

Satellite Sentinel Project

BLUE NILE BURNING: EVIDENCE OF THE DESTRUCTION OF 'AMARA VILLAGE

HUMAN SECURITY INCIDENT

REPORTED BY



Harvard
Humanitarian
Initiative

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The Satellite Sentinel Project (SSP), through the Harvard Humanitarian Initiative's analysis of DigitalGlobe satellite imagery, has identified evidence of the intentional destruction of at least thirty-three structures largely consistent with civilian dwellings in the vicinity of 'Amara, Blue Nile, Sudan. SSP's analysis of imagery captured on 27 November 2011 indicates a firefight apparently involving heavy armor or other tracked vehicles against dug-in fighting positions occurred sometime between 11 and 27 November.

The uncontrolled burning of ground cover is clearly visible. The razed structures, which are consistent with civilian dwellings, do not have charred ground cover between them, indicating that those structures appear to have been deliberately burned. The thirty-three apparently burned structures were among 100 structures present in the area before the fighting commenced. Two fortified encampments apparently under SAF control are now present in the area.

SSP has also identified at least eight craters consistent with bombardment of the area by aircraft-delivered ordnance. The apparent dispersal pattern of the craters in clear lines is consistent with the attacking aircraft flying at a low altitude and at a slow speed. The large distance between the sets of craters is consistent with either multiple aircraft dropping ordnance in the area or the same aircraft performing multiple bombing runs over that location.

BACKGROUND

On 22 November 2011, Sudan Armed Forces (SAF) reported that they captured the town of Dem Mansour, Blue Nile, Sudan from the Sudan People's Liberation Army-North (SPLA-N). The town is approximately three kilometers south of 'Amara.

SAF claimed that they captured two SPLA-N tanks, small arms, ammunition stores in the area, and inflicted heavy casualties. Following the attack, SAF spokesman Al-Swarmi Khaled said that SAF will continue to clear the SPLA-N from the vicinity of Yabus.¹

The ongoing fighting in Blue Nile has dramatically increased the number of civilians fleeing into South Sudan and Ethiopia. The United Nations High Commissioner for Refugees (UNHCR) reports that an estimated 16,000 people have moved from Blue Nile to Upper Nile, South Sudan because of the conflict.² In addition, UNHCR recently estimated that 36,000 refugees from Sudan are living in Ethiopia- only 17,000 of which have been relocated to refugee camps.³

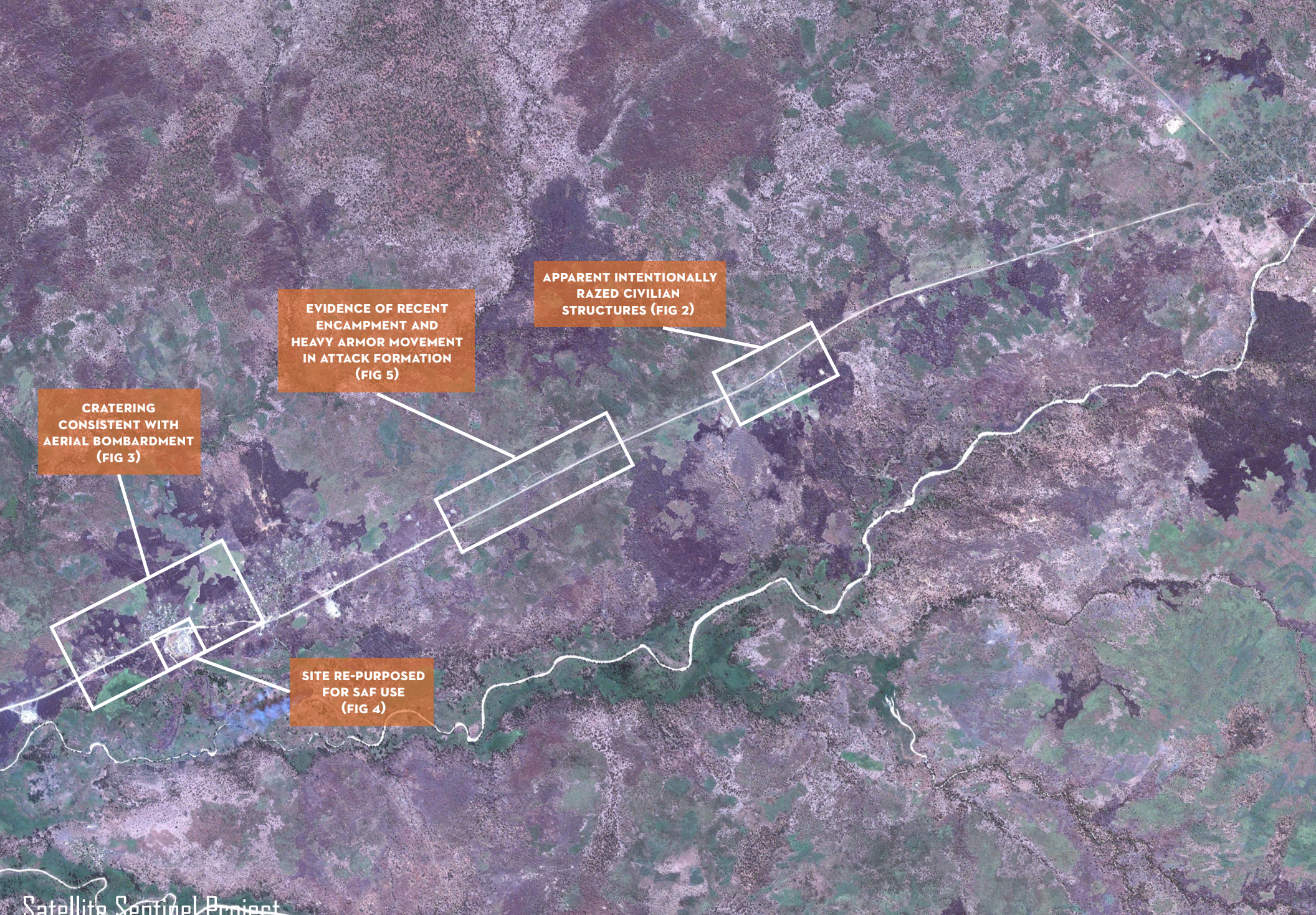
SOURCES

1. "Sudanese army seize new rebel position in Blue Nile- spokesperson." Sudan Tribune. 22 Nov 2011. Retrieved from: <http://www.sudantribune.com/Sudanese-army-seize-new-rebel,40800>
2. "Sudan refugees to hit 100,000 in weeks: UN." AFP. 25 Nov 2011. Retrieved from: <http://www.google.com/hostednews/afp/article/ALeqM5gJTA1dsGgUTJt-Q4zVsr9PBGUY6Q?docId=CNG.81a89bofe2d8boa618e3a2226055c13c.671>
3. "Some 76,000 people fleeing conflict in Sudan enter Ethiopia, South Sudan." UN News Service. 25 Nov 2011. Retrieved from: <http://www.globalsecurity.org/military/library/news/2011/11/mil-111125-unnews01.htm>

ABOUT THE PROJECT

Satellite Sentinel Project conducts regular, intensive monitoring of Sudan to assess the current human security situation and identify potential threats to civilians.

Analysis prepared by Harvard Humanitarian Initiative.
Imagery and additional analysis provided by DigitalGlobe.



CRATERING
CONSISTENT WITH
AERIAL BOMBARDMENT
(FIG 3)

EVIDENCE OF RECENT
ENCAMPMENT AND
HEAVY ARMOR MOVEMENT
IN ATTACK FORMATION
(FIG 5)

APPARENT INTENTIONALLY
RAZED CIVILIAN
STRUCTURES (FIG 2)

SITE RE-PURPOSED
FOR SAF USE
(FIG 4)

11 NOV

INTACT CIVILIAN
STRUCTURES

27 NOV

UNDISTURBED
GROUND COVER
BETWEEN STRUCTURES

APPARENT
INTENTIONALLY
RAZED CIVILIAN
STRUCTURES

VEHICLE TRACKS
CONSISTENT WITH
HEAVY ARMOR MOVING IN
ATTACK FORMATION

INTACT CIVILIAN
STRUCTURES

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CRATERING CONSISTENT WITH AERIAL BOMBARDMENT

CRATERING
CONSISTENT WITH
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APPARENT
INTENTIONALLY
RAZED CIVILIAN
STRUCTURES

RE-PURPOSED
COMPOUND
(SEE FIG 4)

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11 NOV

RE-PURPOSED CIVILIAN SITE

Prior to 27 November, this location appears to have characteristics consistent with a construction site or other civilian facility. The structures, vehicle tracks, and an apparent artillery position that appear as of 27 November suggest that this site has been re-purposed for military use.

27 NOV

AT LEAST 20
STRUCTURES NOW
VISIBLE AROUND
PERIMETER

FIGHTING
POSITIONS

APPARENT
ARTILLERY
POSITION

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11 NOV

27 NOV

APPARENT
FIGHTING POSITIONS

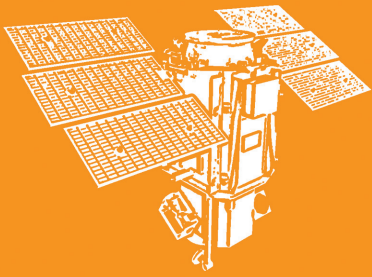
VEHICLE TRACKS
CONSISTENT WITH
HEAVY ARMOR MOVING IN
ATTACK FORMATION

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VEHICLE TRACKS
CONSISTENT WITH
HEAVY ARMOR MOVING IN
ATTACK FORMATION

FIGHTING POSITIONS
CONSISTENT WITH
SPLA-N POSITION



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ABOUT THE PROJECT AND THE PARTNERS

THE WORLD IS WATCHING BECAUSE YOU ARE WATCHING.

The Satellite Sentinel Project – conceived by George Clooney – combines satellite imagery analysis and field reports with Google's Map Maker technology to deter the resumption of war between North and South Sudan. The project provides an early warning system to deter mass atrocities by focusing world attention and generating rapid responses on human rights and human security concerns.

This project is the result of an unprecedented collaboration between Not On Our Watch, the Enough Project, Google, DigitalGlobe, the Harvard Humanitarian Initiative, and Trellon, LLC.

The project works like this: Commercial satellites passing over the border of northern and southern Sudan are able to capture possible threats to civilians, observe the movement of displaced people, detect bombed and razed villages, or note other evidence of pending mass violence.

Google and Trellon design the web platform for the public to easily access the images and reports. Harvard Humanitarian Initiative provides system-wide research and leads the collection, human rights analysis, and corroboration of on-the-ground reports that contextualizes the satellite imagery. The Enough Project contributes field reports, provides policy analysis, and, together with Not On Our Watch, and our Sudan Now partners, puts pressure on policymakers by urging the public to act. DigitalGlobe provides satellite imagery and additional analysis.

The Satellite Sentinel Project marks the first sustained, public effort to systematically monitor and report on potential hotspots and threats to security along a border, in near real-time (within 24-36 hours), with the aim of heading off humanitarian disaster and human rights crimes before they occur.

Not On Our Watch – co-founded by Don Cheadle, George Clooney, Matt Damon, Brad Pitt, David Pressman, and Jerry Weintraub – has provided seed money to launch the project. To support the Satellite Sentinel Project, donate at www.satsentinel.org.

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