

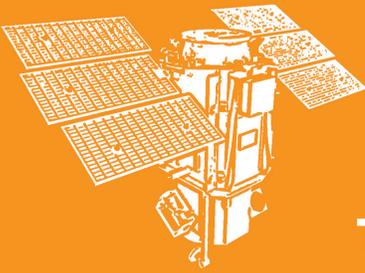


# Satellite Sentinel Project

**HUMAN SECURITY WARNING**

**STATE OF EMERGENCY:  
THREAT OF IMMINENT SAF ATTACK  
ON KURMUK, BLUE NILE**

**23 SEPTEMBER 2011**



# Satellite Sentinel Project

## STATE OF EMERGENCY: THREAT OF IMMINENT SAF ATTACK ON KURMUK

HUMAN SECURITY WARNING

REPORTED BY



Harvard  
Humanitarian  
Initiative

23 SEPTEMBER 2011

Satellite Sentinel Project (SSP) is issuing a human security warning in this report for Kurmuk and the surrounding area due to the strong likelihood of potential SAF attack in the near future which may result in the use of indiscriminate and disproportionate force.

The use of indiscriminate and disproportionate force includes, though is not limited to, the following: the intentional deployment of heavy armor against civilian targets, indiscriminate aerial and artillery bombardment of locations that include non-military targets, and potential extra-judicial killings of civilians by Sudan Armed Forces (SAF) troops, Government of Sudan (GoS)-aligned police units, and/or paramilitary militia groups.

Since May 2011, SAF and other GoS-aligned forces, according to evidence collected by SSP and others, has routinely engaged in the disproportionate and indiscriminate use of force against targets which included civilian populations. This may constitute violations of international humanitarian and human rights law.

These alleged acts have included the disproportionate and indiscriminate use of force during the May invasion of the Abyei region, which resulted in the razing and looting of civilian dwellings and infrastructure; the documented practice of indiscriminately targeting civilian populations through aerial and artillery bombardment in the Nuba Mountains, South Kordofan; and the reported extra-judicial killing of civilians in Kadugli town and elsewhere in Sudan.

There are also credible reports that Sudan People's Liberation Army-North (SPLA-N) forces have conducted indiscriminate shelling and other alleged abuses in some cases. The use of indiscriminate and disproportionate force by any party to this conflict could represent a violation of the laws of war and international human rights standards.

### SUMMARY

Satellite Sentinel Project's (SSP) analysis of DigitalGlobe satellite imagery has identified a unit of Sudan Armed Forces, a brigade-sized force or larger, within at least 40 miles/64 kilometers of Kurmuk, Blue Nile State, Sudan as of the morning of 21 September.

News articles published on 20 September quote the newly appointed governor of Blue Nile, Al-Hadi Bushra, as saying that SAF are leading massive operations around Kurmuk to tighten their hold on the surrounding area and capture the city. Kurmuk is currently under the control of the Sudan People's Liberation Movement-North (SPLM-N).

The apparent SAF vehicles shown in DigitalGlobe satellite imagery include scores of main battle tanks of multiple types, transport trucks, some of which are towing artillery, light vehicles, infantry fighting vehicles, and either artillery or logistics support trucks. The imagery reveals the extensive use of camouflage by SAF in an attempt to deliberately hide the number and type of its vehicles.

Vehicles consistent with those used by SAF forces were seen approximately 7.5 miles/12 km north of Dindiro town on 21 September. SSP cannot currently prove or disprove conflicting claims by either the Government of Sudan (GoS) or the SPLM-N about who currently controls the town of Dindiro. However, SSP has concluded that SAF forces appear to be moving over terrain they previously bombarded with tank and artillery fire. This is based on the presence of tracking consistent with armored vehicles, and cratering consistent with heavy artillery and/or rocket bombardment.

Additionally, SSP has found evidence of SAF forces consistently gaining ground in Blue Nile since at least 9 September, with apparent rapid operational tempo by SAF forces south of Damazin between 9 and 11 September, including overnight trenching of fighting positions by SAF forces. SSP has also identified 6 helicopters consistent with Hind gunships and a fixed-wing aircraft consistent with an AN-24/26 Antonov on the airstrip at Damazin - all within strike range of Kurmuk and the surrounding area.

### 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. Bottom cover image from razed village of Todach provided by Tim Freccia for the Enough Project.





CRATERING  
CONSISTENT  
WITH ROCKET  
OR ARTILLERY  
BOMBARDMENT

APPARENT SAF  
TRANSPORT VEHICLES

UNKNOWN  
MATERIEL

CRATERING CONSISTENT  
WITH ROCKET OR  
ARTILLERY BOMBARDMENT

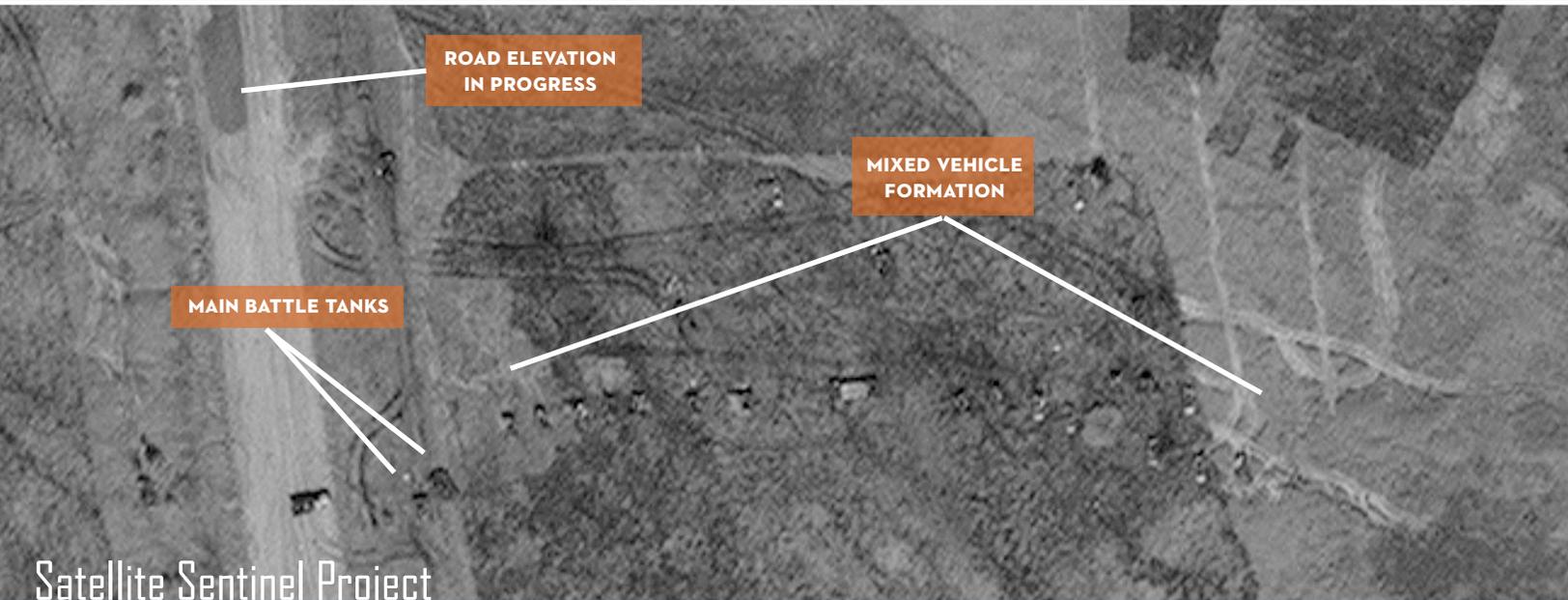


MIXED SAF VEHICLES

FIGHTING POSITIONS



MIXED VEHICLE FORMATION



ROAD ELEVATION IN PROGRESS

MAIN BATTLE TANKS

MIXED VEHICLE FORMATION



AT LEAST 23 VEHICLES  
CONSISTENT WITH LIGHT  
VEHICLES

APPROXIMATELY 30 VEHICLES  
OVERALL, INDICATING AT LEAST  
BATTALION-SIZED UNIT

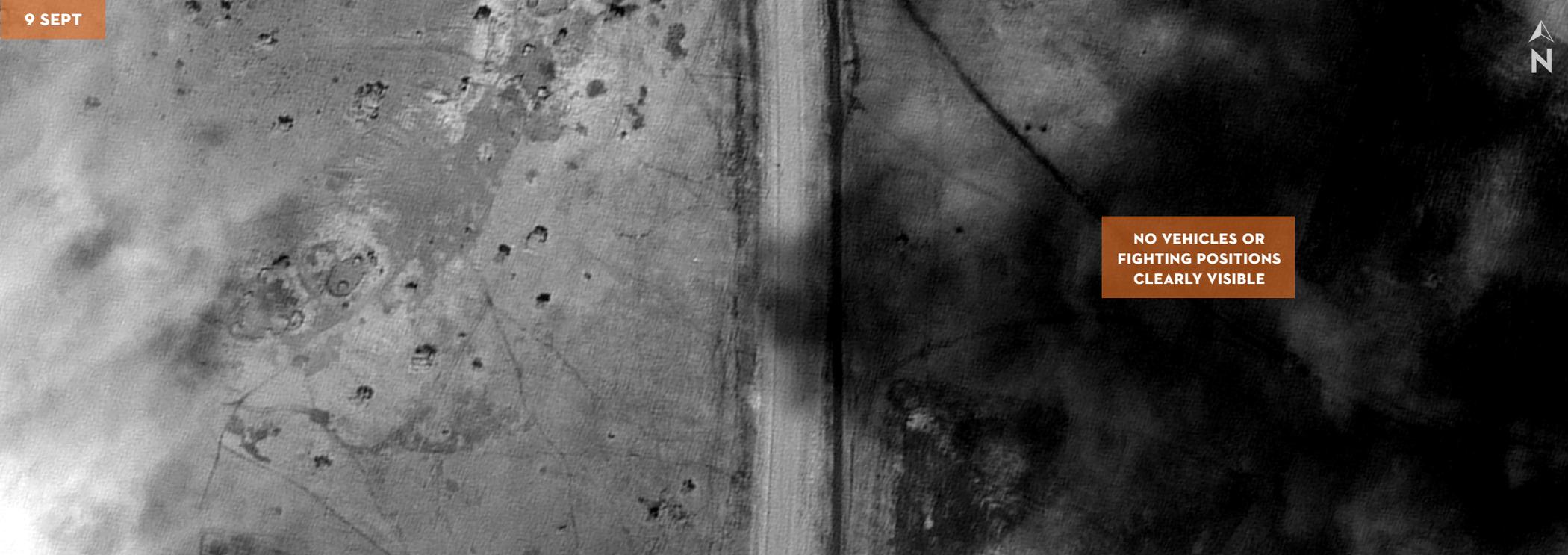
AT LEAST 3 TANKS  
CONSISTENT WITH  
T-54/T-55s

3 LIGHT VEHICLES

TANK CONSISTENT  
WITH T-54/T-55

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9 SEPT



NO VEHICLES OR FIGHTING POSITIONS CLEARLY VISIBLE

10 SEPT



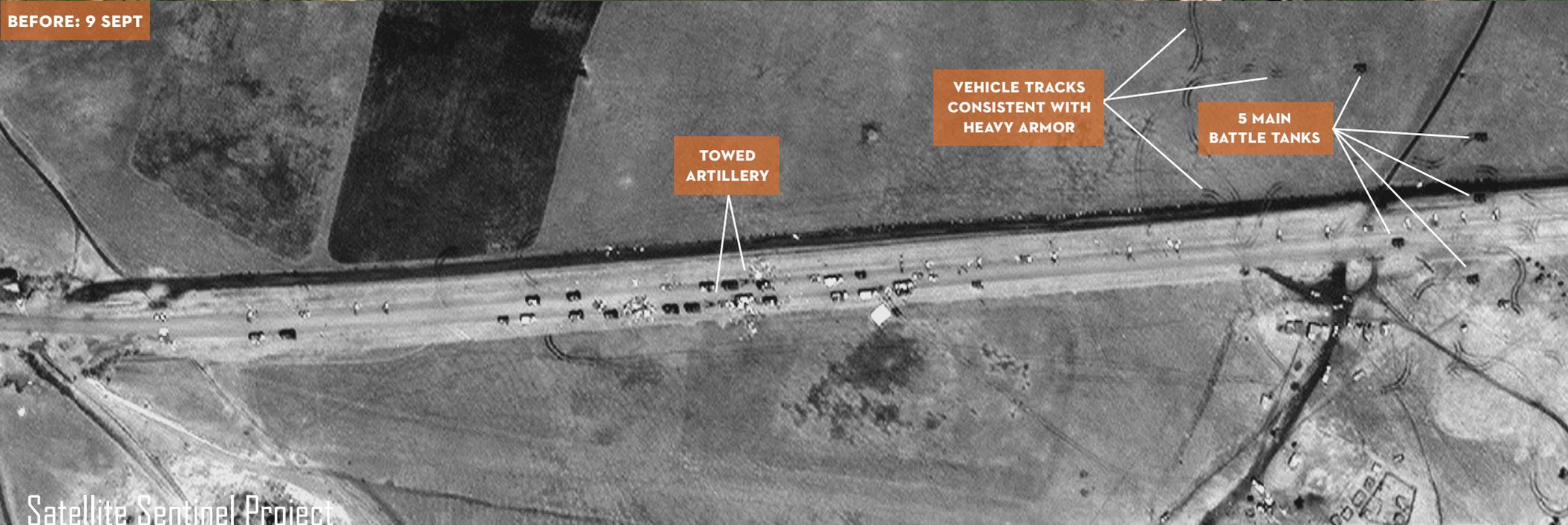
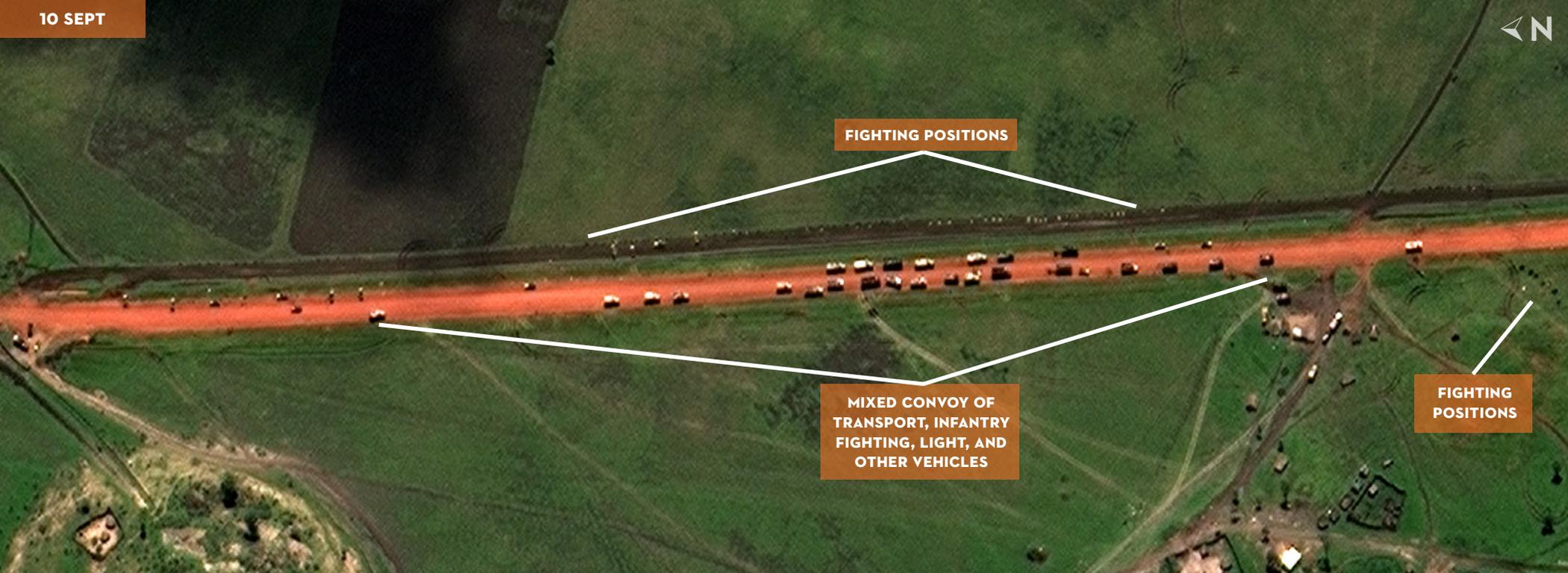
FIGHTING POSITIONS

VEHICLE TRACKING CONSISTENT WITH HEAVY ARMOR

4 LIGHT VEHICLES DIRECTED SOUTH

FIGHTING POSITIONS

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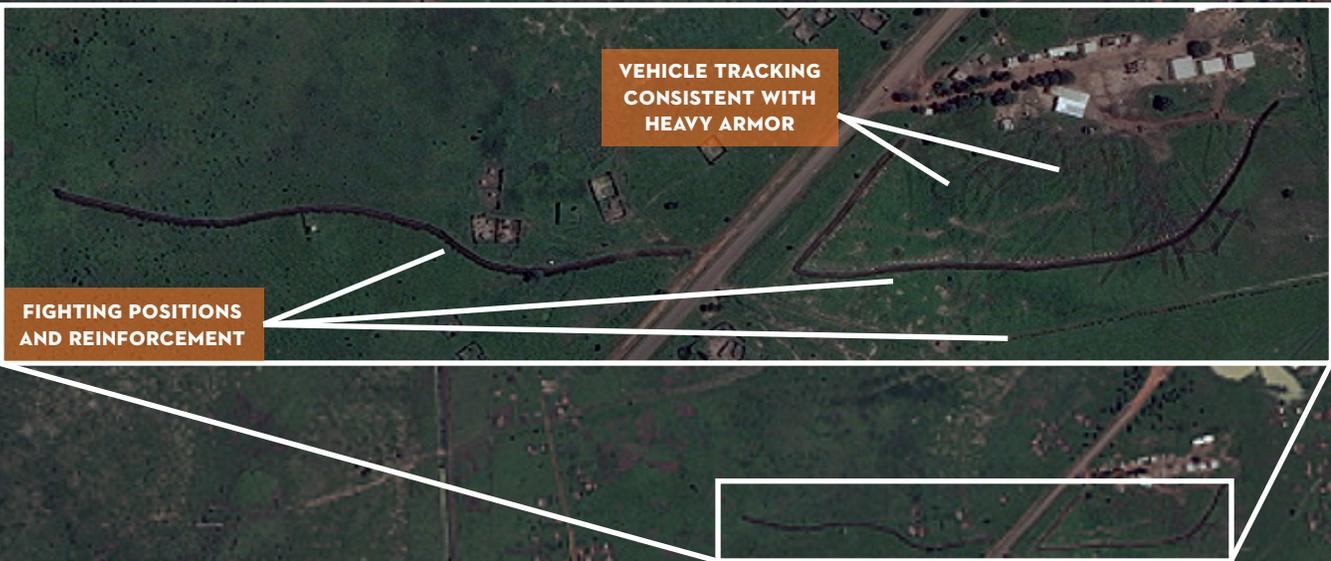


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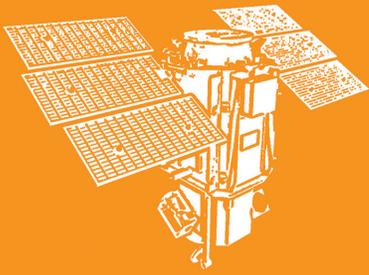
SIX HELICOPTERS  
CONSISTENT WITH  
HIND ATTACK  
GUNSHIPS

PLANE CONSISTENT  
WITH ANTONOV  
AN-24/26



VEHICLE TRACKING  
CONSISTENT WITH  
HEAVY ARMOR

FIGHTING POSITIONS  
AND REINFORCEMENT



# Satellite Sentinel Project

## 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 Trelon, 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 Trelon 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](http://www.satsentinel.org).

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Humanitarian  
Initiative

