that during this timeframe, SAF was engaged with the rebels and SPLA in Heglig. If SAF’s claims that SPLA was involved in Talodi are true, then this would indicate that both SPLA and the rebels were fighting SAF on two major fronts at the same time. During the fighting in Talodi, SAF accused SPLA of collusion with the rebels. Regardless of this alleged coordination, the ability of SRF to engage major SAF units could be highly indicative of their force strength at that time. Previous coordinated efforts by SPLA-N and JEM were against smaller SAF locations throughout South Kordofan. The presence of rebel forces fighting in Talodi and Heglig represented SRF’s growing capability to launch coordinated attacks against multiple major SAF strongholds.

In the 30 March attack, SAF spokesperson Saad claimed that the rebels “came supported by tanks and cannons from South Sudan.” He noted that the bombardment by the rebels began at 7:00 am on Friday, adding “SAF (Sudanese Armed Forces) troops reacted to this and the battle continued until 6:00 pm [...] We succeeded in defeating the rebels, with heavy losses among them.”⁴¹⁹

SPLM-N spokesperson Arnu Ngutulu Lodi disputed SAF’s claim, stating that, “The fighting is continuing inside Talodi [...] It’s an intense battle now.” Lodi explained that the rebels were using artillery, mortars and tanks that they previously seized from SAF in the attack and refuted claims that South Sudan supported the rebels. Lodi went on to add that, “Time will show who won the battle in Talodi.”⁴²⁰

The day before, Lodi claimed the rebels destroyed two SAF garrisons near Talodi in a bid to cut off supply lines to SAF, declaring that, “We have now encircled the town.”⁴²¹ SPLM-N declared late on 29 March 2012 that government troops would have to “either surrender or face their destiny, because all roads leading to the town are now closed.”⁴²² On 31 March 2012, a SAF spokesperson claimed that a battalion of the SPLA’s 4th Division had moved into South Kordofan and was heading towards Talodi.⁴²³

Following four days of clashes in Talodi between SAF and SPLA-N, HAC reported that 26,500 displaced civilians were seeking refuge in Liri, Kalogi and Abu Jubaiha, while approximately 1,400 civilians remained in Talodi. Some displaced people were reportedly moving towards Kosti, North Kordofan and Khartoum.⁴²⁴

On 6 April 2012, *Sudan Vision* reported civilians were returning voluntarily to Talodi and that civilians fled the



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fighting when SPLA targeted them and their families, killing people and burning houses. South Kordofan Governor Haroun claimed that the “enemy” bombed the electricity station in Talodi, stating that engineers were heading to Talodi to repair the damage to the station.⁴²⁵ Two days later, South Kordofan’s state engineering department reported that they repaired the electricity station that was, according to eyewitnesses, attacked by SPLA tanks.⁴²⁶ Fighting broke out around Talodi again in late April. SAF reported that they had repulsed a SPLA-N attack on Talodi and inflicted heavy losses on the rebels. On 30 April 2012, SPLM-N spokesperson declared that his group had taken control of Talodi, a claim that SAF’s spokesperson refuted, “The military forces did wide combing of the area outside Talodi and succeeded in pushing back SPLM-N forces [...] There are no clashes inside Talodi and it is under full government control. Any talk of SPLM forces being in Talodi is mere lies.”⁴²⁷

Buram, Toroge and Jau

In December 2011, South Kordofan Governor Haroun vowed to clear the rebels from South Kordofan by the end of the year. He announced that SPLM-N was active in the localities of Heiban, Um Dorain and Buram, and promised to “restore security and stability in the whole state and to clear the three areas.” The commander of the SAF 14th Infantry Division, Major General Bashir Maki Al-Bahi, echoed Haroun’s commitment to clear the rebels from the region.⁴²⁸

Buram Locality was targeted by SAF air strikes in early January.⁴²⁹ In one specific instance, SAF was accused of launching four “Iranian built Shahab missiles” at Angolo.⁴³⁰ The reported use of Shahab missiles by SAF could not be confirmed. In addition to air strikes, SAF attacked two SPLA-N controlled villages, Buram and Tais. *Sudan Tribune* sources claimed that the rebels repulsed SAF back to Kadugli.

Civilians were reportedly killed and wounded when “SAF bombed surrounding villages during the fighting.” The SAF spokesman denied the bombings and claimed that SAF repelled the rebels from the areas.⁴³¹ SMC said that SAF’s operation in Tais was to reopen a road in the area.⁴³²

On 15 January, SPLA-N claimed that they captured a SAF “outpost” in El Ahmier, 30 km southeast of Kadugli, where they acquired an ambulance, mortars, machine guns and an anti-tank missile. SPLM-N spokesman Lodi claimed, “It was the last outpost of SAF south of Kadugli” and that fighting had spread south to Toroge. However, SAF denied they had troops in that location, saying that they bombed an area between El Ahmier and Toroge on the 14th.⁴³³ Weeks following the fighting, SAF 14th Infantry Division commander, Major General Bashir Mekki Al-Bahi, announced that SAF would continue to expand its offensive into Toroge, Talodi and Jau.⁴³⁴

On 10 February, Sudan and South Sudan signed a non-aggression treaty in Addis Ababa, Ethiopia. The treaty created a “monitoring mechanism” to investigate alleged violations of the treaty by both sides. The pact included language that bound Sudan and South Sudan to “respect each other’s sovereignty and territorial integrity” and “refrain from launching any attack, including bombardment.”

The agreement was signed by the head of South Sudan’s Intelligence Bureau, Thomas Douth, and the director of Sudan’s National Intelligence and Security Service, General Mohammed Atta.⁴³⁵ South Sudan accused SAF of shelling and bombing Jau, Unity the day after the treaty was signed.⁴³⁶

Ryan Boyette told *Sudan Tribune* that on 18 February, SAF troops apparently from Toroge reportedly attacked Angolo, a SPLM-N controlled village. A day before the attack, SAF bombed the village. Boyette claimed that civilians in the area feared that SAF was attempting to control the road leading out of the Nuba Mountains to Yida refugee camp in Unity, South Sudan.⁴³⁷

As of 20 February, Yida camp held 20,000 refugees.⁴³⁸ SAF spokesman Sawarmi denied allegations that SAF forces had blocked the refugee route.⁴³⁹ Sabina Dario Okolong, South Sudan’s deputy minister of humanitarian affairs, pointed out that fighting also affected returnees to South Sudan. The route from El Obeid, Kadugli, Jau

and into Bentiu was deemed “no longer viable due to insecurity.”⁴⁴⁰

On 22 February, *New York Times*’ columnist Nicholas Kristof’s account of his recent, unauthorized trip to South Kordofan included meeting civilians suffering from hunger and malnourishment. “We’ve had nothing to eat but leaves from the trees,” one civilian said. Kristof gained access to the region by a dirt road from South Sudan which Sudanese government forces were attacking to prevent supplies from reaching the SPLA-N rebels. In Dar, a village along the road, Kristof observed destroyed military vehicles, the remnants of a previous SAF attempt to gain control of that key route.⁴⁴¹

Sudan Revolutionary Front (SRF) troops, a combined force of JEM and SPLA-N rebels, reported their first joint attack in South Kordofan on 26 Feb 2012. Malik Agar, SPLM-N chairman, was chosen to be president of SRF and Abdel Aziz al-Hilu, SPLM-N deputy chairman, was elected commander in chief of SRF’s joint military units.⁴⁴² JEM spokesman Gibril Adam Bilal claimed that SRF troops overran SAF forces at Jau and then moved to surround SAF positions in Toroge.

SAF spokesman Saad confirmed Jau was attacked but blamed South Sudan government forces, claiming that the attack originated from inside Unity.⁴⁴³ Sudan’s Foreign Ministry indicated that the rebels were joined by SPLA officers.⁴⁴⁴ The next day, SPLA-N reported gaining control of Toroge with the assistance of JEM forces. Capturing this location created a “completely clear and safe” passage for refugees, according to SPLA-N. They reportedly seized three SAF tanks in Toroge, along with hundreds of weapons and vehicles in Jau.⁴⁴⁵

The Government of Sudan lodged a formal complaint with the African Union Peace and Security Council (AUP-SC) about the rebel attack on Jau, South Kordofan. Sudan argued that South Sudan has provided “logistical and military support to rebel movements” that comprised SRF. Sudan reported that its forces had regained control of Jau but that South Sudan must stop “supporting armed terrorist movements.”⁴⁴⁶

On 13 March, SRF rebels in Jau reportedly shot down a drone inscribed with the identification number “1-2-7R031,” which was confirmed as being operated by the Government of Sudan. The drone was allegedly conducting a reconnaissance mission on an SRF camp in the area. At first, SAF denied losing an unmanned aircraft.⁴⁴⁷ However, in the *Sudan News Agency*, SAF spokesman Saad stated that the Air Force flew a “small drone plane” from the Kadugli airport at 9am and that a technical failure resulted in losing communication with the aircraft.⁴⁴⁸

OCHA’s 2012 Humanitarian Assessment of South Kordofan

Impact of the Fighting in South Kordofan

In the reporting period January to March:

- 300,000 people were severely affected by conflict in South Kordofan
- 30,000 people fled from fighting in Al Abbasiya in late January
- 25,000 people fled from fighting in Talodi in late March
- 17,000 refugees from South Kordofan in South Sudan

In February, Sudan’s Humanitarian Aid Commission (HAC) and UN national staff assessed areas controlled by the Government of Sudan in South Kordofan. HAC reported that 146,000 people were affected by the conflict in South Kordofan. This is approximately half of the figure estimated by the UN. FEWS NET reported that below-average food production throughout South Kordofan continued into 2012 and remained affected by the on-going conflict.⁴⁴⁹



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Caught in the Middle: Conflict Continues in the Nuba Mountains
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In the reporting period April to June:

- 520,000 people were displaced or severely affected by conflict
- 61,000 refugees from South Kordofan in South Sudan, primarily in Yida, Pariang and Nyeel, Unity

Over this 3 month period, the number of refugees in South Sudan from South Kordofan increased by 44,000 people. This is the largest increase of refugees from South Kordofan in a 3 month reporting period to date. UNHCR reported that by the end of June, 1,000 refugees were arriving in South Sudan a day.

OCHA reported that by the end of June, there were 320 UN national and NGO staff and five UN international staff in areas controlled by the Government of Sudan in South Kordofan. However, humanitarian personnel were reportedly not allowed to enter SPLM-N controlled areas.

The FEWS NET published that by June 2012, an estimated 200,000 to 250,000 in SPLM-N-controlled areas were facing “Crisis” (Phase 3) and “Emergency” (Phase 4) levels of food insecurity.⁴⁵⁰

HART reported that, “In July 2012, Khartoum ‘accepted’ the tripartite proposal for Humanitarian access into South Kordofan and Blue Nile – but so far all aid has been prevented...The Agreement’s false promises gave them hope - they waited for months, living on roots of trees and whatever they could scavenge.”⁴⁵¹

Section 3: Blue Nile

Mid-2010 to May 2012



Chapter IX

The Battle for Blue Nile Mid-2010, September to October 2011

Alleged Build-up of SAF and SPLA-aligned Forces in Blue Nile

In 2010, conflicting reports of military activity by both SAF and SPLA units throughout Blue Nile, a state which borders South Sudan and Ethiopia, emerged. Though media reported large movements of SAF troops that year, a western military observer visited Blue Nile in late October 2010 and reported that he saw no signs of reinforcement or heavy equipment movement during his field visit.⁴⁵²

The observer claimed that key infrastructure was well defended, but few units were deployed outside of garrison towns. Conversely, other observers reported that both SAF and SPLA contingents were in fact increasing their presence at that time on either side of the town of Dindiro. Dindiro had previously been the frontline of fighting in Blue Nile during Sudan's second civil war.⁴⁵³

The Governor of Blue Nile, Malik Agar, publicly accused SAF of deploying forces in Blue Nile in 2010 not authorized by the CPA. Elected in April 2010, Agar ran for the governorship of the state as the SPLM candidate. Agar became the only elected governor of a Sudanese state belonging to a party other than the NCP, the ruling political party of Sudan.⁴⁵⁴ Although tensions between NCP and SPLM supporters within the state had escalated before the elections, Agar won the governorship by approximately 10,000 votes over the NCP candidate, Farah Ibrahim Mohamed Al-Aggar.⁴⁵⁵

In mid-2010, Agar claimed 1,500 militiamen from Darfur arrived in Ad Damazin, the capital of Blue Nile and the headquarters of the SAF 4th Division. He alleged that they were provided SAF identity cards, although they apparently operated under a command and control structure separate from SAF. Furthermore, Agar asserted that weapons were transferred from Khartoum to the militia forces a few days after the units arrived. These weapons purportedly included 12.7mm machine guns mounted on Toyotas and anti-tank guns.⁴⁵⁶

Sudan Vice President Taha responded to these accusations by claiming that the Darfurians were sent to Ad Damazin for training. However, SPLA leaders expressed concern about the arrival of the militiamen, alleging that they were sent to strengthen SAF's frontline forces in Blue Nile before the referendum. Small Arms Survey published that there were unverifiable reports of large numbers of PDF present in Blue Nile at that time as well. By January 2011, Malik Agar publicly claimed that SAF had 20,000 men under arms in Blue Nile, with an additional 3,000 SAF soldiers serving as part of the JIU deployment there.⁴⁵⁷

SPLA troop movements in Blue Nile allegedly violating the CPA were also reported. Initially, SPLA had moved their troops south of the 1956 border in accordance with the CPA. The only exception being those SPLA troops serving as part of the JIU⁴⁵⁸ stationed at Guffa, Upper Nile.⁴⁵⁹ In January 2010, a Khartoum-based newspaper reported that equipment and vehicles had been sent to an 8,000-strong SPLA force in areas south of Kurmuk, Blue Nile. SPLA spokesperson Major General Kuol Deim Kuol denied those claims, stating that "SPLA is not present in Blue Nile, all our troops are in Northern Upper Nile at Gupa (sic)." Kuol accused SAF of building up its troops in South Kordofan and Blue Nile.⁴⁶⁰

Agar claimed he then had 17,000 SPLA forces under his command. UN officials also reported Agar formed a militia from members of his tribe, the Ingessana. Original estimates of this militia numbered approximately a few hundred fighters. No recent estimates of their force strength are publicly available. Small Arms Survey reported that within weeks before completing its December 2010 report, local observers witnessed SPLA moving toward

Kurmuk, an area that the SPLA had previously controlled. UNMIS also reported its forces were prevented from inspecting a plane at the Kurmuk airport reportedly carrying arms from SPLA personnel in Abyei.⁴⁶¹

On 9 July 2011, South Sudan's Independence Day, state authorities in Blue Nile instituted a new policy of stopping and searching UN and NGO vehicles at checkpoints. Around that time, WFP food convoys were denied access to Ad Damazin.⁴⁶² WFP later reported in early September, after the fighting had begun, that the Government of Sudan's restrictions only allowed the agency to preposition enough food to sustain 20,000 people in Blue Nile for only two weeks.⁴⁶³

September First: The Blue Nile Conflict Begins

On 1 September 2011, clashes erupted in the city of Ad Damazin between SAF and SPLA-N forces. Agar had assumed command of SPLA-N forces in Blue Nile. At the time the fighting began in Ad Damazin, Major General Yahya Muhammad Kheir was the commander of the SAF 4th Division, based in Ad Damazin.⁴⁶⁴ The NCP and SPLM each have different accounts of how the fighting in Blue Nile began in September 2011. Similar to statements made after fighting erupted that year in Abyei and South Kordofan, each side accused the other of initiating the violence.

Yassir Arman, Secretary General of SPLM, stated that SAF deployed an infantry brigade, 12 tanks and 40 armed vehicles four days before clashes broke out on in Ad Damazin. He claimed SAF launched an attack on the command post of the SPLA JIU around midnight on 1 September.⁴⁶⁵ The executive director of the African Centre for Justice and Peace Studies, Osman Hummida, also reported SAF activity on 28 and 29 of August 2011. He claimed Sudan moved heavy equipment, SAF and PDF troops to Blue Nile by aircraft from Khartoum, as well as national security forces.⁴⁶⁶

Hummida noted that clashes began around 11:00 pm when SAF and PDF forces attacked a three car convoy carrying an SPLM delegation at the southern checkpoint of Ad Damazin, causing SPLA personnel to return fire. Following the convoy attack, clashes spread into the city, especially in the areas around the NCP Headquarters, the crops market, the Al Nahda area, and the industrial zone.⁴⁶⁷ SAF reportedly targeted SPLA positions including Agar's residence and Al-Jundi Suleiman, commander of Blue Nile's special joint units, at the "entrance to Damazin."⁴⁶⁸ Following the clashes, SAF closed the main road connecting Sennar, a northern neighboring state, to Blue Nile while SPLM had control of Bau, Geissan and Kurmuk.⁴⁶⁹

SAF discounted SPLA-N's assertion that the Government of Sudan attacked first. They did agree, though, that the clashes began late on 1 September on the southern side of the city and subsequently evolved into clashes within the city and neighboring areas. In a press release, SAF spokesman Sawarmi said that SPLA forces attacked SAF forces at Ad Damazin's southern gate, at SAF headquarters, and in the industrial zone around 9:00 pm on 1 September 2011.⁴⁷⁰

Saad also asserted that SPLA forces attacked other areas in Blue Nile including Dindiro, Ulu, and Um Darfa. He declared that SAF forces were able to repel the attacks and established total control over Ad Damazin and the other areas attacked.⁴⁷¹ Following the clashes in Ad Damazin, trucks with soldiers, tanks and artillery were reportedly seen in the main squares of the city, in addition to accounts of SAF patrols being conducted throughout the city.⁴⁷²

On an episode of the program "Jounoud Al Watan," a SAF video series, the commander of SAF's 4th Infantry Division, Major General Kheir, said that SPLA had remained in Blue Nile following the CPA, receiving direct logistical support from the government of South Sudan. Kheir claimed that SPLA had been receiving deliveries of supplies from aircraft landing in Kurmuk and Yabus. He described the deliveries as a violation of Sudanese sovereignty. He additionally said that SPLA-N received monetary support from South Sudan. The evidence of this support, according to Kheir, included South Sudanese money found with SPLA in Blue Nile. The narrator of the



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episode claimed that the “conspiracy” that began in South Kordofan is the same as the one in Blue Nile, calling Malik Agar a “special agent, and conspirator extraordinaire.”⁴⁷³

State of Emergency

The day after the fighting started, President Bashir declared a state of emergency in Blue Nile and removed Malik Agar from his position as governor. Bashir appointed Major General Kheir military governor.⁴⁷⁴ As fighting spread beyond Ad Damazin, “Central Reserve Forces or the Abu Tira” allegedly began making arrests.⁴⁷⁵ Abu Tira is also known as the Central Reserve Police. Sudan’s Minister of Interior declared that “central reserved forces” were deployed to maintain security in towns throughout the state.⁴⁷⁶ By 6 September, *AFP* reported that Ad Damazin had no civilian activity, with only armed pickup trucks on the roads.⁴⁷⁷

Fighting quickly expanded throughout Blue Nile. NGO and UN staff reported that SAF aerially bombed Kurmuk early in the morning of 2 September.⁴⁷⁸ The bombing would continue through the end of September.⁴⁷⁹ Additionally, a civilian source reported to *Radio Dabanga* that SAF bombed areas “with concentrations of civilians and completely void of any military presence.”⁴⁸⁰ OCHA also reported that SAF soldiers looted communications, safety and security equipment from the UNICEF compound and an INGO office in Ad Damazin.⁴⁸¹

On 3 and 4 September, military equipment and troops from Ad Damazin were seen on the road south of the city, heading in the direction of Dindiro and Kurmuk. By 6 September, fighting and aerial bombardment were also reported in Dindiro, Ulu, Kurmuk, Geissan, Menza, Yabus and Um Darfa.⁴⁸² Civilians who fled Um Darfa were later interviewed by The Enough Project in Ethiopia. The refugees explained that, “soldiers chased down civilians in the town...and in the words of one refugee ‘slaughtered’ them. Another refugee said pro-government militias captured and raped some women in the town.”⁴⁸³

Major General Kheir declared that SAF was moving to Kurmuk, where “Agar is holed up with his generals.”⁴⁸⁴ An NCP senior official, Mandour Al Mahadi, also reported that the Government of Sudan sent 1,000 “Mujahedeen” to Blue Nile at that time in support of SAF operations.⁴⁸⁵

Witnesses reported that the outbreak of fighting caused thousands of people to flee Ad Damazin. Some fled to Singa, 200 km north of Ad Damazin.⁴⁸⁶ Within the first three days of fighting, *BBC* reported that 20,000 people fled Blue Nile for Ethiopia.⁴⁸⁷ The official numbers of displaced people quickly increased to 100,000 as of 14 September, according to the UN News Centre.⁴⁸⁸

By the third week in September, the Government of Sudan created a government-led task force made up of HAC, SRCS, local NGOs and government agencies to coordinate all humanitarian organizations and assistance. The Government of Sudan also informed humanitarian personnel that they needed authorization from government bodies to travel and assist civilian populations. International NGOs were required to obtain authorization from HAC, while UN agencies needed to receive permission from the Ministry of Foreign Affairs. Despite this process, on the day fighting broke out, 1 September 2011, no international humanitarian staff were granted permission to travel to Blue Nile.⁴⁸⁹ As a result, international humanitarian staff were not allowed to respond to the escalating humanitarian crisis.

The Battle Moves to Bau

When fighting broke out in Ad Damazin, civilians reportedly fled to the Ingessana Mountains in the Bau Locality of Blue Nile.⁴⁹⁰ As noted previously, Agar had reportedly formed a militia from members of his tribe, the Ingessana, who traditionally reside in the Ingessana Mountains. SPLA-N reportedly controlled Bau Locality, as well as Kurmuk and Geissan, when the conflict in Blue Nile started.⁴⁹¹

OCHA reported that fighting and aerial bombardments began occurring in Ulu, Bau Locality as of 1 September. Fighting was also reported during that time at Dindiro, Kurmuk, Geissan, Menza, Yabus and Um Darfa.⁴⁹² SRCS claimed 1,000 people had been displaced from Ulu as of 6 September. SRCS' displacement figures were reported the same day that the commissioner of Bau Locality, Babikir Mohammed Osman, said that he estimated 80,000 SPLM-N supporters were "on the move in his area," fleeing the apparent approach of the Government of Sudan's forces.⁴⁹³

On 7 September, a SAF spokesman announced that SAF clashed with SPLA that afternoon near Bau town. SAF claimed they inflicted heavy losses on the rebels⁴⁹⁴ and had cleared them from the Bau area.⁴⁹⁵ SRCS later reported that the government-controlled areas of Bau and Tadamon had the highest amount of IDPs, numbering as many as approximately 25,000 people.⁴⁹⁶

Jisir al Awad: SAF Special Forces and Airborne Operation in Geissan

On 9 September, SAF launched an operation they named "Jisir al Awad" in Geissan to break a siege by SPLA-N on SAF forces present there. Aircraft were reportedly flown into Ad Damazin, the launching point for the operation, on the morning of 9 September. According to Air Colonel Ibrahim Ahmed Ibrahim, who identified himself as the Commander of the operation on an episode of "Jounoud Al Watan," SPLA-N attacked the SAF base in Geissan at 7:00 am that day. SAF claimed they repelled the attacks but sustained heavy losses. Major Awad was critically injured in that attack and later died from his injuries. The SAF operation takes its name from him.

The Geissan operation was led by SAF Special Forces, in coordination with the Sudanese Air Force and the Airborne Forces, and was commanded by Major General Abdel Hamid Osman.⁴⁹⁷ The Commander of SAF Special Forces, identified as Colonel Al Sheikh Usman Al Sheikh on the program "Jounoud Al Watan," reported that the special forces moved by aircraft to Ad Damazin. There, they coordinated with the Air Force and the ground forces in Geissan.

The Special Forces, supported by the Air Force, moved towards Geissan at

Figure IX-1

Four Mi-24 Helicopters



Ad Damazin Airstrip - Before

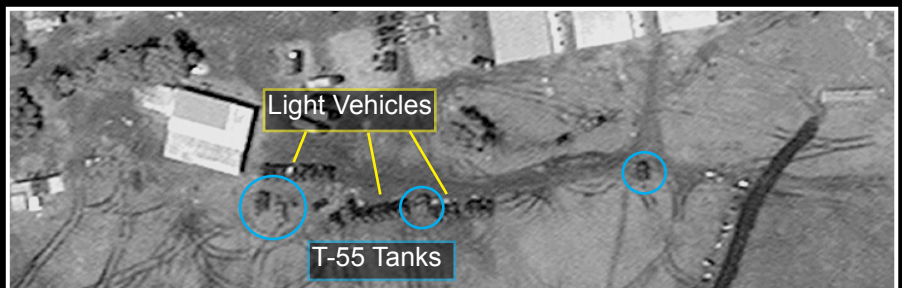
9 September 2011 | 11:16 AM EAT
Ad Damazin, Blue Nile

Six Mi-24 Helicopters



Ad Damazin Airstrip- After

10 September 2011 | 12:06 PM EAT
Ad Damazin, Blue Nile



Encampment south of Airstrip - Before

9 September 2011 | 11:16 AM EAT
Ad Damazin, Blue Nile



Encampment South of Airstrip- After

10 September 2011 | 12:06 PM EAT | Analyzed in WV-2 NIR
Ad Damazin, Blue Nile

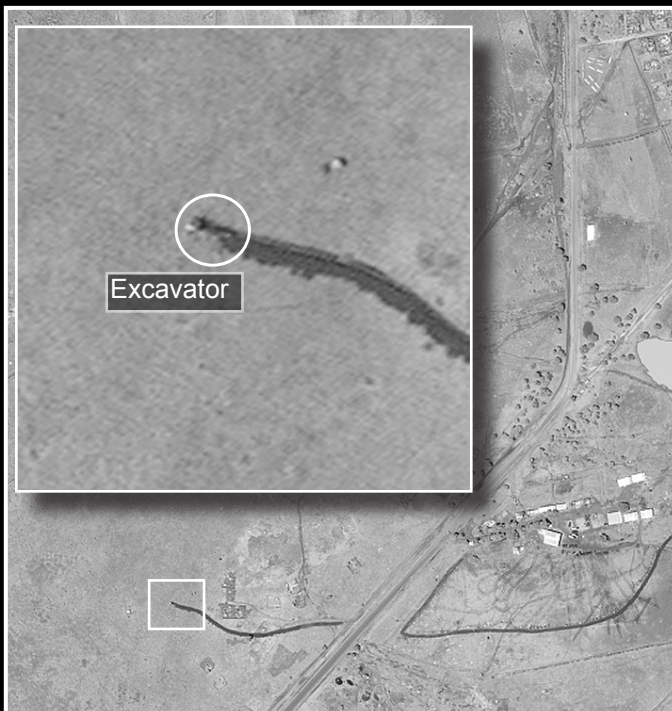
1:15 pm on 9 September. The commander of the Special Forces detachment involved in the battle noted that the operation was difficult because SPLA-N forces had surrounded and besieged the SAF base. The operation lasted an hour and a half, during which Special Forces reported delivering materiel, reinforcing the troops there, and evacuating the wounded.⁴⁹⁸

Signal analysis of imagery taken of the Ad Damazin airstrip on 9 September and 10 September 2011 shows, as of 9 September, that the airstrip has at least four apparent Mi-24 attack helicopters present there. The image taken on 10 September shows this compliment has increased with the addition of two more apparent Mi-24s and an aircraft consistent with an Antonov An-32 military transport plane. This type of fixed-wing asset has been used by SAF forces for transport and/or indiscriminate bombardment operations. The Mi-24s visible in images from both days are consistent with helicopters visible in the “Jounoud al Watan” footage of the Geissan operation that occurred on 9 September [Figure IX-1].

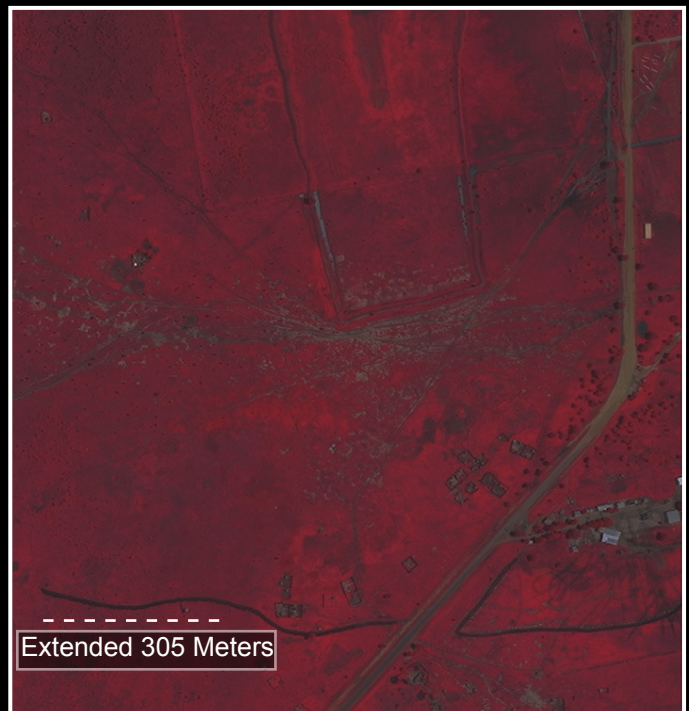
Approximately 400 meters south of the airstrip, there is an encampment visible. On 9 September, 20-25 light technical vehicles and four T-55 main battle tanks are present. Imagery taken the following day shows that the light technical vehicles have departed. However, the tanks remain in their positions facing southward [Figure IX-1].

In the 9 September imagery, an encampment situated on the east side of the main road running south from Ad Damazin is fortified by an L-shaped berm along its east and south sides, measuring approximately 660 meters. The southern part of the berm continues on the western side of the road for approximately 285 meters. A mechanical excavator appears to be actively digging the fortification. In imagery captured the next day, 10 September, the fortification has been extended by approximately 305 meters [Figure IX-2].

Figure IX-2



Encampment Fortifications - Before
9 September 2011 | 11:16 AM EAT
Ad Damazin, Blue Nile



Encampment Fortifications - After
10 September 2011 | 12:06 PM EAT | Analyzed in WV-2 NIR
Ad Damazin, Blue Nile

Tracking the Deployment of SAF Units

Further analysis of the 9 September image shows that approximately 30 km south of Ad Damazin airstrip, on the main road, a military convoy is apparently parked. Signal identifies two pieces of unhitched towed artillery consistent with 105mm M101 howitzers. Two northward facing vehicles consistent with covered M-35 military-grade cargo trucks are positioned in front of each unhitched artillery piece. At the southern end of the convoy, objects consistent with five T-55 main battle tanks are visible and appear to be travelling southward [Figure IX-3].

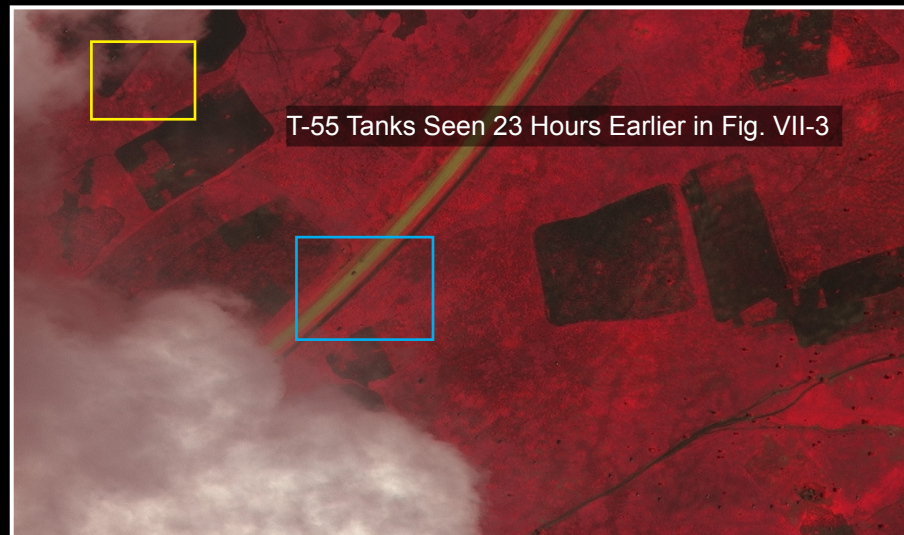
The next day, the convoy that was parked on 9 September still remains in place. The two artillery pieces are now hitched to the M-35 cargo truck and facing south. Additionally, the T-55 main battle tanks that appeared to be moving south in the 9 September image are absent [Figure IX-3].

Further analysis reveals fresh tracking, consistent with T-55 tanks, in the 9 September image that connects with tracking identified in imagery the following day. Analysis of the five sets of tank tracks reveal that the T-55s visible in the 9 September were apparently traveling off-road towards the south. By 10 September those units are seen 11.5 km south, leaving the same tracking pattern and travelling in a southward vector. The T-55s are accompanied by a formation of approximately 20-25 light vehicles [Figure IX-4].

Figure IX-3

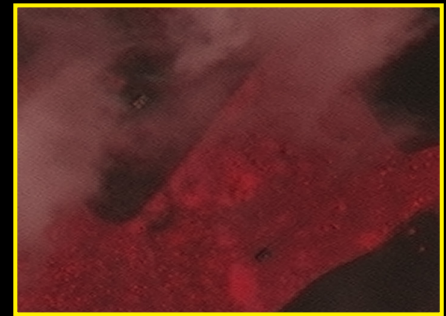


Figure IX-4



Tanks and Vehicle Formations

10 September 2011 | 12:06 PM EAT | Analyzed in WV-2 NIR
Ad Damazin, Blue Nile



Martyr Quobtia: SAF Operations in Dindiro

A week before the battle of Dindiro, SAF reported they were moving into the Dindiro Mountains region to clear the area of SPLA-N forces as they moved towards Kurmuk.⁴⁹⁹ SAF asserted that they would attack Kurmuk as soon as troops in Geissan and the Dindiro Mountains were reinforced. Imagery analysis by Signal is consistent with these reports. SAF also reported they were delayed in expelling the insurgents from the area because of the heavy rains.⁵⁰⁰ Three days after Sudanese Parliament officially approved SAF military in action in Blue Nile against the rebels;⁵⁰¹ Defense Minister Hussein visited Dindiro on 15 September and told fighters that SAF “will score striking victory within three days.”⁵⁰²

On 21 September 2011, imagery was captured of the 100 km-long main road that connects Ad Damazin to Kurmuk. In the village of Bangas, which is approximately 40 km south of Ad Damazin along the main road, Signal identifies a large, J-shaped installation of fighting positions. The total approximate length of these fighting positions is 2 km.

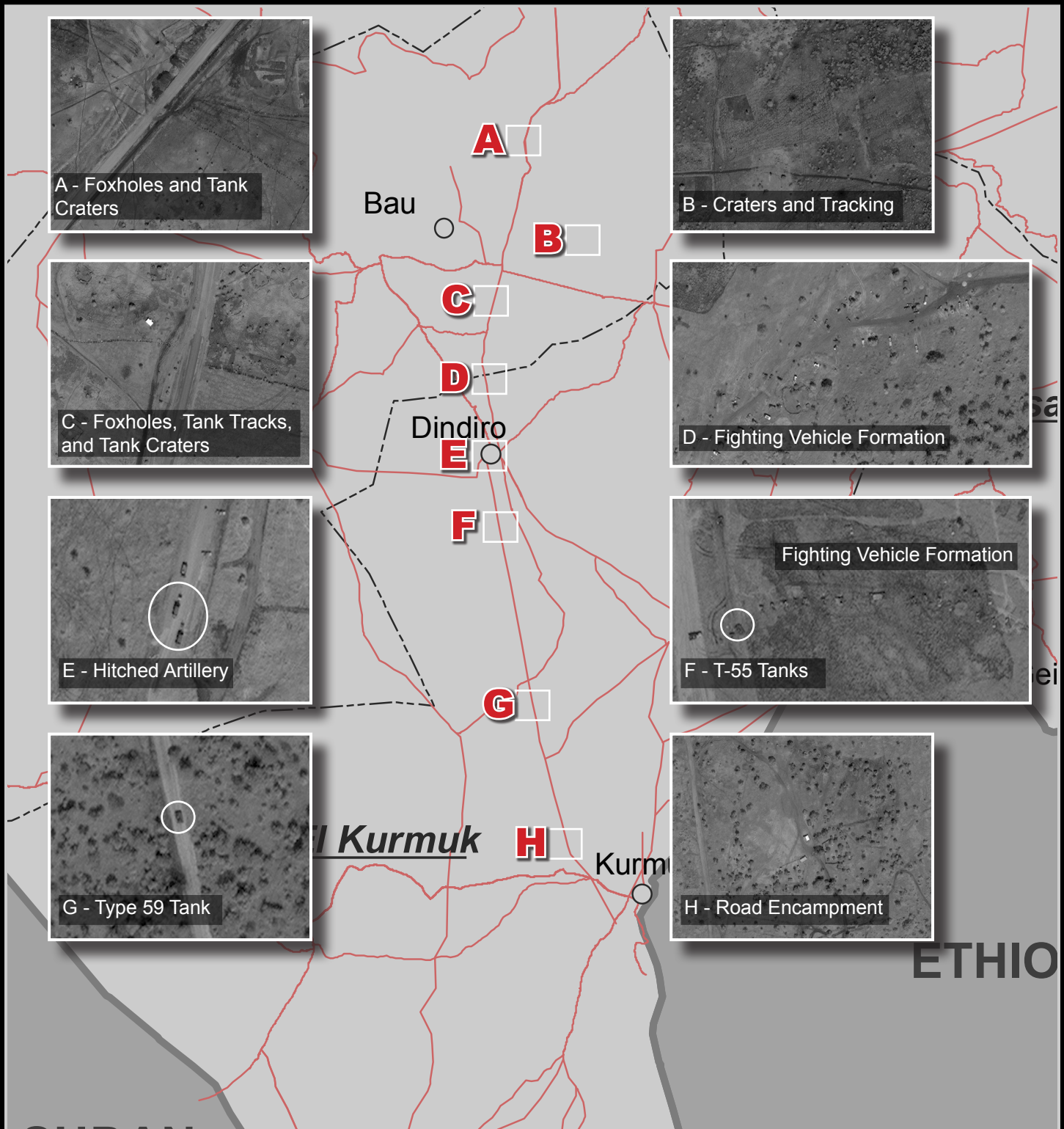
Tracking consistent with both light armor vehicles and main battle tanks, such as the T-55, is visible. Several craters consistent with previous bombardment of the area by 100 mm artillery shells, the same ammunition type fired by a D10T gun, the standard armament on a T-55 main battle tank, are also identified. Similar cratering and tracking continues southward for approximately 35 km into the area of Dindiro. This indicates recent movement of T-55 tanks through this location. Three different locations within this area south of Bangas contain extensive fighting positions: Fadamiya (16 km south), Diren (25 km south), and Mogm (30 km south).

Analysis of imagery captured on 21 September 2011 shows the presence of vehicles consistent with heavy armored units in the northern part of the Dindiro vicinity, approximately 3 km south of Mogm. Military vehicles are present throughout the northern Dindiro area. At least four pieces of heavy armor consistent with T-55 tanks are seen on the road, along with two different mixed vehicle formations consisting of both heavy and light armored vehicles. Light technical vehicles, transport trucks, and support vehicles are also included in this formation. Heavy cratering consistent with 100mm, 105mm, and 122mm shells are visible in the vicinity.

Figure IX-5

Satellite Imagery Overview: Battle on Dindiro Road

21 September 2011 | 11:32 AM EAT



Three heavy equipment transports, two of which are loaded with tanks, are seen on the road next to two off-loaded T-55 main battle tanks. More tracking consistent with heavy armor is seen heading south for 10 km. There, an armored vehicle consistent with a Type 59 main battle tank can be seen travelling southward on the main road. An encampment with the presence of extensive heavy armor tracking is identified approximately 35 km south of the Type 59's location. The encampment is approximately 6 km north of the town of Kurmuk. This is the first and only time Signal has identified a Type 59 deployed in the field [Figure IX-5].

On the program "Jounoud al Watan," Colonel Engineer Mohamed Ali Saleh, identified as SAF Commander of the Dindiro Operation, said that the first battle reportedly began at 7:00 pm on 20 September and lasted until midnight. He said that the second battle started at 4:00 am and lasted until 7:00 am on the morning of 21 September. Saleh addressed the troops and told them that they had captured five T-55 tanks and four Land Cruisers, as well as a cache of light and medium weapons and ammunition. Saleh claimed that the captured tanks were going to be taken to Ad Damazin for maintenance and then returned to the battlefield. "We will use their weapons against them. So that we can kill them with their guns and their ammunition," Saleh said.⁵⁰³

Lieutenant Colonel Jamal Tanafa, identified as the Commander of the 154th Infantry Battalion, is shown briefing his troops about the success of the operation and the SPLA-N materiel they claimed to have captured and destroyed. Jamal alleged that SPLA-N ran away from the battles, enabling SAF to capture SPLA-N armored vehicles.⁵⁰⁴

Captain Ahmad Muhammad Ahmad, identified as Commander of the operation's armored units, described the victory in Dindiro as "a special one," a victory he "gifts" to the people of Sudan. Ahmad states that the "spirits of our forces are really high, and that of the enemy has been destroyed [...] God willing we will destroy all their forces in the near future."⁵⁰⁵

The narrator of the program claims that Agar and his forces escaped towards the mountains during the night, "thinking that SAF forces wouldn't fight at night." Footage of an apparent SAF operation at night in Dindiro is shown. Tanks, armored vehicles, technicals and a variety of artillery reportedly used in the battle are seen being dragged through fields.⁵⁰⁶

Major General Kheir, then the Military Governor of Blue Nile, reported that Agar and SPLA-N fled Dindiro, leaving behind their dead and wounded.⁵⁰⁷ Additionally, Kheir thanked the PDF for the support they provided SAF, describing the role they played in the operation as important.⁵⁰⁸

Imagery taken on 21 September and 28 September 2011 reveals that, during this seven-day period, significant fortifications have been made to the main encampment in Dindiro town. On the western edge of the encampment, a raised berm measuring approximately 1.2 km in length has been established. This is consistent with SAF publically stated intentions, as noted previously, that they would reinforce position in Dindiro. SAF claimed that they would attack Kurmuk as soon as troops in Geissan and the Dindiro Mountains had been reinforced [Fig.IX-6].

Figure IX-6



Dindiro Encampment Build-up
21 September 2011
Dindiro, Blue Nile



Dindiro Encampment Build-up
28 September 2011
Dindiro, Blue Nile

Martyr Awad: SAF Conducts Operations in Sali

SAF's operation in Sali, codenamed "Martyr Awad," began on 19 October and lasted until the following day, resulting in SAF capturing the town. Colonel Jamal Mohammad Ahmad, identified in the program "Jounoud Al Watan" as the Commander of SAF's 154th Infantry Battalion, noted that SAF believed the battle for Sali would be a decisive one, representing the last phase of SAF efforts to remove the rebels from Blue Nile. The narrator of the program said that Sali was the last front for the remnants of SPLA-N that ran away from Geissan and Dindiro. The narrator also said that the region's tough terrain and heavy rain made the battle difficult.⁵⁰⁹

In the program, Brigadier General Mubarak Kato Kijo identified himself as Commander of the operation. Kijo stated that it took the forces six days to travel from Dindiro to Sali. He noted that two skirmishes occurred on the way, which he described as "not big at all." Kijo reported that they arrived at Sali around 5:00 pm on 19 October 2011, with SAF and SPLA-N positions separated by only 400 meters. By 8:00 pm that evening, SAF forces breached the SPLA-N's trenches.

Kijo noted that SAF attacked from two directions and that fighting continued overnight. During that time, SPLA-N mounted six counter-offensives, the most significant of them occurring at 5:00 am. Major General El Kheir addressed the troops after Sali fell to SAF: "This is a historic battle like no other in Sudan's history, this is a huge offensive battle [...] we have big surprises coming soon."⁵¹⁰

Major General Yaqoob Ibrahim Ismail, Director of Ground Operations at SAF General Command, hailed the role of PDF, Special Forces, SAF, and what he referred to as "Mujahedeen." Ismail declared that, "We are fighting for a nation, we have a duty and belief, but they don't have any cause, they are rebels who fight for Malik Agar and not for Sudan."⁵¹¹

SAF statements following the clashes indicate that they expelled SPLA-N forces from Sali and controlled the town. Meanwhile, SAF continued combing the area for any remaining SPLA-N forces. SPLA-N reportedly used heavy and light weapons during the battle at Sali, including tanks, cannons and light guns, some of which SAF reportedly confiscated afterwards.⁵¹² SPLA-N confirmed that the battle had occurred but denied the army drove its fighters from the area.⁵¹³ The newly appointed Governor of Blue Nile, Major General Al Hadi Bushra,⁵¹⁴ echoed Major General Ismail's assertion that the battle in Sali was the end of SPLA-N's presence in Blue Nile. Bushra expressed confidence in the new commander of SAF's 4th Infantry Division, Major General Murtada Warrag, who assumed command of the unit from Major General Kheir in November 2011.⁵¹⁵

According to Yasir Arman, "Official reports indicate 1,200 wounded in the battle, six tanks two helicopters destroyed. 85 killed and 53 missing." Arman also said the Government of Sudan lost the battle of Sali, contrary to SAF's earlier claims.⁵¹⁶ Ali Bandar, a leader of SPLM-N in Blue Nile, reported on the 21 October 2011 that SPLA-N shot down three SAF helicopters and damaged a fourth. He denied SAF had entered Sali, saying that the fighting was still continuing.⁵¹⁷ Bandar further accused SAF of initiating the attack on SPLA-N in Blue Nile, claiming that they had fought back only in self-defense.⁵¹⁸

SAF Advances towards Kurmuk

On 28 September, President Bashir declared that SAF would capture Kurmuk, the rebel stronghold, where SAF-aligned forces would then give prayers of thanksgiving.⁵¹⁹ Bombardment by SAF Antonovs increased throughout the last week of October around Sali, Bau and Dindiro. SPLA-N-aligned militia around Kurmuk reportedly warned civilians to flee, fearing an imminent ground offensive by SAF-aligned forces.⁵²⁰

Agar explained that although the bombardment was a strategy to fight the rebels, civilians were the target of the aerial attacks. Agar said, "The strategy is to break the will of the fighters. The civilians are their mothers, their



PROGRAM ON
HUMAN SECURITY & TECHNOLOGY
Harvard Humanitarian Initiative

SUDAN: ANATOMY OF A CONFLICT

Chapter IX

The Battle for Blue Nile

Mid-2010, September to October 2011

wives, their beloved ones. If you bomb them you will scatter them all over the area.”⁵²¹

Some analysts noted the similarities of the current SAF strategy to tactics previously employed by SAF-aligned forces operating in Darfur. Faoud Hikmat, a Sudan analyst at the International Crisis Group, told *Reuters*, “If you remove the civilians, you remove a base for supply to the fighters of the insurgency. That was the strategy of bombing Darfur before.”⁵²² Assessments done by Sudanese government agencies revealed some of the extent of civilian displacement in Blue Nile. Those reports noted that towns along the main road south of Ad Damazin to Kurmuk were emptied of civilians and that IDPs were reportedly present in Derang, Bau Locality and Dindiro.⁵²³

Janjaweed Allegedly Join the Fight in Blue Nile

In late October, approximately one week before SAF forces captured Kurmuk, SPLM-N alleged that the Government of Sudan flew Janjaweed fighters from El Geniena and Nyala, Darfur into Blue Nile.⁵²⁴ Matthew Russell Lee, a reporter for *Inner City Press*, asked the United Nations Head of Peacekeeping Operations, Herve Ladsous, about these allegations that Janjaweed were brought to Blue Nile. Ladsous said that the African Union - United Nations Mission in Darfur (UNAMID) “has no mandate to monitor the government’s reported flying of Janjaweed militia from Darfur to Blue Nile.”

The US Mission to the UN Spokesman Payton Knopf followed those comments, saying, “(UNAMID) can’t be expected to fulfill this mandate outside of Darfur.”⁵²⁵ After SAF invaded Kurmuk, Yasir Arman of SPLM-N said that SAF gained control of Kurmuk “with the help of ‘janjaweed’.” He also accused government forces of committing atrocities during the attack, causing massive civilian displacement.⁵²⁶

Chapter X

The Fall of Kurmuk and Bombardment of Refugee Camps October to December 2011

Kurmuk Operation

SAF finally entered Kurmuk on 3 November 2011. One day before, President Bashir had announced that SAF and PDF were on the outskirts of the city.⁵²⁷ On the program “Jounoud al Watan,” SAF troops declared that they kept Bashir’s promise to “liberate” the town before the Muslim holiday of Eid Al Adha. Bashir, as he had earlier vowed to do, made his Eid prayers in the town.⁵²⁸ Eid Al Adha was on 6 November 2011.

Signal analysis of imagery taken of the Kurmuk airstrip on 10 November 2011 reveals the presence of four vehicles consistent with the BRDM-2 armored reconnaissance vehicles, and a BTR-80 amphibious armored personnel carrier. A towed artillery piece consistent with the 105mm M101 howitzer is also visible [Figure X-1].

Within the town of Kurmuk, a SAF base containing evidence of enhanced air operations capacity is visible. Five helicopter landing pads appear to have been recently installed. An apparent towed artillery piece consistent with a 105mm M101 howitzer, a heavy equipment transport, and an armored infantry fighting vehicle are also identified. Imagery analysis corroborates SAF claims of having captured Kurmuk town [Figure X-2].

After taking control of the rebel stronghold, SAF reportedly closed the border with Ethiopia. This hindered civilians attempting to flee into neighboring Ethiopia through the major crossing point located in Kurmuk.⁵²⁹

SAF declared that they had “fully liberated and secured” Kurmuk. They stated, “The enemy forces fled led by rebel Malik Agar leaving behind its equipment and weapons.”⁵³⁰ The SPLM-N spokesperson in Blue Nile, Suleiman Osman, admitted that SAF forces entered Kurmuk. He claimed that, “SPLM-N emptied the town because they were expecting the SAF to attack. But they are in many other areas of Blue Nile.”

Osman added: “Don’t imagine that the SAF entering Kurmuk is the end of the war, or total defeat for SPLM-N. They will fight back.”⁵³¹

On the program “Jounoud al Watan,” Brigadier General Mubarak Kato Katmor, a SAF officer present at the battle, stated that, “The mission to liberate Kurmuk was a hard and dangerous one [...] it was a

Figure X-1



SAF Base at Kurmuk Airbase
10 November 2011
Kurmuk, Blue Nile

Figure X-2



SAF Base with Increased Helicopter Capacity, Heavy Armor Support

10 November 2011
Kurmuk, Blue Nile

great challenge.” Katmor reported that the forces moved from Dindiro and faced the enemy forces in Sali, noting that “The battle in Sali was a decisive one, even for the traitors it was a decisive one.”

Katmor claimed that SPLA-N increased its defenses in Sali and had mustered all their forces and arms there. He reported that SPLA-N had a force of 4,805 in Sali and that the loss of Sali was a huge blow to Agar and his forces. He declared that there was practically no opposition going into Kurmuk. According to Katmor, Agar’s forces ran away leaving all their equipment behind.⁵³²

In an address to SAF troops in Kurmuk, Lieutenant Colonel Jamal Mohammad Jamal, Commander of the 154th Infantry Battalion, stated that the Sudan Air Force destroyed an SPLA arms depot and that SAF took all the materiel that SPLA left behind. Jamal claimed that the 4th Division, and the 154th, 157th and 160th mixed Infantry Battalions were responsible for the operations leading SAF into Dindiro. He noted that the 154th Infantry Battalion was the only SAF battalion that kept fighting after the operation to capture Dindiro had concluded.⁵³³

Combat Action by SAF Forces Following Kurmuk

Sudan’s operations to expel SPLA-N forces from Blue Nile did not end with the offensive on the stronghold of Kurmuk. After performing Eid Al Adha prayers in Kurmuk, Bashir directed SAF to clear the rebels from the Yabus area in southern Blue Nile.⁵³⁴ The Government of Sudan also filed a complaint of “detailed, confirmed information” with the UNSC accusing South Sudan of supporting the rebels in Blue Nile and South Kordofan.

Sudan’s UN ambassador, Daffa-Alla Elhag Ali Osman, said South Sudan provided anti-aircraft missiles, tanks, guns, ammunition, and an infantry battalion to SPLA-N forces in Kurmuk.⁵³⁵ South Sudan rejected the accusations, which they said were false and an attempt to redirect attention from Khartoum’s support of rebel groups in South Sudan.⁵³⁶

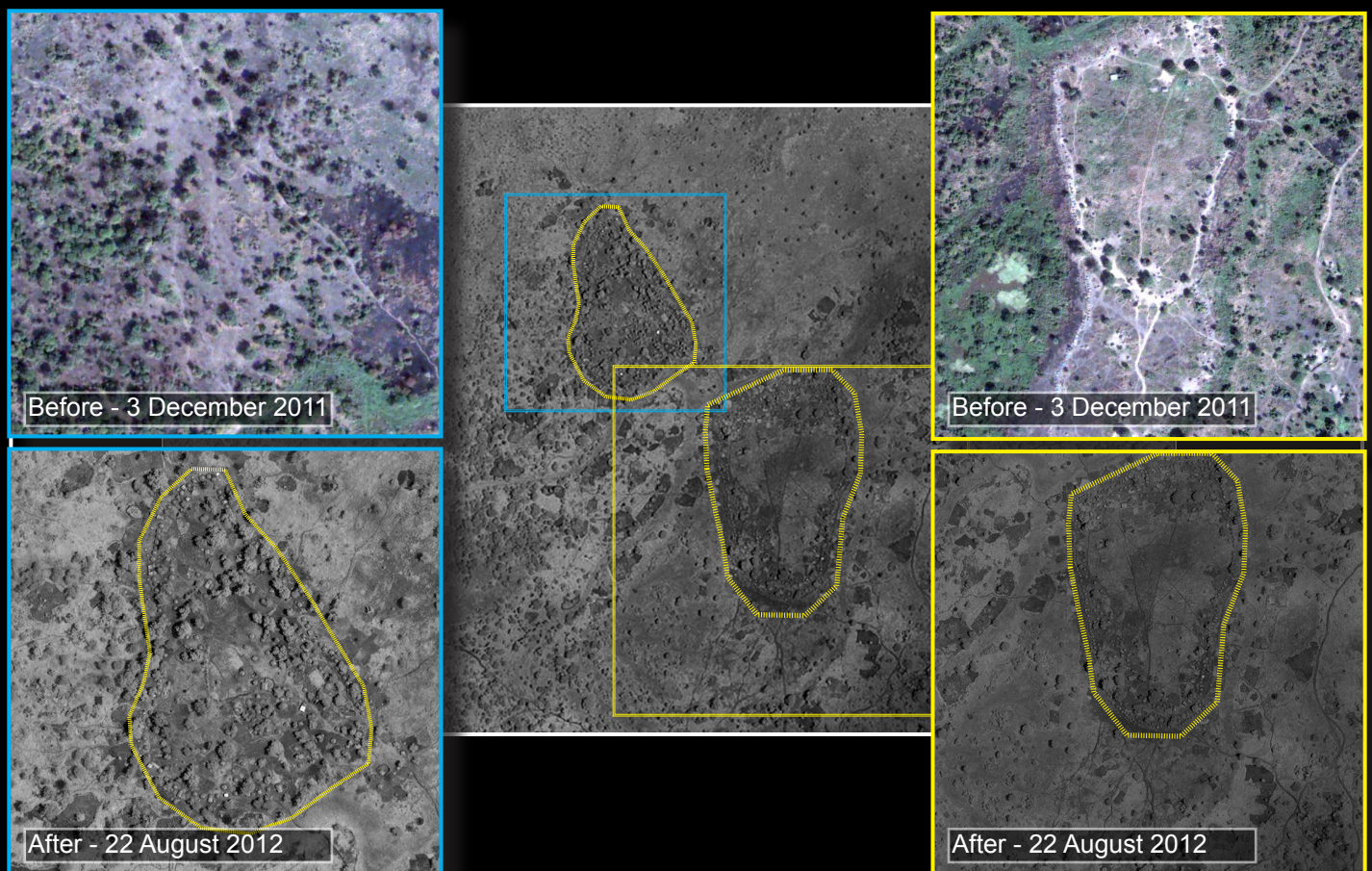
SAF Bombardment of Refugee Camps in South Sudan

Eric Reeves reported that multiple ground sources confirmed SAF aerial bombardment of refugee camps in Guffa, Upper Nile and Yida, Unity, South Sudan.⁵³⁷ Guffa is approximately 4 km from Blue Nile's border with South Sudan.

The 8 November 2011 SAF aerial attack on the refugee camp reportedly lasted four hours and killed seven people. UNHCR announced after the attack that Guffa is not considered a formal refugee site; although an estimated 400 refugees were reportedly living there.⁵³⁸ Amnesty International reported the presence of SPLA in Yafta, just outside of Guffa. The families of SPLA soldiers lived there and it was a regular stopping point for refugees and soldiers moving back and forth across the border between Blue Nile and Upper Nile.⁵³⁹

Imagery collected on 3 December 2011 shows one apparent SPLA camp in Guffa, Upper Nile. An encampment has been identified with a 1.5 km perimeter of fighting positions, with tents set inside the perimeter behind the majority of these fighting positions. By 22 August 2012, imagery analysis shows that the encampment was reduced in size by approximately 500 meters. A new encampment has been established 240 meters northwest of the previously identified encampment. The new encampment has a perimeter of fighting positions measuring nearly 800 meters with tents set on the inside of the perimeter behind these fighting positions. Imagery corroborates reports of SPLA presence in the area [Figure X-3].

Figure X-3



Guffa SPLA Camp Buildup
Guffa, Unity, South Sudan

SAF's Southern Push in Blue Nile

Twenty days after taking Kurmuk, SAF units advanced farther south and captured Deim Mansour from SPLA-N. SAF spokesman Saad said that government forces captured two tanks, small arms and ammunition stores. Deim Mansour is located 17 km south of Kurmuk. Saad said SAF was “hunting ‘the remnants’ of SPLM-N in Yabous area.”⁵⁴⁰

In the aftermath of the reported attack on the southern Blue Nile town of ‘Amara, which is 3 km north of Deim Mansour, there is evidence corroborating reports of the tactics allegedly employed by SAF during its campaign in Blue Nile. These tactics, which appear to intentionally target civilian communities and structures, are consistent with other, similar visual evidence of alleged SAF attacks in South Kordofan and the Abyei area.

Imagery captured on 27 November of ‘Amara shows approximately 30 structures and fighting positions located around the perimeter of an encampment, with apparent artillery positions in the center. Of the 100 structures consistent with civilian dwellings located across the road from the encampment, 33 appear intentionally burned. In the 11 November imagery these military positions and materiel are not visible. Additionally, the 100 structures appear intact.

In 27 November imagery, there is also cratering consistent with previous aerial bombardment present through the area. Signal identifies at least eight craters. Each crater is approximately 4 meters in diameter. The number of craters, distance between them and their size suggest this location was subject to several rounds of aerial bombardment [Figure X-4].

Figure X-4



Cratering Consistent with Aerial Bombardment and Fortified Compound

27 November 2011

'Amara, Blue Nile

Figure X-5



Fighting Positions and Vehicle Tracking South of Kurmuk
27 November 2011
'Amara, Blue Nile

Signal analysis reveals fighting positions in a U-shape formation crossing the road in 'Amara. There is also tracking consistent with T-55 main battle tanks moving through the area. Tracking indicates that the tanks appear to have overrun the fighting positions [Figure X-5].

OCHA's 2011 Humanitarian Assessment of Blue Nile

Impact of the Fighting in Blue Nile

The fighting that broke out in Ad Damazin on 1 September quickly spread throughout Blue Nile. This resulted in a growing humanitarian crisis and refugee flow into South Sudan and Ethiopia.

In the reporting period July to September:

- 60,000 people were displaced or severely affected by the conflict in Blue Nile
- 4,000 refugees from Blue Nile in South Sudan
- 25,000 refugees from Blue Nile in Ethiopia

OCHA reported that 100,000 people were displaced from Ad Damazin when the fighting broke out in early September. A daily curfew was reportedly implemented from 7:00 pm to 5:00 am, limiting the ability of civilians to move freely. Destruction of property and looting also purportedly had occurred. The Government of Sudan claimed that 90% of Ad Damazin's population returned by end of September.

Displacement was also reported in western and southern Blue Nile. SRCS estimated 25,000 IDPs were in Tadamon and Bau Localities. Additionally, 11,000 people from the western area of Kurmuk Locality were displaced

to southern Blue Nile, an area along the Upper Nile, South Sudan border.⁵⁴¹

In the reporting period October to December:

- 66,000 people were displaced or severely affected by the conflict
- 54,000 refugees from Blue Nile in South Sudan, primarily in Doro, El Foj and Jammam
- 33,000 refugees from Blue Nile in Ethiopia

Over this 3 month period, the number of refugees in South Sudan from Blue Nile increased by 50,000 people. By 31 December, 54,000 Sudanese refugees from Blue Nile were in Upper Nile State in three main refugee camps. 30,000 refugees were in Doro camp, 20,000 refugees El Foj and 4,000 in Jammam.

A large number of the refugees in Ethiopia were not living in formal camps. Approximately 19,000 refugees were registered at Sherkole and Tongo camps and at the Ad Damazin Transit Center in Ethiopia. However, 14,000 refugees were living in communities along the Blue Nile border.⁵⁴²

Imagery collected on 7 December 2011 of the Benishangul-Gamuz Region of Ethiopia, shows the presence an apparent refugee camp in Sherkole, 15 km from the border of Blue Nile, Sudan. Within the camp there are approximately 800 shelters consistent with UNCHR family tents, each designed with a standard capacity of five people [Figure X-6].

As fighting between SAF and SPLA-N continued in Blue Nile's southern areas, civilian displacement surged. In early December, *Radio Dabanga* published that an estimated 43,000 refugees from Blue Nile were trapped along the border of Upper Nile in the Yabus and Waqfa areas.⁵⁴³ The UN also reported that some refugees remained stranded in the border region while an estimated 650 refugees a day entered Upper Nile.⁵⁴⁴

Figure X-6



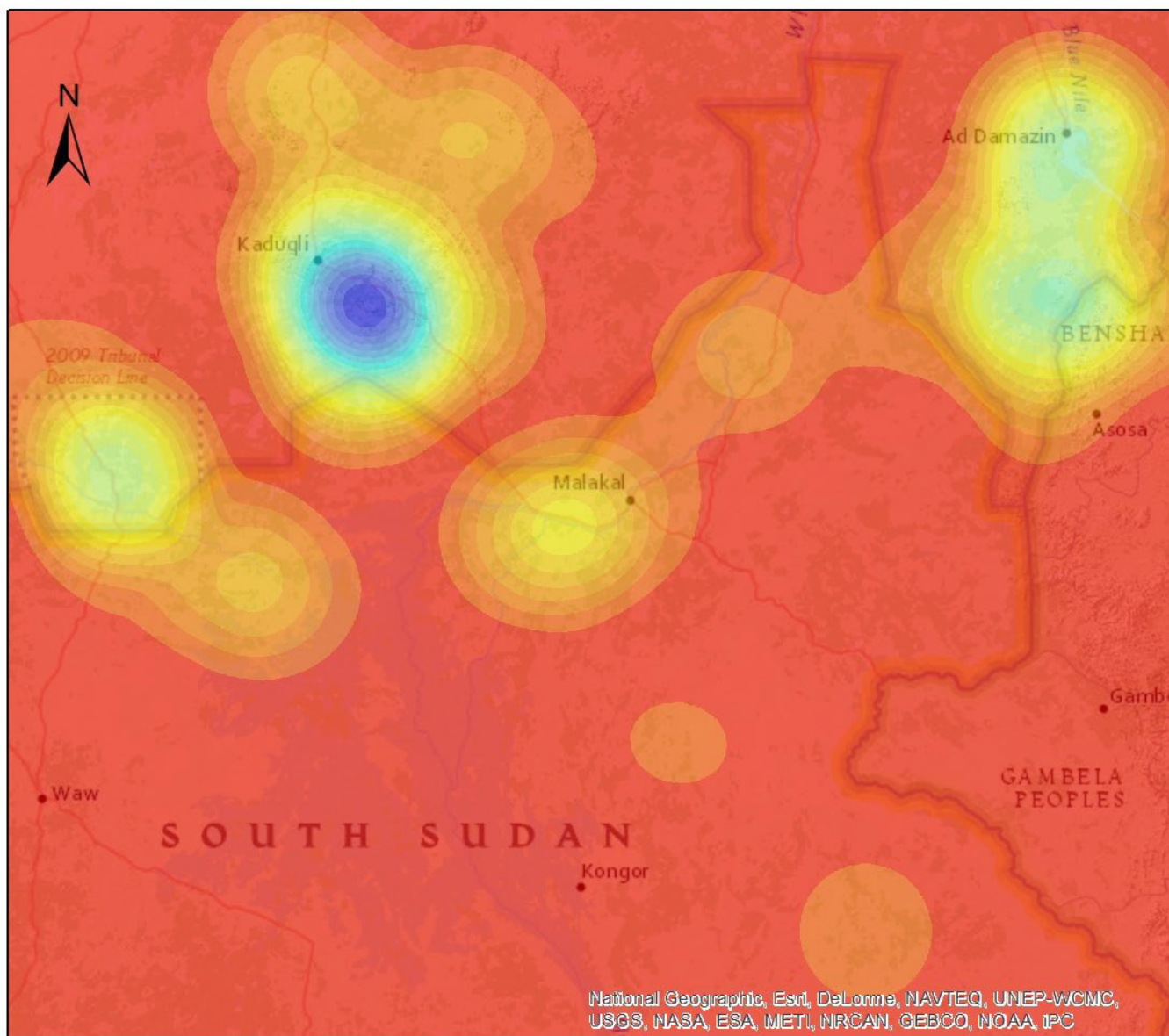
Sherkole Refugee Camp

7 December 2011

Benishangul-Gamuz Region, Ethiopia

Figure ID C-1

2011 Attack Density in Abyei Area, South Kordofan and Blue Nile



0 40 80 160 Miles

Data from HHI Signal Program

This map shows the density of all reported attacks in 2011 collected by the Signal Program. The map was created using the Kernel Density tool in ArcMap. This map portrays spatial patterns in attacks occurring in 2011. Here, blue represents a relatively high density of attacks and red represents a relatively low density of attacks, with yellow and orange in between [Figure ID C-1].

Chapter XI

Continued Crisis: Blue Nile in 2012 January to May 2012

The Battle for Bau

The fighting reported in the early part of 2012 between SAF and SPLA-N forces in Blue Nile occurred mainly in Bau and Kurmuk Localities. SAF's approach to counterinsurgency operations against rebels in Bau Locality, which SPLA-N had maintained control of since the conflict broke out. In late 2011, SAF's main strategy had relied primarily on bombardment of the area. However, in early 2012 an uptick in SAF ground attacks was reported.

While SAF began executing ground assaults against SPLA-N, SPLA-N was striking SAF convoys as they transited through the area. In one case, SPLA-N forces reportedly attacked a SAF convoy en route from Shifa Hamra and Kevol, near Bau.⁵⁴⁵ On 18 January, the rebels claimed to shoot down a SAF helicopter gunship that was "sent in to rescue a convoy caught in a forest ambush that killed 26 members of the Sudan Armed Forces." SAF denied that a helicopter gunship was downed by SPLA-N. SAF spokesman Saad did confirm, though, that fighting had occurred there because "SAF was trying to clean the Al Roum area and defeat the rebels."⁵⁴⁶

A SPLA-N 18 January press release gave additional details regarding the alleged attack. The rebels asserted that one of their Special Forces units attacked SAF that morning at South Bot town, Khor Dalouma area. The rebels declared that they would continue to move towards the city of Bot.⁵⁴⁷

Ulu, Bau Locality, was repeatedly targeted by air assaults since the outbreak of fighting in September 2011. Again, on 23 January, this border town was allegedly bombed.⁵⁴⁸ A UN source confirmed to *Reuters* that it received reports of two helicopters attacking Ulu.⁵⁴⁹ On the same day that Ulu was bombed, El Foj, Upper Nile, South Sudan was also bombed. Ulu is 10 km from the Upper Nile border.

El Foj was a "refugee transit site," approximately 10 km from the border of Blue Nile. UNHCR reported that the bombing caused refugees and humanitarian personnel to flee.⁵⁵⁰ The UN denounced the bombing of the camp, which was home to 5,000 refugees at the time. UNHCR reported 14 people were missing after the attack.⁵⁵¹

In addition to the attacks on El Foj and Ulu, a SPLM-N spokesman reported to *Reuters* that Danfona, a settlement on the Blue Nile border was also bombed. He said, "There is a big movement of Sudan Armed Forces from...al-Damazin towards the Bau mountains. They are coming with heavy weapons and air cover from helicopter gunships."⁵⁵²

Aerial bombardments and shelling in Ulu were reported to have occurred again from 27 to 29 February. This round of bombing prompted more civilians to flee across the border to Upper Nile, South Sudan.⁵⁵³ Sudan's Minister of Defense addressed a rally in Blue Nile on 29 February 2012 and stated that Blue Nile combat operations were nearly over, claiming that SPLA-N were cornered in the far southeast areas of Blue Nile.⁵⁵⁴ Despite his comments, SAF and SPLA-N continued to engage in active combat with each other in eastern Blue Nile.

Throughout February SAF's campaign of aerial bombardment continued while SAF ground forces reported gaining control of rebel-held positions in Bau during this time. A SAF spokesman stated that Sudan's forces seized Magja on 11 February 2012 from the rebels after two days of fighting.⁵⁵⁵ He further noted that SAF's capture of Magja would allow them to control the critical road connecting Ad Damazin to Kurmuk and roads leading into the Ingessana Mountains and Kulkan.⁵⁵⁶ Holding Magja could enable a SAF ground offensive into the Ingessana Mountains.

Five days after SAF took Magja, SPLM-N reported their troops ambushed government forces in Al Baraka near Sali, which is located on the Ad Damazin-Kurmuk road. SPLM-N reported that after the battle, their forces took control of Sali, Al Baraka and Khor Hamra.⁵⁵⁷ During this time period, the UN also received reports of aerial bombardment occurring in Fadimia, Silik, Abu Garen, Bagis, Makanza.⁵⁵⁸

BBC interviewed Mukesh Kapila, a former UN official, about the fighting in Blue Nile. Kapila, who had recently returned from Sudan, said that he was reminded of the “terror tactics” he witnessed SAF-aligned forces employ in Darfur. “We saw whole tracts of deserted countryside and smoke rising from fires where fields of seeds that had been planted had been burnt off,” he explained. Refugees in Maban County, Blue Nile reported that aerial bombardments were specifically targeting markets in villages.⁵⁵⁹ Similar attacks on markets have been reportedly carried out by SAF-aligned forces operating in Darfur as well.⁵⁶⁰

Fighting continued into April. In Tivol and Mugum, the SPLA-N rebels claimed they destroyed SAF armored vehicles. According to the Commissioner of Humanitarian Affairs, SAF troops reportedly burned the village, prompting 500 families to flee.⁵⁶¹ By 17 April, SAF 4th Division claimed control of Mugum, killing 25 rebels and seizing equipment and weapons.⁵⁶²

April: Fighting Spreads in the Ingessana Mountains

SAF captured the strategic location of Magja on 11 February, which they believed would gain them control of roads leading into the Ingessana mountains and from Ad Damazin to Kurmuk. Fighting between SAF and the rebels spread along this road during April. There were reports of fighting 20 km south of Ad Damazin in “mountainous terrain,” on the 17 and 18 April. SPLA-N forces claimed they carried out two ambushes, which killed 79 SAF troops and militiamen.⁵⁶³

A few days later, SAF, backed by PDF and other regular forces, reportedly gained control of Magan, Jilgo and Gabanet, towns in the Ingessana Mountains from the SPLA-N.⁵⁶⁴ Other areas, Suda and Gam, in the Ingessana Mountains were captured from the rebels in late May.⁵⁶⁵ As previously mentioned, Malik Agar had allegedly formed a militia from his tribe in the Ingessana Mountains.

The UN was unable to verify the reported fighting in the area because of restricted access but SAF claimed that they finally took control of Bau from SPLA-N on 4 May. The rebels denied their claim, saying SAF entered Bau but were repelled.⁵⁶⁶

Following the SAF capture of Bau, the Deputy Governor of Blue Nile, Dr. Adam Abakar Ismail, announced that all insecurity in Blue Nile was confined to the Ingessana Mountains. He also stated that all efforts to clear the rebels from the state would be concentrated in that region.⁵⁶⁷ By 24 May, SAF reportedly took control of Suda and Gam in the Ingessana Mountains from SPLA-N.⁵⁶⁸ According to *Reuters*, rebels denied that Sudan’s army captured the areas, saying that clashes still continued as of the 25th.⁵⁶⁹

Kurmuk Locality

In addition to its campaign in Bau Locality, SAF continued operations in the southern part of the state as well. SAF forces remained in pursuit of Agar and a small SPLA-N force operating in the vicinity of Khour Yabus,⁵⁷⁰ where Agar allegedly fled to after leaving Kurmuk. A SPLM-N spokesperson reported on 7 February 2012 that SAF was conducting air raids across the rebel-controlled area of Yabus. Airstrikes reportedly occurred in northern and southern areas of Blue Nile as well.⁵⁷¹

Two days later, *SUNA* reported that SAF conducted a successful “airdrop” operation at Yabus and rescued seven Sudanese police and security officers from SPLM-N detention. The officers were reportedly working in the town of Kurmuk when they were abducted.⁵⁷²

The UN reported that SAF carried out additional aerial bombardments both in Bau Locality and near Kurmuk on 9 February 2012. Save the Children-Sweden reported that thousands of people were displaced to Alkaili village, Kurmuk Locality. Some people were living out of school buildings. Additionally, thousands were reportedly displaced to Bakori, Geissan Locality.⁵⁷³

On the evening of 3 March, SPLA-N allegedly clashed with SAF in Al-Ahmar Sadak area southeast of Al Kurmuk, according to SPLA-N spokesperson Arnun Ngutulu Lodi. Lodi claimed that SPLA-N killed 24 soldiers, destroyed 3 Land Cruisers and captured a cache of ammunition. *Sudan Tribune* attempted to reach SAF for comment but was unsuccessful.⁵⁷⁴

On 9 March 2012, *BBC* released an interview with Colonel Abdildem Dafalla, a SPLA-N colonel in Upper Nile. The interview provided insight into SPLA-N's guerilla strategy for attempting to evade SAF forces. Colonel Dafalla said there were between 8,000 and 9,000 SPLA-N soldiers currently in Blue Nile. "We are moving around. If a specific place is attacked, we move away and then return to it when the Sudan government forces have left."⁵⁷⁵

SAF's increasing strategic and operational reliance on the PDF was apparent when, at the end of March, PDF leaders in Blue Nile reported the preparation of three deterrence brigades to clear the rebellion from the state before the rainy season began. Presidential Adviser Othman, who commented on the creation of the PDF brigades in Ad Damazin, said military training centers must be launched in response to Bashir's "instructions."⁵⁷⁶

The Deputy Governor of Blue Nile announced that the first deterrence brigade would be ready by the first week of April, and the formation of more "Mujahedeen brigades" would continue.⁵⁷⁷ The Government of Sudan also stated that the removal of the "state of emergency" that had existed in Blue Nile since September 2011 was "linked to cleansing the border areas from rebellion."⁵⁷⁸

OCHA's 2012 Humanitarian Assessment of Blue Nile

Impact of the Fighting in Blue Nile

The humanitarian impact of the ongoing fighting, particularly the relentless SAF campaign of indiscriminate bombardment,⁵⁷⁹ was felt far beyond the main epicenters of active ground combat. By early January 2012, for example, the Commissioner of Blue Nile's Western Sector reported that 50,000 displaced people were sleeping outside under trees. He added that many of them were only 8 km from the Upper Nile border, but were stranded waiting for buses to transport them to the refugee camps.⁵⁸⁰

In the reporting period January to March 2012:

- 50,000 people were displaced or severely affected by conflict in Blue Nile
- 86,000 refugees from Blue Nile in South Sudan, primarily Upper Nile
- 27,000 refugees from Blue Nile in Ethiopia

As fighting spread into Bau and Kurmuk Localities, OCHA reported that thousands of additional people fled to South Sudan and Ethiopia. Despite the increasing humanitarian crisis, OCHA also acknowledged they were unable to "provide a detailed overview" because "an assessment of the humanitarian situation in Blue Nile was planned by the Humanitarian Advisory Commission but was subsequently delayed." The report also noted the continued movement restrictions on international humanitarian organizations outside of Ad Damazin.⁵⁸¹ On 1 January, international humanitarian organizations were permitted to conduct operations through national staff and were limited to areas in and around Ad Damazin.⁵⁸²

In the reporting period April to June 2012:

- 145,000 people were displaced or severely affected by conflict
- 107,000 refugees from Blue Nile in South Sudan
- 37,000 refugees from Blue Nile in Ethiopia

Over this 3 month period, the number of people that were displaced or severely affected by the conflict in Blue Nile increased by approximately 100,000 people since that last reporting period. This is the largest increase of those displaced or affected from Blue Nile in a 3 month reporting period to date. Additionally, UNHCR reported that by the end of June, 1,000 refugees were arriving in South Sudan a day.

According to FEWS NET, there were approximately 50,000 to 75,000 people in SPLM-N controlled areas in Blue Nile. They reported that this population was expected to face a “Crisis” (Phase 3) level of food insecurity. OCHA reported that insecurity from the conflict resulted in limited crop production, especially in Geissan, Bau and Kur-muk Localities.⁵⁸³

Despite the large movement of civilians to South Sudan, Eric Reeves published that, “Refugees from Blue Nile have found only tenuous relief in the camps of Upper Nile (South Sudan), and the impending rainy season threatens to increase a population of almost 100,000, even as the transport of relief supplies and equipment, especially which needed for provision of clean water, will rapidly become impossible.”⁵⁸⁴

Figure XI-1



Doro Refugee Camp
3 October 2012 | 11:49 AM EAT
Doro, Upper Nile, South Sudan

Humanitarian access to affected populations did not improve either. The SPLM, the UN, African Union and Arab League met in Nairobi, Kenya to sign an agreement to deliver aid to South Kordofan and Blue Nile on 18 February 2012. The agreement aimed to facilitate direct aid delivery without conditions within two weeks of obtaining the necessary signatures to enter force. The agreement called on the WFP to provide logistics and connect the two regions.⁵⁸⁵ US special envoy to Sudan Princeton Lyman noted that 500,000 people were at risk of living in famine conditions by March 2012.⁵⁸⁶

However, as of 9 May, three months after the agreement was signed, aid had yet to be delivered. Malik Agar accused the Government of Sudan “blocking the plan.” Agar argued that 200,000 people were in desperate need of aid, a need that would only grow with the coming rainy season.⁵⁸⁷ By the end of June, humanitarian personnel were still restricted from entering SPLM-N-controlled areas because of insecurity and Government of Sudan-imposed restrictions.⁵⁸⁸

Families in Jelhak displaced within Blue Nile corroborated evidence of limited humanitarian access. On 24 February, amidst reports of many families having no access to food or water supplies, people complained about the poor humanitarian conditions, noting an absence of any aid organizations and an ever increasing number of displaced people arriving at the camp.⁵⁸⁹

Signal analysis of an image covering a 210 square km portion of Upper Nile shows the presence of an apparent

Figure XI-2



Jammam Refugee Camp

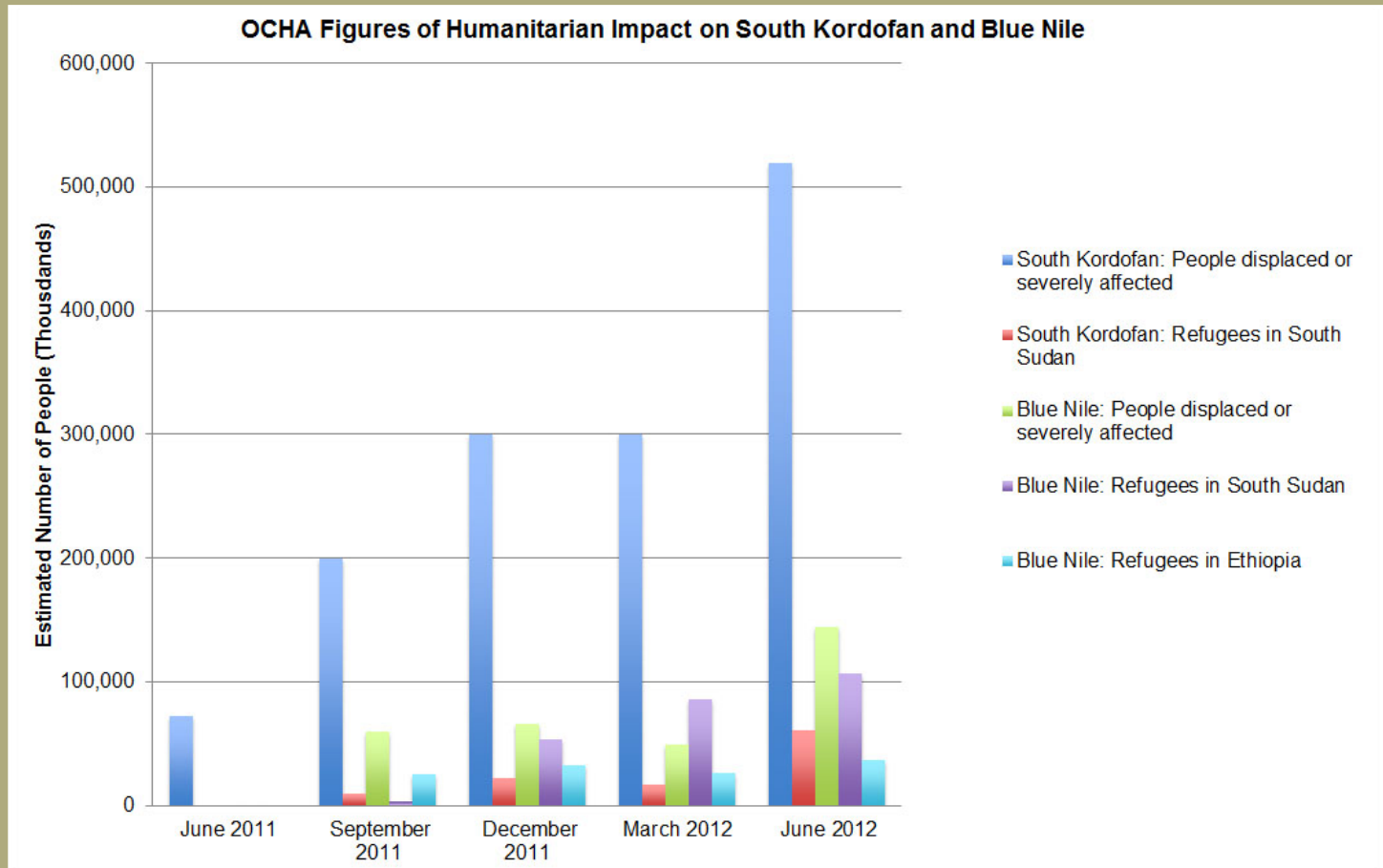
3 October 2012 | 11:48 AM EAT

Jammam, Upper Nile, South Sudan

refugee camp in the vicinity of Doro. The camp is located on the southernmost edge of the image strip and thus does not appear in its entirety. However, Signal was able to identify the presence of at least 2,124 tents consistent with UNHCR family tents that each measure 6.6m in length, and 3.8 meters in width [Figure XI-1].

Another satellite image taken in Upper Nile on 3 October 2012, approximately 40 km northwest of the Doro refugee camp reveals another apparent refugee camp in the vicinity of the town of Jammam. Signal was able to identify the presence of at least 3,338 tents consistent with UNCHR family tents within the camp. Approximately 2 km north of the camp, is an apparent SPLA encampment with a perimeter of fighting positions measuring 2.2 km in length surrounding the encampment [Figure XI-2].

Figure ID D-1

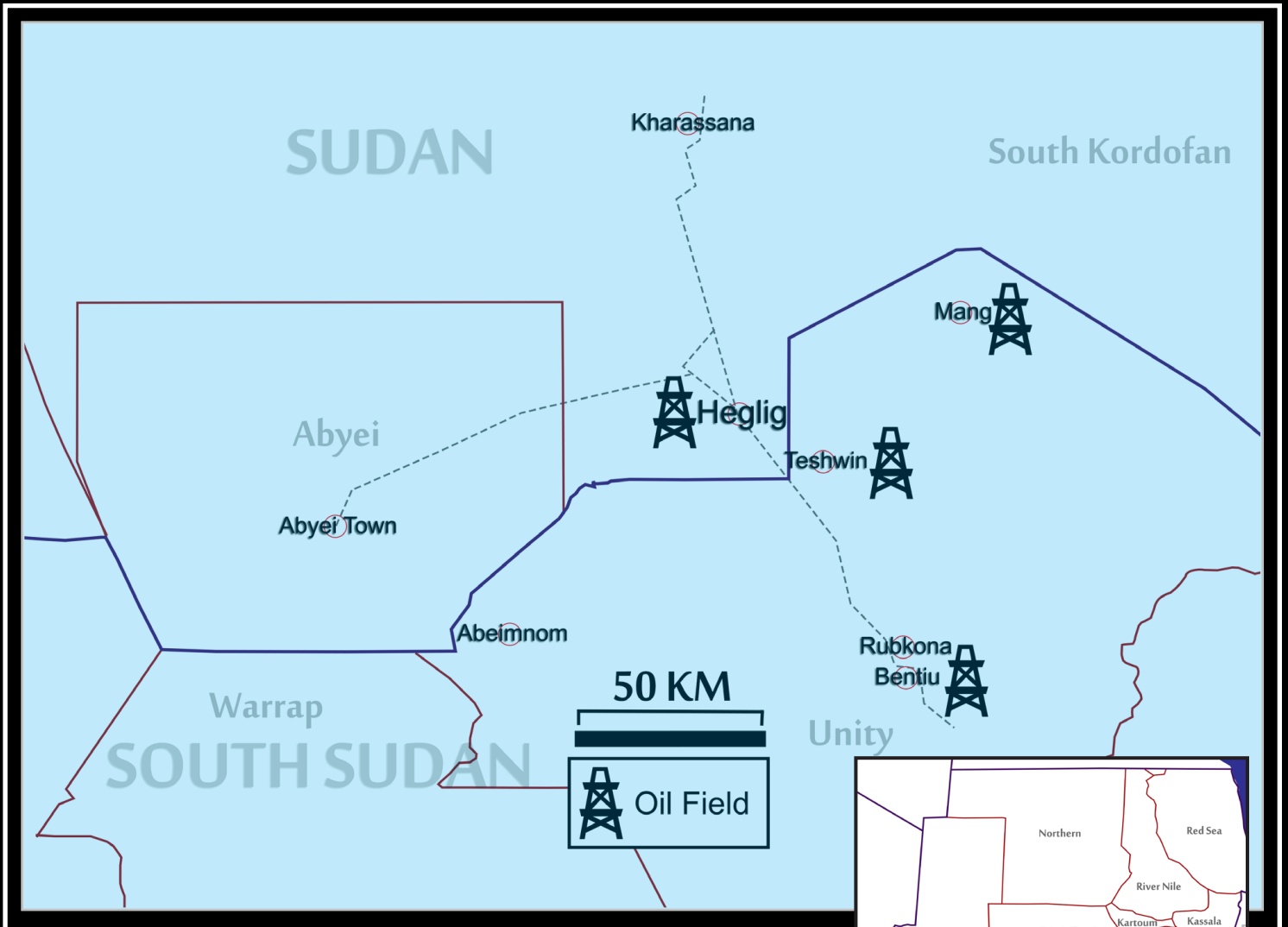


	South Kordofan People displaced or severely affected	South Kordofan Refugees in South Sudan	Blue Nile People displaced or severely affected	Blue Nile Refugees in South Sudan	Blue Nile Refugees in Ethiopia
June 2011	73,000	N/A	N/A	N/A	N/A
September 2011	200,000	10,000	60,000	4,000	25,000
December 2011	300,000	22,000	66,000	54,000	33,000
March 2012	300,000	17,000	50,000	86,000	27,000
June 2012	520,000	61,000	145,000	107,000	37,000

Data derived from OCHA Quarterly Reports.

Section 4: Heglig

January to May 2012



Chapter XII

The Brink: SPLA and SAF Battle for Heglig January to May 2012

Heglig's Disputed Political Status

Heglig, a region near Abyei, bordering Sudan and South Sudan, is claimed by Sudan as sovereign territory under its own demarcation of the 1956 border. This demarcation is disputed by South Sudan. The Government of Sudan has maintained a military presence in Heglig since the 1970s.⁵⁹⁰ The 2005 Comprehensive Peace Agreement (CPA), which ended the second Sudanese Civil War, stipulated that the 1 January 1956 border would be the basis for delineation of north and south Sudan in the event of the South's secession.

A Technical Border Committee (TBC), comprised of members from both North and South Sudan, was tasked with leading the process of border demarcation after the signing of the CPA.⁵⁹¹ Presidential Decree No. 29 established the TBC in September 2005.⁵⁹² The committee largely accomplished its mandate. However, a few key areas remained contested and unresolved. These disputes, in the case of Abyei and Heglig, were further complicated by the presence of significant natural resources in both areas. The Heglig oil fields, for example, produce half of Sudan's daily output of 130,000 barrels of crude oil, making up a significant percentage of Sudan's yearly national revenue.⁵⁹³

In 2009, the Permanent Court of Arbitration (PCA) ruled that the Heglig region lies outside the territory of Abyei. This ruling failed to resolve the underlying issue of Heglig's political status.⁵⁹⁴ Additionally, Khartoum refused to accept the findings of the Abyei Boundaries Commission, the TBC, and the 2009 ruling of the PCA.⁵⁹⁵ At present, Heglig's final status still remains a subject of dispute between Sudan and South Sudan.

Resource Rich: Sudan and South Sudan's Oil Controversy

In the months after South Sudan's independence in July 2011, South Sudan and Sudan repeatedly failed to reach an agreement on transit fees for oil. Sudan requested \$36 per barrel as a transit fee to allow South Sudan to continue shipping the oil it produces through Sudanese pipelines and ports. South Sudan is a landlocked country with no access to any of the major transportation routes.

Geographic reality made the new nation reliant on infrastructure in the north to transfer its oil for sale.⁵⁹⁶ However, Sudan is also dependent on revenue garnered from the transit fees it imposes on South Sudan. The region's oil fields are predominantly within South Sudanese territory, mainly the border states of Unity and Upper Nile. Since South Sudan declared independence, Sudan's oil production was reduced by 75-80%.⁵⁹⁷

The two nations have repeatedly threatened each other with curtailing either the production or shipment of oil. Sudan allegedly "confiscated" South Sudanese oil in January 2012. The Government of Sudan justified this action based on approximately \$800 million dollars South Sudan reportedly failed to pay Sudan in transit fees. South Sudan formally protested this action with members of the international community and at the United Nations.⁵⁹⁸

The oil crisis reached a new crescendo on 20 January 2012 when South Sudan ordered the halt of oil production. A two-week warning was given to all oil companies operating in the country to stop production.⁵⁹⁹ Subsequently, South Sudan announced that they would construct a new pipeline through Kenya.⁶⁰⁰

On 22 February, South Sudan expelled Liu Yingcai, the President of Petrodar, a Chinese-Malaysian consortium

operating in the region.⁶⁰¹ He was reportedly expelled for not cooperating with South Sudan's investigation of Sudan's alleged oil confiscation. South Sudan's Oil Minister said of the incident, "They [China] cannot have it both ways. Cooperate with Khartoum in stealing oil and at the same time pretends to be partners with us. It does not work like that."⁶⁰² On 13 March, though the transit fee Sudan demanded was reduced to \$32.20 per barrel, South Sudan refused to accept that figure.⁶⁰³

On the Border: Escalating Tensions

The rising tensions between the two nations appeared to reach a breaking point in late March 2012, threatening a return to full-scale war between Sudan and South Sudan. On 21 March 2012, the Government of Sudan's Director of NISS, General Mohamed Atta, claimed that SPLA-N attacked Heglig. Atta alleged that half of the attacking force was comprised of SPLA troops. SAF and NISS reportedly repulsed the attack. According to General Atta, "NISS elements are fighting alongside SAF in operations zones."⁶⁰⁴ SPLM-N spokesman Arnu Lodi denied Sudan's allegations that SPLA-N attacked SAF positions at Heglig.⁶⁰⁵

In addition to the fighting in Heglig, the South Sudan Liberation Army/Movement (SSLA/M), a rebel group operating against the Government of South Sudan, claimed they captured a SPLA base in Lalop, Unity on 23 March at 7:00 pm. They also claimed to have captured SPLA soldiers and materiel during the attack. Reports of the attack could not be independently verified but the SSLA claimed they deployed five battalions towards Rubkona, with the eventual goal of advancing on Bentiu after they had captured Pariang County.⁶⁰⁶

Clashes in Teshwin

On 26 March clashes broke out along the Sudan-South Sudan border at Teshwin between SAF and SPLA. *SUNA* reported that the "rebels of Khalil Ibrahim," the leader of the rebel Justice and Equality Movement (JEM) in Sudan, used the confrontation between the two forces to infiltrate Heglig and target SAF near the oil fields.⁶⁰⁷ *Sudan Tribune* reported SAF's account of the events that led to the fighting. SAF claimed that at 8:00 am on 26 March a small SPLA force from Teshwin crossed the border into Sudanese territory. The SPLA contingent then allegedly asked to meet with the commanding officer to discuss "Sudanese intentions to carry [out] an incursion" into South Sudan. The SAF officer purportedly came and met with the SPLA force, which subsequently left the SAF position. According to SAF, at 2:00 pm that day, that SPLA force and two additional battalions attacked SAF positions in Teshwin.⁶⁰⁸

SPLA offered a differing account of events that day. They claimed that Sudan's Air Force bombed Jau and Pan Akuach in South Sudan in the morning. SPLA then repulsed an attack by SAF in Teshwin later that day.⁶⁰⁹ Aguer claimed that the two armies were only 500 meters from each other, supposedly awaiting a border demarcation team, when SAF attacked SPLA positions.⁶¹⁰ After the fighting, SPLA announced that they captured two SAF bases situated between Heglig and Teshwin.⁶¹¹ They also claimed to have taken an oil field in Heglig.⁶¹²

Signal identified two destroyed encampments in the Teshwin area consistent with the reports of clashes between SPLA and SAF at this location. Imagery taken on 16 April 2012 of the disputed area of Teshwin

Figure XII-1



Teshwin Encampment A
16 April 2012 | 10:47 AM EAT
Teshwin, Unity

shows the apparent intentional destruction of two different encampments. The eastward encampment is in Unity, South Sudan based on available maps. At least 50 structures in that encampment appear to be razed. The encampment is almost entirely surrounded by fighting positions [Figure XII-1].

The westward encampment in the Teshwin area, on the South Kordofan, Sudan side of the border, is situated 7.5 km southwest of the aforementioned eastward encampment. Signal analysis of imagery taken on 18 April 2012 finds that the camp appears to have suffered extensive damage with at least 360 destroyed structures present within the perimeter [Figure XII-2].

SPLA Advance on Heglig

Although SAF announced they had defeated the SPLA assault, sources in Heglig reported ongoing clashes in the area. SPLA troops were reportedly 6 km outside Heglig. In response to these incidents, oil workers were evacuated from Heglig. SPLA stated that they did not target oil pumps, instead attacking a Sudanese army garrison near Heglig.⁶¹³

Greater Nile Petroleum Operating Company (GNPOC), a Chinese, Indian, and Malaysian joint venture, confirmed that oil fields approximately 20 km from Rokotana town, which is located in Unity, South Sudan, were bombed by SAF aircraft.⁶¹⁴ According to GNPOC Vice President, Chom Juaj, one strike landed close to their base camp. Sudan's Foreign Ministry spokesman denied the SAF air strikes but confirmed that SAF ground forces had attacked SPLA artillery positions. Those artillery positions had shelled Heglig, according to Sudan.⁶¹⁵

The UN later confirmed that SAF aircraft had bombed SPLA locations along the border.⁶¹⁶ Munitions also reportedly landed about 35 km from Bentiu, the capital of Unity. SPLA 4th Division is located in Rubkona, outside Bentiu. The munitions did not apparently damage oil infrastructure in the vicinity.⁶¹⁷ SAF also reportedly "hovered" unspecified military aircraft over Bentiu without dropping munitions. "The over-flight of Bentiu also was a reminder that Sudan's aircraft go virtually unchallenged over South Sudan, due to the fact the South has no fixed-wing military planes and a handful of MI-17 transport helicopters that are for the most part inoperable," reported journalist Alan Boswell.⁶¹⁸

JEM's Involvement and Affected Oil Infrastructure

An *AFP* reporter was permitted to enter Heglig after the clashes. He accompanied Sudan's Oil Minister Awad Ahmad al-Jaz to the area impacted by the fighting. They spent six hours inspecting the area with South Kordofan Governor Ahmed Haroun. The reporter observed dead bodies, destroyed tanks and residences for oil workers, and an "unscathed oil well." Sudan's Oil Minister said that no oil fields were affected by the battle. An unnamed oil engineer contradicted this claim, saying that oil production fell from 60,000 to 40,000 barrels because some wells were affected by fighting. The reporter noted JEM's insignia on two destroyed Land Cruisers and on clothing worn by some of the dead. JEM publicly denied any involvement in the fighting.⁶¹⁹

The Government of Sudan established a heavy security presence in Heglig. Sudanese police, intelligence agents, and SAF were immediately deployed. A large group of Misseriya nomads, reportedly serving with the

Figure XII-2



Teshwin Encampment B
18 April 2012 | 11:39 AM EAT
Teshwin, South Kordofan

PDF, were also seen by the *AFP* reporter patrolling the area “on foot and by motorcycles, with rifles but without uniforms.”⁶²⁰

In imagery taken on 7 February 2012, Signal identifies a section of oil infrastructure consistent with a collection manifold that manages oil flow at the facility. This collection manifold was located approximately 1 km north of the main SAF encampment in Heglig. Analysis of imagery taken on 15 April 2012 reveals the collection manifold was destroyed. The entire structure appears absent and extensive scorched earth is seen in the position where it previously was present. It cannot be determined if the manifold’s apparent destruction was a result of aerial bombardment, ground bombardment, or other means of detonation [Figure XII-3].

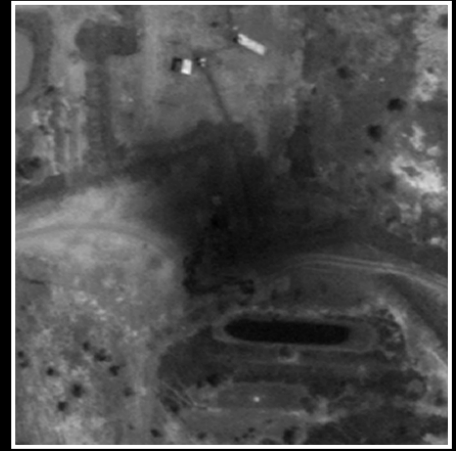
Approximately 23 km northeast of the aforementioned destroyed collection manifold, imagery analysis reveals that another collection manifold appears to have been partially damaged between the dates of 7 February and 15 April 2012. Destruction of collection manifolds has important strategic significance. Damaging the manifolds would immediately disrupt oil flow at T-junctions in the pipeline [Figure XII-4].

According to the SPLM’s Deputy Defense Minister, Majak D’Agoot, SPLA air defenses shot down a MiG-29 on 4 April 2012 at 3:30 pm with an anti-aircraft gun. SAF also allegedly sent an unmanned aerial vehicle into South Sudan “to photograph strategic SPLA positions.” Auger reported that the downed MiG was one of two flying over El Nar and Toma oil fields that dropped “many” bombs during its sortie. SAF’s spokesperson Saad denied these reports, labeling them as “completely inaccurate.”⁶²¹

Figure XII-3



Collection Manifold A - Before
7 February 2012 | 12:03 PM EAT
Heglig



Collection Manifold A - After
15 April 2012 | 12:02 PM EAT
Heglig

Figure XII-4



Collection Manifold B - Before
7 February 2012 | 12:03 PM EAT
Heglig



Collection Manifold B - After
15 April 2012 | 12:02 PM EAT
Heglig

SPLA Capture Heglig

On 9 April, SPLA attacked SAF positions in Heglig again. According to military sources that requested to remain anonymous, *Sudan Tribune* reported that oil workers in Heglig were evacuated at that time and that SAF forces were ordered to retreat from the area.⁶²²

That day, SPLA’s 4th Division Commander, James Gatduel Gatluak, claimed that SAF air and ground attacks against South Sudan forced SPLA to retaliate and take control of Heglig. He further claimed that SPLA had already advanced about 30 km north of Heglig.⁶²³

Signal analysis of imagery taken on 15 April of the main SAF encampment in Heglig reveals, following SPLA combat action against SAF, the majority of the tents and structures in the encampment were destroyed. Additionally, both of the artillery pieces were removed from the premises.

Two months prior to the SPLA incursion, on 7 February, the encampment has four artillery berms, two of which are occupied by objects consistent with 105 mm M101 howitzers. The white shed, which was previously identified as an armor

Figure XII-5



Heglig Camp Destruction - Before
7 February 2012 | 12:03 PM EAT
Heglig



Heglig Camp Destruction - After
15 April 2012 | 12:02 PM EAT
Heglig

shelter, shows two sets of tracking leading from its perimeter consistent with the tracks of T-55 main battle tanks. Approximately 35 to 40 tents and other structures line the perimeter of the encampment inside a berm [Figure XII-5].

Additional imagery captured after SPLA attacked Heglig reveals that a section of approximately 100 fenced-in structures have been deliberately razed. These structures are located approximately 15 km northwest of the main SAF encampment that had been destroyed [Figure XI-6].

Following SPLA's attack on Heglig, Sudan reportedly attacked South Sudan. A SAF Antonov reportedly dropped six bombs in Pankuel district of Abiemnom, Unity at 3:00 am on 10 April 2012. Four people were seriously

Figure XI-6

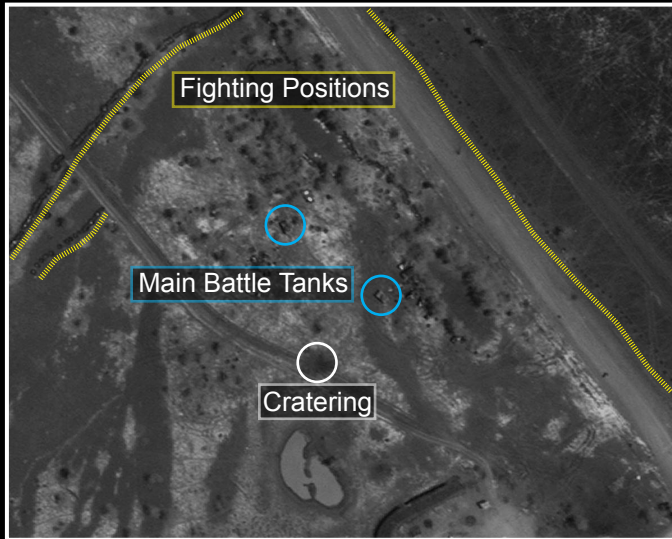


Razed Structures - Before
7 February 2012 | 12:03 PM EAT
Heglig

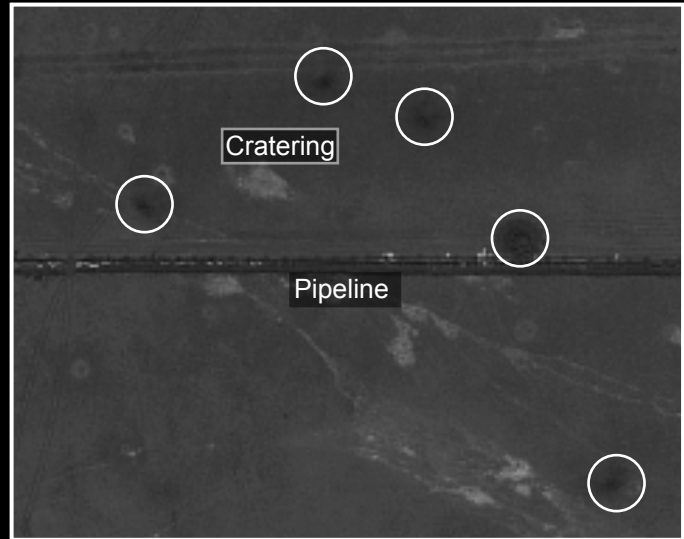


Razed Structures - After
15 April 2012 | 12:02 PM EAT
Heglig

Figure XI-7



Tanks, Cratering, and Fighting Positions
7 February 2012 | 12:03 PM EAT
Heglig



Cratering Near Oil Pipeline
15 April 2012 | 12:02 PM EAT
Heglig

wounded.⁶²⁴ A South Sudan government spokesman condemned the SAF aerial bombardment, which injured civilians and targeted a strategic bridge in Abiemnom.⁶²⁵ That day, a SAF spokesman reported SAF was defeated outside of Heglig and retreated north.⁶²⁶ South Sudan said its troops advanced to Heglig, but did not claim to control the oil fields. A SAF spokesman claimed that SPLA were inside Heglig and the oilfield. He also stated that SAF suffered a defeat outside of Heglig.⁶²⁷

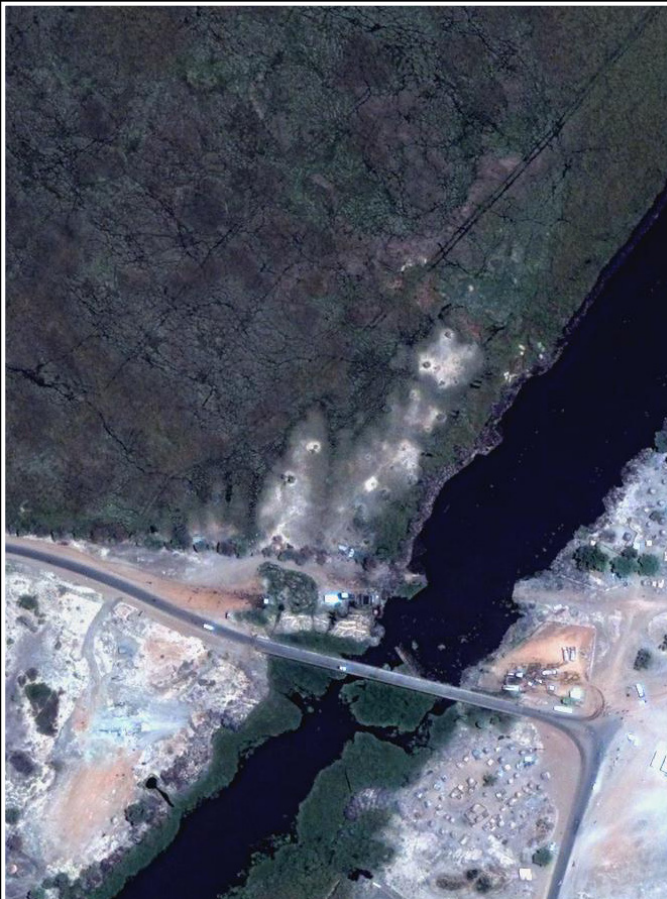
An *AFP* correspondent in Teshwin reported hearing heavy shelling by artillery and multiple airstrikes lasting for about an hour. Unity State Information Minister Barnaba Marial Benjamin reported that, "Two brigades of Sudan Armed Forces, backed by 16 tanks and accompanied by members of the mujahedeen and other militia loyal to Khartoum, are currently moving towards Unity state with the intent to capture and occupy the oilfields." Conversely, *AFP* reported that SPLA forces were seen moving close to the frontier, with convoys heading up to the front line.⁶²⁸

Approximately 10 km south of the main SAF encampment in Heglig, imagery collected on 15 April 2012 reveals the presence of extensive fighting positions and craters indicative of previous ground fighting and artillery bombardment. Two heavy armored vehicles consistent with T-55 main battle tanks, as well as a mixed formation of fighting and support vehicles, are also identified [Figure XII-7].

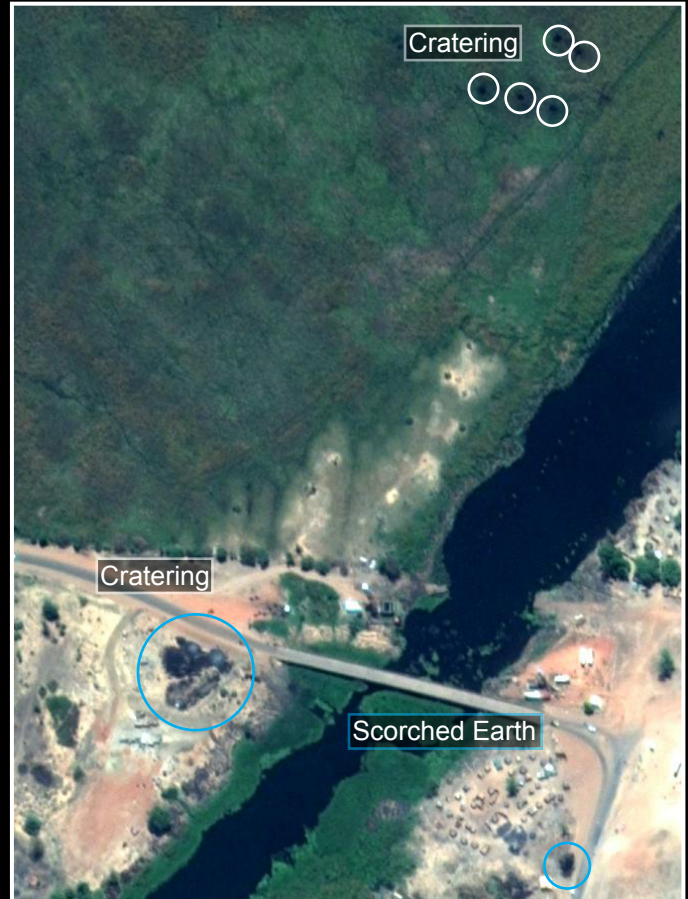
In an address to Sudan's National Assembly and the Council of States on 10 April 2012, Defense Minister Hussein declared that SPLA force strength in South Kordofan numbered 22 battalions, comprised of 500 soldiers per battalion. He claimed that these SPLA forces had been deployed towards Talodi, Kadugli and Kauda. He asserted that an additional force commanded by Minni Minnawi was made up of 61 Land Cruisers provided by South Sudan and deployed around oil fields in Ragad, Teshwin and Mang. Hussein stated that two battalions of SPLA's 4th Division launched the initial attack on Heglig, which was repulsed by SAF.⁶²⁹ At the time, Minni Minnawi was the leader of the Sudan Liberation Movement/Army-Minni Minnawi (SLM/A-MM), a group that was part of the SRF along with JEM and SPLA-N.⁶³⁰

Hussein reported that SPLA employed tanks and rockets in the attack on 10 April 2012, targeting and destroying SAF's position in the area, precipitating SAF's withdrawal to Kharassana.⁶³¹ SPLA's Philip Auger declared that

Figure XI-8



Bombardment Near Bentiu Bridge - Before
4 April 2012 | 10:51 AM EAT
Bentiu, Unity



Bombardment Near Bentiu Bridge - After
18 April 2012 | 11:43 AM EAT
Bentiu, Unity

“Heglig belongs to South Sudan” and defended SPLA actions on the basis of his claim that SAF first attacked SPLA at Teshwin.

Hussein claimed that SAF will “not rest until it recaptures Heglig.”⁶³² Following the attack on Heglig, the Sudanese parliament declared a “general mobilization” in an effort to recruit Sudanese to the armed forces.⁶³³ Sudan Vice President Al-Haj Adam announced mobilization efforts from El Obeid to support SAF’s counter-offensive operations in Heglig.⁶³⁴

According to the Unity State Information Minister, SPLA advanced 23 km north of Heglig on 11 April 2012. He also noted that Kharassana would be part of Unity State according to the 1956 border.⁶³⁵ The same day, Sudan’s Foreign Ministry Under-Secretary Mohamad Osman, claimed that SPLA entered Heglig with 3,000 fighters, backed by artillery and tanks. Osman accused SPLA of advancing 70 km into Sudanese territory. He was skeptical of any future negotiations in light of the recent hostilities. He noted that his country wasn’t seeking a new war with South Sudan but reserved the right to defend its territories. Osman denounced what he described as a “blatant” breach of international law by South Sudan.⁶³⁶ The same day, amidst reports that the Sudanese government cut-off mobile communications in Kharassana and Kailik, residents of Kharassana reported to *Radio Dabanga* that violent clashes occurred there between SRF and SAF.⁶³⁷ Kharassana is 55 km north of Heglig.

On 12 and 14 April 2012, SAF reportedly bombed the strategic bridge which links Bentiu to Rubkona. SPLA 4th

Division is located in Rubkona. The bridge is near a United Nations compound slightly outside the town and on the road leading north to the front line. In the attack on the 12th, Sudanese warplanes reportedly dropped five bombs; no casualties were reported.⁶³⁸

Sudan's Air Force also reportedly dropped two bombs from two Sukhoi fighters on 14 April. The bombs reportedly killed four civilians, one soldier and wounded four people. According to SPLA's Major General Mac Bol, the bridge was left untouched. The following day, two bombs reportedly fell in the center of Bentiu near the residence of the Governor of Unity.⁶³⁹

Imagery collected on 18 April 2012 reveals two craters consistent with aerial bombardment. These craters are not visible in imagery collected on 4 April. The craters are located by the northwest end of a bridge. Approximately 1 km north, five more craters are visible. There are burned structures and scorched earth near the southeastern end of the bridge in Bentiu. These craters are consistent with reports of SAF bombers targeting the bridge [Figure XI-8].

Another incident of aerial bombardment was reported on 12 April. A white-colored SAF Antonov bomber reportedly dropped six bombs at 6:30 am. One bomb landed in Kach, three on Than village, and two in Kaja area. One man was reportedly killed in Than and crop damage was reported in Kaja. According to the Commissioner of Gut County, James Puoy, these are civilian areas and there are no oil fields where the bombs landed. He indicated that the only permanent structures in the area were two state-owned warehouses used by the World Food Program. These warehouses were in the vicinity of where two bombs landed. *Radio Tamazuj* noted that a South Sudan army base was also near where the bombs fell.⁶⁴⁰

That day South Sudan declared that they were consolidating their forces around Heglig. Deputy Defense Minister Majak D'Agoot declared that, "Both sides are raising strengths, they are building up, they are sending reinforcements to the front line. We know that Khartoum is mutually mobilizing; we are also consolidating our defenses." D'Agoot added that Heglig was part of Sudan and claimed that Heglig "has been used as a launching pad, as a military base for launching operations against our troops in Unity State makes it a legitimate military target."⁶⁴¹

SAF launches operation to recapture Heglig

As Sudan's army confirmed they were launching operations to recapture Heglig, ground fighting reportedly took place between SAF and SPLA on 13 April 2012, 30 km north of Heglig. The following day, SAF Spokesman Saad stated that the Heglig region was "100%" under their control, saying SAF was now inside Heglig, with "a few km" separating SAF from the Heglig oilfield.

South Sudanese Information Minister Barnaba Marial Benjamin disputed those claims, noting that SAF "tried to attack our positions north of Heglig last night but it was contained. Heglig is [still] under our control." South Sudan's Spokesman also said that SPLA destroyed two SAF tanks.⁶⁴²

Shifts in the Relationship between Misseriya and Khartoum

Fighting in Heglig highlighted the changing relationship between the Misseriya and the Government of Sudan. As noted earlier, Misseriya militias played a prominent role in the attacks alongside Government of Sudan-aligned forces before the SAF invasion of Abyei town. As the conflict in Sudan continued, Misseriya allegiance to Khartoum began to shift. For example, on 17 April 2012, Misseriya leaders aligned with the SRF reported that SRF took control of Nyama.⁶⁴³ *Radio Dabanga* also reported on the same day that some members of the Misseriya tribe had rejected calls to mobilize and fight in Heglig.

According to alleged eyewitnesses, reported that young men from the Misseriya broke into SAF's storage facility



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in Muglad and stole motorbikes. Additionally, *Radio Dabanga* reported another incident in which Misseriya stole “dozens of motorbikes loaded onto trucks near the Balila area, often used by pro-government militia to loot and terrorise citizens.” According to witnesses to these events, Misseriya residing in the western sector of South Kordofan did not support the current conflict and refused to fight for the government.⁶⁴⁴

Though the full context of these statements was not entirely clear, Misseriya resistance to mobilization efforts by Sudan was an important new development in the region’s dynamics.

Bashir’s Incendiary Rhetoric

On 18 April 2012, during a speech in Khartoum, President Bashir addressed a crowd vowing that he would liberate the South from the dominance of the SPLM.⁶⁴⁵ Bashir declared that, “The story began in Heglig, but it will end in Khartoum or Juba.” He added, “Either we end up occupying Juba or you end up occupying Khartoum but the boundaries of the old Sudan can no longer fit us together, only one of us has to remain standing.”⁶⁴⁶

In a speech on the same day in El Obeid, Bashir further declared that it was the responsibility of Sudan to get rid of the SPLM as it was the North that allowed them to develop. Bashir explained that Sudan had a duty to intervene to save the people of the South. The crowd that Bashir was addressing repeatedly chanted “No negotiations after today,” as well as “God is great.”

During this speech, Bashir repeatedly referred to the SPLM as “insects” when addressing the crowd, “We call it an insect [...] trying to destroy Sudan and our main target from today is to eliminate this insect completely,” explaining that Sudan has to “rectify” the mistake it made. Moreover, Bashir stated that, “We will not give them an inch of our country, and whoever extends his hand on Sudan, we will cut it.”⁶⁴⁷ The incendiary language Bashir employed in these speeches has antecedents elsewhere; the Hutus repeatedly referred to the Tutsis as “cockroaches” during the 1994 Rwanda Genocide.⁶⁴⁸

Heglig in the Balance

South Sudan Army Spokesman Philip Auger labeled Sudan’s claim that they entered Heglig on 19 April 2012 a “white lie.” Auger accused Sudan of bombarding Heglig on 19 April, causing the central oil processing facility to catch fire. Sudan contradicted this claim. Sudan State Information Minister Sana Hama accused the South of “intentionally” damaging Heglig’s facilities.⁶⁴⁹

The SPLA 4th Division Commander, James Gatduel Gatluak, told *Sudan Tribune* that his forces were prepared for a SAF offensive and were in full control of South Sudan’s border up to 40 miles north of Heglig town. Auger reported that SPLA on 18 April had “defeated the advancing forces of Sudan Armed Forces, took control of Katasla [Kilo 23] and captured three tanks plus lots of military equipment from the enemy.”⁶⁵⁰

SAF reportedly recaptured Heglig from the SPLA at 2:20 pm on 20 April. Defense Minister Hussein stated that, “The troops moved towards Heglig carefully so as not to destroy what remains of the infrastructure,” adding, “Our enemy suffered heavy losses in people and equipment.”⁶⁵¹ Kiir dismissed SAF claims that they captured the area and that SPLA would voluntarily withdraw in the next three days.⁶⁵² Kiir announced that although SPLA would withdraw from Heglig they still consider Heglig to be part of South Sudan. SPLA declared that they were not “abandoning” Heglig, noting that they would react to any incursions or bombardment.⁶⁵³

On 22 April 2012, SPLA’s Deputy Director of Military Intelligence reported that SAF attacked their positions in Teshwin after SPLA withdrew from Heglig. At 10:00 am SAF reportedly sent approximately ten Toyota vehicles mounted with guns on “reconnaissance” to Teshwin where they reportedly “had an engagement” with SPLA troops.⁶⁵⁴



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SAF reportedly attacked an SPLA base in Panakuach on 29 April 2012, injuring four people. Journalists in the area reported witnessing the attack. The Commander of SPLA's 4th Division, General Gatluak, stated that if SAF continued to attack South Sudan, SPLA would retake Heglig. ⁶⁵⁵

General Kamal Abdul Maarouf, SAF's Commander of Operations for the battles in Heglig, reported that SAF killed 1,200 South Sudanese soldiers in the fighting. This claim was denied by South Sudan. SPLA said it lost only 19 soldiers in action, claiming its force killed 240 SAF personnel. ⁶⁵⁶

IN DEPTH: E

SAF Build-up in Heglig and SPLA Occupation of Disputed Areas

After recapturing the disputed Heglig area, SAF built up their presence along the disputed border.

Figure ID E-1



Main SAF Encampment Rebuilt - Before
18 April 2012 | 11:39 AM EAT
Heglig



Main SAF Encampment Rebuilt - After
23 October 2012
Heglig

SAF Encampment 1

Satellite imagery collected on 18 April and 23 October 2012 of the apparent SAF encampment located in the south of Heglig reveals that it was rebuilt and reinforced during this timeframe. In the 18 April imagery, the majority of the structures in the bermed encampment have been razed. There are no military vehicles visible. In the 23 October image, however, at least 90 tents have been added, as well as other structures. Towed artillery pieces consistent with the 105 mm M101 howitzer are also present [Figure ID E-1].

SAF Encampment 2

Approximately 10 km south of the aforementioned SAF encampment at Heglig, a newly constructed encampment is visible. Analysis of imagery taken on 15 April, 17 May and 23 October 2012 appears to show the progression of the installation's development.

On 15 April, a horseshoe-shaped berm measuring approximately 140 meters in length has four fighting positions in its center. By 17 May, imagery reveals that a bermed perimeter measuring approximately 775 meters in length has been built around the horseshoe-shaped berm. Approximately 18 meters across from the entryway of the newly constructed berm an excavator is present [Figure ID E-2].

Additional imagery taken on 23 October of the encampment shows the addition of at least 100 new tents and

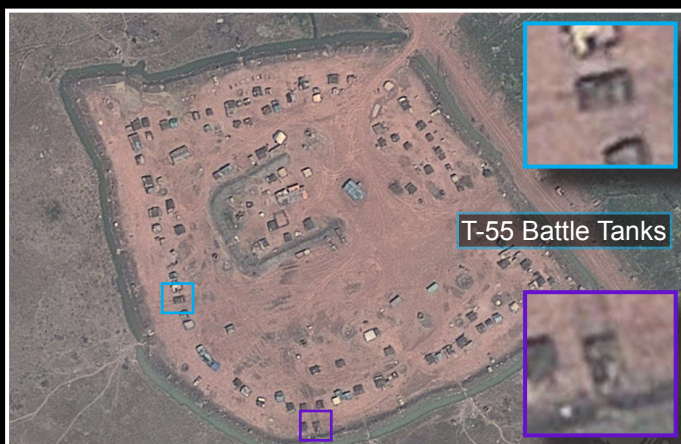
Figure ID D-2



Development of Encampment 1 - A
15 April 2012 | 12:02 PM EAT
Heglig



Development of Encampment 1 - B
17 May 2012
Heglig



Development of Encampment 1 - C
23 October 2012
Heglig

structures, with at least three new artillery berms. Two heavy armored vehicles consistent with T-55 main battle tanks are also present. One tank is positioned within the southern berm, its turret pointing southward. The second tank is positioned on the western berm with its turret pointing westward. Light technical vehicles and light infantry fighting vehicles are parked in security positions along the inside of the bermed wall. This encampment is in close proximity to where the fighting occurred in April 2012 [Figure ID E-2].

SAF Encampment 3

Approximately 510 meters northeast of Encampment 2, another encampment has been constructed between the dates of 17 May and October 23 2012. Imagery tak-

Figure ID D-3



Development of Encampment 2 - A
17 May 2012
Heglig



Development of Encampment 2 - B
23 October 2012
Heglig

Figure ID D-4



Built Up Camp - A
18 April 2012 | 11:39 AM EAT
Heglig



Built Up Camp - B
17 May 2012
Heglig

en on 17 May shows the presence of construction equipment, including an excavator actively digging. By 23 October, an encampment has been constructed with a completed berm measuring 575 meters in length around its perimeter. At least 50 new structures and a munition storage facility have been installed. Three heavily armored vehicles with turrets are visible within the bermed perimeter. Two are positioned inside the south wall with their turrets pointing southward. The other is positioned on the east wall and its turret is pointing eastward [Figure ID E-3].

SAF Encampment 4

Signal analysis of imagery taken on 18 April and 17 May 2012 reveals that during these dates, a small fortified encampment has undergone improvements, both inside and outside its perimeter. It apparently was damaged during the April 2012 fighting in Heglig. The encampment, according to the 18 April image, had at least 15 of the structures within in its bermed perimeter apparently razed during the fighting.

By 17 May, a berm approximately 450 meters long was constructed outside the northwest and northeast perimeter of the encampment. At least seven new artillery berms appear to have been constructed, as well as several berms along the perimeter apparently used as vehicle security positions. Most of the vehicle security positions appear to be occupied with light technical and infantry fighting vehicles. Positioned inside the newly constructed northeast berm is a heavily armored vehicle consistent with a T-72 main battle tank. This is the first and only time Signal identified a T-72 main battle tank deployed in the field [Figure ID E-4].

Figure ID D-5a

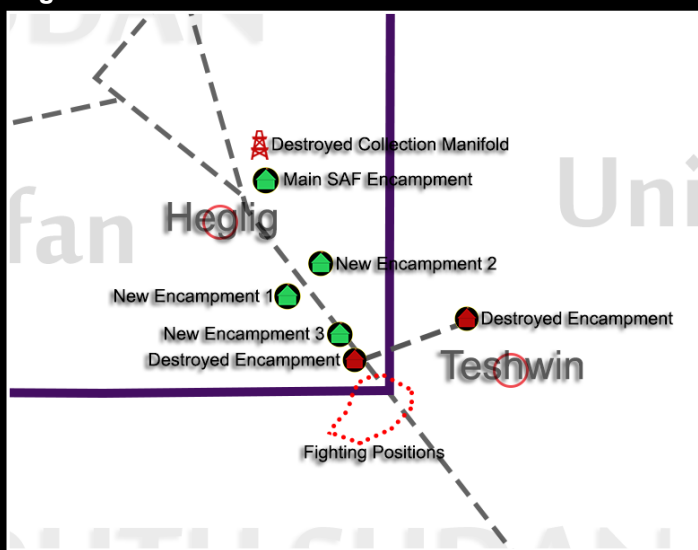
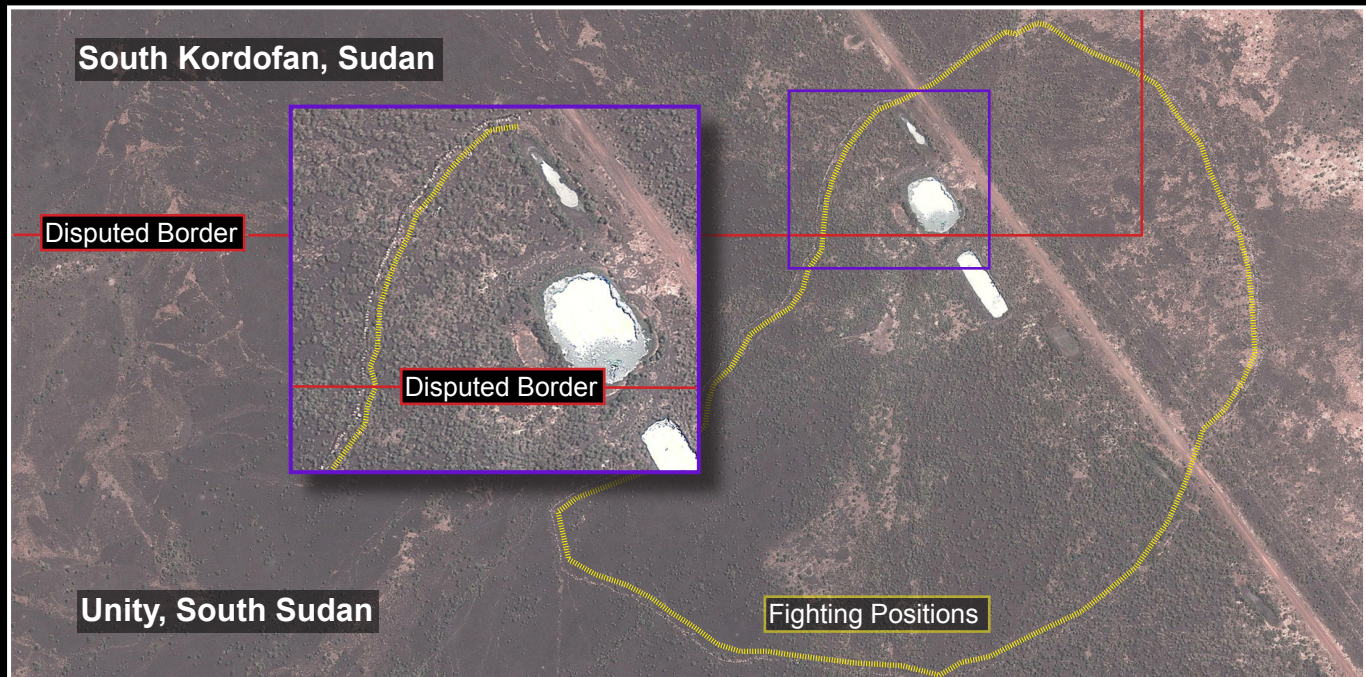


Figure ID D-5b



Fighting Positions Around Disputed Border Line

17 May 2012

South Kordofan-Unity Disputed Border

Following the cessation of fighting in Heglig and the subsequent withdrawal of SPLA troops, *AFP* reported that both sides were “digging into trenches along their contested border.”⁶⁵⁷ Jason Straziuso, a reporter for the *Associated Press* (*AP*) noted that a trench had been dug in the area of Teshwin along the disputed border. SPLA Major General James Gatduel Gatluak reported that SAF forces reportedly dug the trench in Teshwin, which effectively prohibits tanks crossing.⁶⁵⁸ These reports are consistent with imagery captured on 17 May 2012, which shows the presence of fighting positions and trenches overlapping the disputed South Kordofan-Unity border. These fighting positions measure approximately 3.5 km in length, and bisect at two points the main road leading from South Kordofan, Sudan to Unity, South Sudan [Figure ID E-5a & E-5b].

SPLA Occupation of Disputed Areas

On 2 May, the UNSC issued Resolution 2046 that called for an immediate end to fighting between Sudan and South Sudan and for both sides to withdraw from the disputed border area.⁶⁵⁹ However, both sides continued to accuse the other of provoking hostilities.

SPLA reported that SAF aircraft and artillery bombed a SPLA bases in the area of Panakuach, Unity. Sudan’s Foreign Ministry Spokesman, Al-Obayd Adam Marawih, accused SPLA of attacking Um Dafoug, South Darfur; Samaha, East Darfur and Talodi, South Kordofan. Additionally, Marawih stated that SPLA occupied Kafia Kingi and Kafia Dibi.⁶⁶⁰ On 5 May, SAF spokesman Saad repeated the claims that SPLA occupied Samaha and Kafia Kingi.⁶⁶¹

On 13 May, *SMC* reported that SPLA Secretary General Pagan Amum admitted that SPLA occupied Kafia Kingi, Hufrat al Nahas, Kafia Dibi and Samaha, also known as Mile 14,⁶⁶² in East and South Darfur.⁶⁶³ Kafia Kingi, Hufrat al Nahas and Samaha are disputed areas between Sudan and South Sudan.⁶⁶⁴ Signal analysis confirms SPLA statements that they occupied Hufrat al Nahas, Kafia Dibi and Kafia Kingi.

SPLA Encampment 1

Analysis of imagery taken on 25 April 2012 of the border region of South Darfur and Western Bahr el Ghazal reveals the presence of a fortified encampment in Hufrat al Nahas, Western Bahr el Ghazal, 2 km from the border of South Darfur. This encampment has a bermed perimeter measuring approximately 430 meters with tents positioned along its interior. This is consistent with reports of SPLA occupying the area [Figure ID E-6].

SPLA Encampment 2

Approximately 75 km southeast of Hufrat al Nahas, imagery from this date shows that in the town of Kafia Dibi, another encampment has been established. The encampment has an outer berm perimeter measuring approximately 600 meters in length with 15 light technical vehicles set in security positions along the interior. In the center of this perimeter is an additional circular berm enclosing approximately 60 tents and other structures, as well as an artillery berm and an ammunition storage facility. This is consistent with reports of SPLA occupying the area [Figure ID E-6].

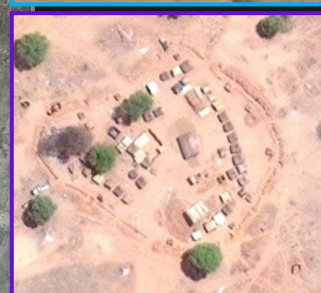
SPLA Encampment 3

A third encampment in the town of Kafia Kingi, located approximately 26 km southwest of Kafia Dibi, has also been identified. The encampment's bermed perimeter measures approximately 350 meters in length, with at least 50 tents and other structures inside. Also identified inside the perimeter are an ammunition storage facility and one artillery berm. This is also consistent with reports of SPLA occupying the area [Figure ID E-6].

Figure ID D-6



**Hufrat an Nahas
Encampment**
25 April 2012
Hufrat an Nahas, Western
Bahr el Ghazal



**Kafia Dibi
Encampment**
25 April 2012
Kafia Dibi, Western Bahr el
Ghazal



**Kafia Kingi
Encampment**
25 April 2012
Kafia Kingi, Western Bahr
el Ghazal

Postscript

As of the publication of this report, the human security situation in South Kordofan, Blue Nile and the disputed areas of Abyei and Heglig remains acute. Sporadic clashes continue in South Kordofan and Blue Nile, primarily, as SAF and SRF forces still grapple to consolidate control over strategic areas amidst shifting lines of battle. Ongoing aerial bombardment in the Nuba Mountains persists, while food insecurity and the risk of widespread famine threatens the civilians who still remain in these areas. Meanwhile, tens of thousands of people are displaced from their homes, attempting to subsist inside Sudan.

Tens of thousands more people from these areas remain refugees in neighboring South Sudan and Ethiopia—many of them living precariously in camp settings for almost two years now. Although several agreements regarding humanitarian access have been signed by all parties to the conflict, humanitarian agencies are still prevented from fully reaching affected populations. The ability of these aid providers to conduct sustained and unfettered assistance operations inside Sudan itself is almost entirely restricted.

A series of ongoing negotiations between Sudan and South Sudan have yet to yield concrete results on the issues of the permanent demarcation of the border and the final status of key disputed areas. The Abyei Area referendum has yet to occur due to seemingly intractable disputes over the eligibility of the Misseriya community to participate in a vote if one were to occur. The Misseriya themselves have recently declared that they would move permanently to Abyei to gain resident status in order to cast ballots in any future referendum on the area's final status. Additionally, preliminary agreements reached towards the end of 2012 between Sudan and South Sudan about oil transit fees have occurred in the context of unresolved disputes over the establishment of a demilitarized buffer zone between the two nations.

Though focused on retrospective events that occurred between mid-2010 and June 2012, *Sudan: Anatomy of a Conflict* is nonetheless relevant to Sudan's current context of unending violence, extreme humanitarian need, and economic upheaval. Events that happened during this timeframe, in many cases, continue to reverberate across both Sudan and South Sudan. These reverberations will, in part, determine how the next chapter of this region's history is written.

Though this study has been singularly focused on events in Sudan and South Sudan, the data and the methodology may have value in multiple contexts and across disciplines. The data contained in this report may be used in whole, or in part, to further knowledge about how similar conflicts develop, escalate and/or persist. Through the extensive citation of media sources, it also provides a wealth of data for researchers exploring the relationships between media reports and conflict. The satellite imagery and analysis contained within this report present myriad first hand examples of the types of information that can in some cases only be derived through the application of remote sensing.

As new information emerges concerning the time period and events contained within this report, it will be possible to revisit and assess the accuracy of the findings resulting from this study. New information will also test the efficacy of the Signal Program's methodology employed to reach the findings. As a body of work, *Sudan: Anatomy of a Conflict* is designed to prompt a deeper and more integrated inquiry into what can be known about recent events in Sudan and South Sudan. It also raises questions about how human rights and humanitarian researchers can learn about these conflicts from a far. Most importantly, this study raises questions and provides opportunities to know more about how information may be gathered to serve populations facing conflict and disaster.



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Glossary of Armed Actors

The Central Reserve Police

The Central Reserve Police (CRP), also known as Abu Tira, are a branch of the Sudanese National Police Services (NPS).⁶⁶⁵ The Government of Sudan reportedly deployed CRP/Abu Tira in Darfur as a paramilitary force to engage in counter-insurgency operations. To this day, Abu Tira continues to be predominantly active in Darfur. Many members of the CRP in Darfur are reportedly members of the Janjaweed, an irregular fighting force that is accused of genocide.⁶⁶⁶ In August of 2011, the United Nations High Commissioner on Human Rights released a report alleging the “unlawful abduction, detention, and extrajudicial killings” of civilians and others in Kadugli by CRP.⁶⁶⁷ CRP/Abu Tira reportedly was under the command of South Kordofan Governor Ahmad Haroun, himself indicted for alleged crimes against humanity by the International Criminal Court, when these acts, including house-to-house searches of SPLM-N supporters, reportedly occurred.⁶⁶⁸

A leaked UNMIS report revealed that, “The Central Reserve Police Forces have treated UNMIS with gross contempt and a total disregard of its status as a UN body with the privileges and immunities set forth and contained in the Status of Forces Agreement (SOFA) with the Government of Sudan, as well as international conventions on the status of the UN, its staff, and assets, to which Sudan is a signatory.” In addition,⁶⁶⁹ UNMIS complained that PDF and CRP/Abu Tira abducted, harassed and killed UNMIS staff.⁶⁷⁰

Justice and Equality Movement

The Justice and Equality Movement (JEM) is a rebel group based in Western Darfur. Khalil Ibrahim was its leader from 2003- 2011. He claims that JEM was founded in 2001, though its roots can be traced back to 1993. After being killed in December 2011, Ibrahim’s brother, Jibril, became appointed JEM’s leader on 26 January 2012.⁶⁷¹ JEM is one of the key factions that form the Sudanese Revolutionary Front.

Joint Integrated Units

The Joint Integrated Units (JIUs) were established following the signing of the Comprehensive Agreement between northern Sudan and southern Sudan. Chapter VI of the CPA (Security Arrangements), Article 4 mandated the formation of the Joint Integrated Units “*consisting of equal numbers from the Sudanese Armed Forces (SAF) and the Sudan People’s Liberation Army (SPLA) during the Interim Period.*” The agreement established the JIU functions, size and deployments. According to the CPA, the JIU would be commanded by a Joint Defense Board (JDB) “*comprised of the Chiefs of Staff of the two forces, their deputies and any number of senior officers to be agreed to by the parties.*” Additionally, the JDB was to be responsible for coordination between the two forces.⁶⁷² The JIUs’ total strength was expected to reach 39,000 troops and be equally comprised from the two parties’ forces. Expenditures for each respective JIU element were to be covered by their respective governments. Chapter VI, Article 20.8 mandated that SAF and SPLA JIU were to be “treated equally” adding that, “There shall be uniformity in welfare, salaries, emoluments, pensions rights, supplies, armament and equipment.”⁶⁷³ However, research done by Small Arms Survey indicated that SPLA JIU reportedly received additional allowances, which apparently led to tensions with the SAF JIU.⁶⁷⁴

The JIUs’ complete deployment was never achieved. At its peak, 84.7% of its deployment goal during the period between November 2008 and January 2009. Since January 2009, these numbers decreased to 82.6% by April 2009. The deployment figures further declined to 75.2% by November 2010.⁶⁷⁵ UNMIS figures from August 2010 put the total JIU strength at 32,723 deployed 82.6% (SPLA 81.3% SAF 84.0%).⁶⁷⁶ The CPA established 9 October 2006 as a deadline for the full deployment of the JIU forces.

The history of the JIU initiative is marked by several endemic problems preventing it from fully accomplishing its mandate. Key issues included a lack of unit cohesion, lingering tensions between the troops from each party and a dearth of training and required resources.⁶⁷⁷ Additionally, the JIUs faced challenges command and control challenges. The CPA determined that both SAF and SPLA elements would have a set command and control structure defined by the structure of the JDB. According to the Assessment and Evaluation Commission, however, there ostensibly remained two chains of command for the JIU.⁶⁷⁸ This failure to integrate the two forces into a unified command chain was evident in incidents such as the November 2006 battle between SAF JIU and SPLA JIU troops in Malakal, Upper Nile. The skirmishes over internal disputes within the joint unit killed approximately 150 people, including civilians.⁶⁷⁹

Following the referendum in January 2011, the JIUs were required to disband in accordance to the 2005 CPA.⁶⁸⁰ The CPA stipulated that “The Joint Integrated Units shall constitute a nucleus of a post referendum army of Sudan, should the result of the referendum confirm unity, otherwise they would be dissolved and the component parts integrated into their respective parts.” Following the referendum, an agreement was reached by SAF and SPLA to dismantle the JIU elements by 9 April. There were two exceptions made, however. JIUs present in the oil fields of Melut and Bentiu in southern Sudan and those stationed in the disputed area of Abyei. The JIU’s mandate for these specific areas was extended to 9 July, the day South Sudan officially seceded from the North.⁶⁸¹

Popular Defense Force

Established through the 1989 Popular Defense Forces Act, the Popular Defense Force (PDF) is defined as a paramilitary force comprised of civilians born in Sudan. The PDF was established to provide three main tasks: 1) Assist the Armed forces and other uniformed forces whenever necessary, 2) Contribute to the defense of the nation and assist during crises and public disasters, and 3) Any other tasks as instructed by the Commander in Chief, or based on a recommendation from the “Council.” The council is an advisory group that provides recommendations to the Commander in Chief about PDF operations. The Commander in Chief reserves the right to summon the Popular Defense Forces for 1) training purposes 2) During crises and catastrophes 3) During war, or the anticipation of war and 4) any other situation the commander in chief sees fit. The PDF training consists of basic military training, civilian defense, civics training and cultural training.⁶⁸²

Locations of PDF training camps typically coincide with the PDF’s areas of operations to attract local recruits. Sudan often recruits local citizens because of their familiarity with the local territory and its community. This allows for easy infiltration and identification of opposition and SPLM-N supporters.⁶⁸³

The role of the PDF was down-sized after the Comprehensive Peace Agreement was signed in 2005, with many camps being dismantled and recruitment slowing down. However, in 2008-2009, according to Small Arms Survey, reports indicated that the PDF were reorganized. Some elements were provided with weapons and new recruitment was reportedly occurring in areas around Abyei.⁶⁸⁴ Small Arms Survey reported that camps were created to recruit local civilians. Many of the new recruits were from the Misseriya tribe, under the auspices that they would fight for their rights in Abyei and other disputed areas.⁶⁸⁵ PDF members generally receive little or no paid salaries; however, they have been reportedly compensated with loot acquired during attacks.⁶⁸⁶ In the Abyei, South Kordofan and Blue Nile conflicts, PDF members often led attacks on towns and operated alongside SAF.⁶⁸⁷ Misseriya recruited to the PDF have reportedly been promised a payment of 50 Sudanese pounds (\$21 at that time) for their services. An estimated 12 PDF camps were reportedly established north of Abyei in the period prior to the 2011 invasion of the Abyei Area.⁶⁸⁸

Sudan Armed Forces

The Sudan Armed Forces (SAF) is the military branch of the Sudanese Government. SAF oversees all military operations and campaigns. Sudan’s President Omar Al Bashir seized power in 1989 while serving as the Sudanese Army’s Commander of Operations during the Civil War.⁶⁸⁹



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SUDAN: ANATOMY OF A CONFLICT

Glossary

President Omar Al Bashir is the Commander in Chief of the Armed Forces and the Popular Defense Force (PDF). Operational command for the Armed Forces is held by Sudan's Defense Minister. According to IHS Jane's, SAF is organized into several regional military commands.⁶⁹⁰

SAF is comprised of 109,300 military personnel and a paramilitary force of 17,500, also known as the Popular Defense Force (PDF), which is the military wing of the National Islamic Front. The Army's regular strength is estimated at 85,000 personnel, which can be supplemented by an additional reserve force of 20,000 conscripts. Males between the ages of 18 and 30 are required to serve a two year term of conscription. Additionally, SAF maintains a paramilitary reserve force of an additional 85,000 personnel. SAF reportedly has 390 main battle tanks, including 20 M-60 A3s, 60 Type 59/ Type 59Ds, and 300 T-54/T-55s. Additionally, SAF's arsenal of light tanks purportedly includes 70 T-62s and 45 T-63s. SAF also possesses as many as 412 armored personnel carriers (APCs). SAF has 778 pieces of artillery, including 20 self-propelled and 123 towed guns. Sudan has 635 multiple rocket launchers, including 477 107mm Type-63's. The Sudanese Navy has a strength of 1,300 and a fleet of 4 patrol and coastal craft, as well as seven amphibious landing craft.⁶⁹¹

Sudan's Air Force has 3,000 personnel and possesses "a force of 61 combat capable aircraft," including 21 MiG-29SE/ Fulcrum and two MiG-29SE/ Fulcrum UB. Additionally, the Sudanese Air Force has ground attack aircraft including 15 A-5 Fantans and nine Su-25 Frogfoots. The Air Force has a transport wing of 23 aircraft, many of which are Antonovs repurposed for indiscriminate bombardment operations. Antonovs are not built with targeting and telemetry systems for the dispersal of munitions and are considered highly imprecise bombing platforms. They also have attack and transport helicopter capacity, including 29 attack helicopters. These assets include 15 Mi-24 Hinds and approximately five multiple-role Mi-17 Hip H. Lastly, the Air Force fields air defense assets, which include, notably, an arsenal of 90 towed S-75 Dvina surface to air missiles.⁶⁹²

Sudan People's Liberation Army

The Sudan People's Liberation Army (SPLA) was founded by John Garang in 1983. At the time, Garang was head of SAF's Staff College in Omdurman. SPLA fought Government of Sudan-aligned forces in the Second Civil War, which lasted from 1983-2005. The 2005 Comprehensive Peace Agreement, which ended the war, established the SPLA as the official army of southern Sudan.⁶⁹³

SPLA then transitioned into the official army of South Sudan after it gained independence from Sudan on 9 July 2011. The army's commander in chief is President Salva Kiir Mayardit and its primary spokesman is Philip Aguer. The International Institute for Strategic Studies' Military Balance 2012 reported:

In the mid-2000s, the SPLA began to re-equip on a large scale, beginning in 2006–07 with Ural-4320 troop transport trucks from an unknown supplier, in addition to small arms, light weapons and ammunition. Around 110 T-72M tanks and 11 BM-21 MLRS were acquired between 2007 and 2008, and nine Russian Mi-17-V5 helicopters and one Mi-172 helicopters in 2009–10. In 2007, the World Bank estimated GOSS defense expenditure at US\$555m. Some analysts project that figure has risen to US\$ 1 billion. In 2010–11; the GOSS, meanwhile, pledged to double defense spending in 2010. If estimates are correct, South Sudan's defense budget is larger than those of Ethiopia or Eritrea.⁶⁹⁴

The South Sudanese Army is reported to have an active force of 140,000 forces, divided into nine infantry divisions. SPLA possesses an estimated 110 Soviet-era T-55 main battle tanks and 100 T-72 main battle tanks. Additionally, SPLA reportedly has an arsenal of 69 pieces of artillery, including 24 self-propelled 122mm guns and 15 BM-21 122mm multiple rocket launchers. South Sudan has limited air assets, including one Beech 1900 light transport aircraft, nine Mi-17 multiple role helicopters and one Mi-172 Transport helicopter.⁶⁹⁵



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Sudan People's Liberation Movement/Army-North

The Sudan People's Liberation Movement/Army-North (SPLM/A-N) is a rebel group in South Kordofan and Blue Nile. The group has two wings: The Sudan People's Liberation Movement-North, which is the political wing, and the Sudan People's Liberation Army-North, which is the military wing. Before South Sudan's independence, SPLM/A-N was part of the Sudan People's Liberation Army, which is now the officially recognized army of South Sudan. The group is under the leadership of Malik Agar, who became the chair of the northern sector of the SPLM in February 2011 and continued to lead SPLM-N after it became a separate party following South Sudan's secession.⁶⁹⁶ He was elected Governor of Blue Nile State in 2010 but was dismissed from his position by President Bashir on 2 September 2011.⁶⁹⁷ In September 2011, the Government of Sudan banned the SPLM-N, revoking its rights as a political group.⁶⁹⁸

Sudanese Revolutionary Front

In November 2011, the SPLA-N joined forces with other rebel groups in Sudan, including the Justice and Equality movement (JEM) and the two factions of the Sudan Liberation Army (SLA), to form the Sudanese Revolutionary Front (SRF), a political and military alliance. In a joint statement released in November of 2011, the SRF said that its goal was "toppling the regime of the [Sudan's ruling] National Congress Party with all possible means,"⁶⁹⁹ saying that they would "coordinate fighting to end this government that wants no peace."⁷⁰⁰ The new alliance elected Malik Agar, former chairman of the SPLM/A-N, as their leader, alongside Abd Al Aziz Al Hilu, Deputy-Chairman of the SPLM/A-N, who was elected as Commander in Chief, and Yassir Arman, Secretary of Foreign Affairs.⁷⁰¹

Methodology

Study Design

This analysis of a nearly two year period during the ongoing conflict in Sudan was conducted through the comparison and cross-corroboration of open source event data with archival satellite imagery. The conclusions of this study are, in some cases, the result of cross-referencing imagery with non-imagery data based on intersecting data points to corroborate a reported event. Apparent evidence available through imagery analysis may also provide new data about a publicly reported event beyond the information previously available, creating additional, new generalizable and/or specific knowledge about that event.

In other cases, imagery is available for times and places which do not cross-reference any available geo- and time-coded data collected for this study. Imagery and open source data sets are then employed independent of the other to either draw conclusions and/or present data based on available source materials.

The imagery was captured by high resolution commercial satellites between 2010 and 2012. The timeframe of events relevant to the conflict in Sudan covered in this report ranges from mid-2010 to June 2012. While some imagery used in this report has previously been analyzed and presented publically, all imagery-related findings in this report are based on Signal's analysis of geospatial data, except when specifically noted.

The geographic areas that are the focus of this report are South Kordofan and Blue Nile, Sudan, the contested Abyei Administrative Area, and the disputed region of Heglig. This study's objective was to identify and collect all available evidence from both open source and/or satellite imagery relevant to this period of the ongoing conflict in Sudan.

Collection of Open Source Data

Over 2,000 collected and logged entries were used for this study. The logged reports were identified based solely on publicly available reports published by news media, governments, inter-governmental agencies, non-governmental organizations, and individuals. The archived satellite imagery utilized for this study is also available for purchase by the general public.

The open source reports and materials relevant to conflict in Sudan were originally published in English or Arabic. All Arabic to English report translation was done by Signal researchers. Google alerts, internet search platforms, and the daily monitoring of sources were methods used to identify and collect the open source reports deemed relevant to events in this study.

The Log

The reports were entered into a digital spreadsheet (hereafter, "the log") and geo-coded (i.e. given a latitude and longitude coordinate for relevant place names) when a specific longitude and latitude for the locations for the report could be identified. The time of the events mentioned in the report was recorded in the log, as well as the time the report was first published. The event entries were categorized according to an event taxonomy (i.e. bombardment, village razing, etc.).

Geo-Locations

The latitude and longitude for an event's location(s) was determined based on information obtained from the following sources: available UN maps and databases, historical, publicly available maps of the areas being monitored, NGO (non-governmental organization) and other IGO-produced (inter-governmental organization)

maps, volunteered geographic information repositories on the internet (i.e. Wikimapia, Open Street Map, etc.), and/or visual identification of relevant locations consistent with public descriptions via satellite imagery analysis.

Crowdsourcing of volunteer geographic information by Signal was not used to identify locations relevant to reported events in this study. In one case in the study, the logged open source data were mapped in ArcMap 10.1 using pre-recorded coordinates. ArcMap's Kernel Density tool was then used to create a density map for attacks, applied only to logged entries where the event type was specified as "Attack."

Analysis of Archival Satellite Imagery

This study does not employ automated and/or algorithmic imagery analysis platforms, programs or systems, nor proactive crowdsourcing programs, platforms, or systems. Three manual, analyst-applied, satellite imagery analysis methodologies were employed independently and/or in combination during this study. Those methodologies are as follows:

Multi-Temporal Quantitative and Qualitative Change Detection

Multi-temporal change detection involves the comparison of two or more images of the same location at two or more different points in time. Change detection is critical to identifying patterns of apparent activity over time through satellite imagery analysis and/or collecting evidence corroborating an event has or has not occurred at a specific location. The quantitative version of this methodology involves engaging in comparative measurements of objects or attributes in two or more images of the same location at two or more times to detect a change in the physical and/or spectral attributes of a location and/or the number of observable objects with certain measurable attributes present at a location. The qualitative version of this methodology involves the analyst arriving at a conclusion based on visual but non-measurable differences between two images of the same location at different times (i.e. changes in color of an observable object).

One example of how quantitative multi-temporal change detection is used in this study would be the use of measurements to detect changes to defensive fortifications at military bases. This method can corroborate public reports of either the construction and/or destruction of physical infrastructure at a specific location. One example of how qualitative multi-temporal change detection is used in this study would be changes in the color of an apparently burned structure with an apparently intact structure.

Typing Observables

The imagery analysis methodology of typing observable objects is employed throughout this report to identify objects consistent with apparent vehicles, other military equipment, and military or civilian infrastructure. Typing an observable object involves measuring the size and attributes of the object for comparison with open source specifications about the size, shape, and/or attributes of an object.

For example, measurements of apparent heavy armored units are used to determine if that observable object is consistent with a known type of tank in the arsenal of a particular armed actor (i.e. a T-55, T-64 tank, etc.). The length, width, and barrel size of the apparent tank are measured and cross-checked with publicly available information about that apparent vehicle. The apparent tracks made by the vehicle are also measured to corroborate the apparent type of the vehicle.

Multi-Spectral Analysis

High resolution satellite imagery captured with the DigitalGlobe Worldview-2 satellite is viewable in four bands of color, including an extra band for near infrared (NIR) imagery. At times in this study, imagery processing pro-

grams used to analyze in NIR were used to highlight a specific attribute of the image. When this methodology is used as part of the analysis, it is noted in the text and/or annotation of the image.

Sources of Geospatial Data

The imagery used in this study was made available to Signal by DigitalGlobe. Publicly displayed imagery on the Google Earth platform was used in two specific cases. The total amount of archival imagery analyzed for this study was 40,000 sq km collected over South Kordofan and Blue Nile, Sudan, the Abyei Administrative Area, and South Sudan, including Unity, Upper Nile and Bahr el-Ghazal, and Ethiopia.

The resolution of the satellite imagery analyzed ranged from 46 to 60 centimeter resolution. The imagery was collected by a constellation of satellites, including three DigitalGlobe satellites: WorldView-1, WorldView-2 and QuickBird-2. The imagery was analyzed and processed on the ERDAS Imagine and Google Earth platforms. The imagery was stored both online, in some cases, and in external and internal hard drives.

Challenges and Limitations

The overarching challenge faced in the course of this study was the absence of best practices and applicable methodologies for the temporal-spatial (i.e. time and place-based) collection of open source data and the subsequent fusion of that data with archival satellite imagery. Therefore, Signal developed procedures for the identification of locations in Sudan from multiple sources of potential geospatial data; the intake and handling of large volumes and high tempos of open source data relevant to logging reported events; procedures for cross-referencing the log with available satellite imagery; and procedures for identifying and recording relevant information from over two years of available geospatial data.

Additionally, standards for what constitutes cross-relevance between open source data of a reported incident and archival satellite imagery were also developed by Signal in the course of the study. Four primary approaches were used as a consistent standard for determining the relationship between text-based reports and imagery data.

- The evaluation of the reported location of the alleged event and the availability of imagery of that location;
- Cross-matching the time of the reported event with its degree of temporal proximity to the most recent collection of imagery of that location;
- Identification of attributes of the location and/or observable objects consistent with actors, objects, and/or behaviors with reports of specific events;
- The identification of apparent actors, observable objects, and/or evidence of patterns of behavior not present in reports of specific incidents.

Signal also faced challenges and limitations specific to open source data collection and analysis and archival satellite imagery collection and analysis independent from the combination of the two methodologies together.

Factors Limiting Access to Open Source Data in Sudan and South Sudan

There are multiple major factors limit the volume and quality of open source data available for Signal's analysis. The non-permissive environment in conflict-affected areas in Sudan severely limited the ability of news media, non-governmental organizations, and UN agencies and other international observers to physically access areas where events relevant to this study have reportedly occurred. Thus, the public statements of the armed actors party to the conflict themselves became the most available source of public information about the conflict. These statements were often made in the absence of third party corroboration.

The civilian population in the areas affected by ongoing conflict in Sudan and South Sudan are often only accessible after they have been forcibly displaced from the areas where events relevant to this study have occurred or are occurring. The information provided by these displaced populations often cannot be verified by non-remote sensing means due to these access restrictions.

Though this report combines multiple media reports into a single narrative it must be noted that every report carries different biases and has different limitations. These factors are noted in the text of the report when possible and all material referenced in the study is cited by its primary or secondary source. *Sudan: Anatomy of a Conflict* does not present a definitive portrait of all the events in question. Instead, the study seeks to link what has been publicly stated about the conflict with other corroborative evidence. Publicly available information about actions allegedly taken by the actors involved the conflict were also analyzed within the context of previous historical precedent and the influence of natural resources, environmental and weather factors.

Analysis of Archival Satellite Imagery

US federal law limits the resolution of imagery made available for public consumption and analysis. Commercial imagery cannot detect evidence of either the interactions or movements of individuals. Satellites collecting imagery used in this study have at most one potential pass over the area in question each day. In rare cases, multiple shots of the same location are collected on the same day by the pass of the area by more than one high resolution satellite. It is also important to note that satellite imagery analysis is only based on the assessment of the imagery available to the practitioner.

Satellite imagery collection and analysis is also limited by the fact that the remote sensing data used in this study cannot be collected at night, during periods of high cloud cover, and/or the presence of certain particulate densities of smoke clouds. Additionally, objects technically present at the time the satellite is capturing imagery of an area can be intentionally and/or unintentionally obscured through tree canopy cover, the use of camouflage, and/or the housing of observable objects under or within temporary and/or permanent structures.



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