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United Nations Institute for Training and Research

UNOSAT

Security Event



12 January 2011

17:00 UTC - Version 1.0

CE-2010-001201-SDN

Kuajok - UNOSAT analysis 1: Returnee areas and infrastructure development

ANALYSIS SUMMARY: This analysis shows the town of Kuajok in South Sudan. The analyzed World View 1 image was acquired on the 22nd of December 2010 and compared against Quickbird 2 imagery recorded on the 26th of December 2008. Infrastructure development can be identified and is marked with annotations. New buildings and road works are the main changes.



Detail of build-up area in Kuajok on 26 December 2005



Detail of new development and buildings on 22 December 2010

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Satellite Imagery (left): Quickbird-02

Resolution: 60cm

Imagery Date: 26. December 2005

Source: Google Earth

Copyright: DigitalGlobe 2010

Report Analysis: UNITAR / UNOSAT

Satellite Imagery (right): Worldview-01

Resolution: 50cm

Imagery Date: 22 December 2010

Source: European Space Imaging

Copyright: DigitalGlobe 2010

Projection: UTM Zone 35N Datum: WGS-84

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12 January 2011 -17:00 UTC - Version 1.0 - CE-2010-001201-SDN - (lat: 28.634N lon: 8.087E)

Kuajok, Sudan: Returnee areas and infrastructure development **By UNITAR/UNOSAT – 12 January 2011**

ANALYSIS BACKGROUND: This is a satellite-based qualitative analysis of the town of Kuajok, located approximately 167 kilometers south of Abyei in Warrab state. Kuajok is currently a destination for returnees to the region following years of displacement due to civil war and its aftereffects. According to the Resident Coordinator Support Office of the UN Mission in Sudan, about 11,189 persons had returned to the Kuajok area in the previous month as part of a government organized resettlement process. While an orderly process overall, the number of returnees have placed strains on food and water disbursements as well as health, educational, and other services.

Infrastructure Changes

Kuajok saw significant development to infrastructure within the satellite image analysis time period from 26 December 2005 and 19 December 2010 as the town increased in size, facilities expanded, and roads multiplied in number. A rapid UNOSAT analysis documented 84 new buildings, an additional 33 new building compounds, the newly paved main road, and 5 new unpaved road segments in the area. Finally, 7 buildings and compounds were removed, often to make way for new roadways.



Contact Information:

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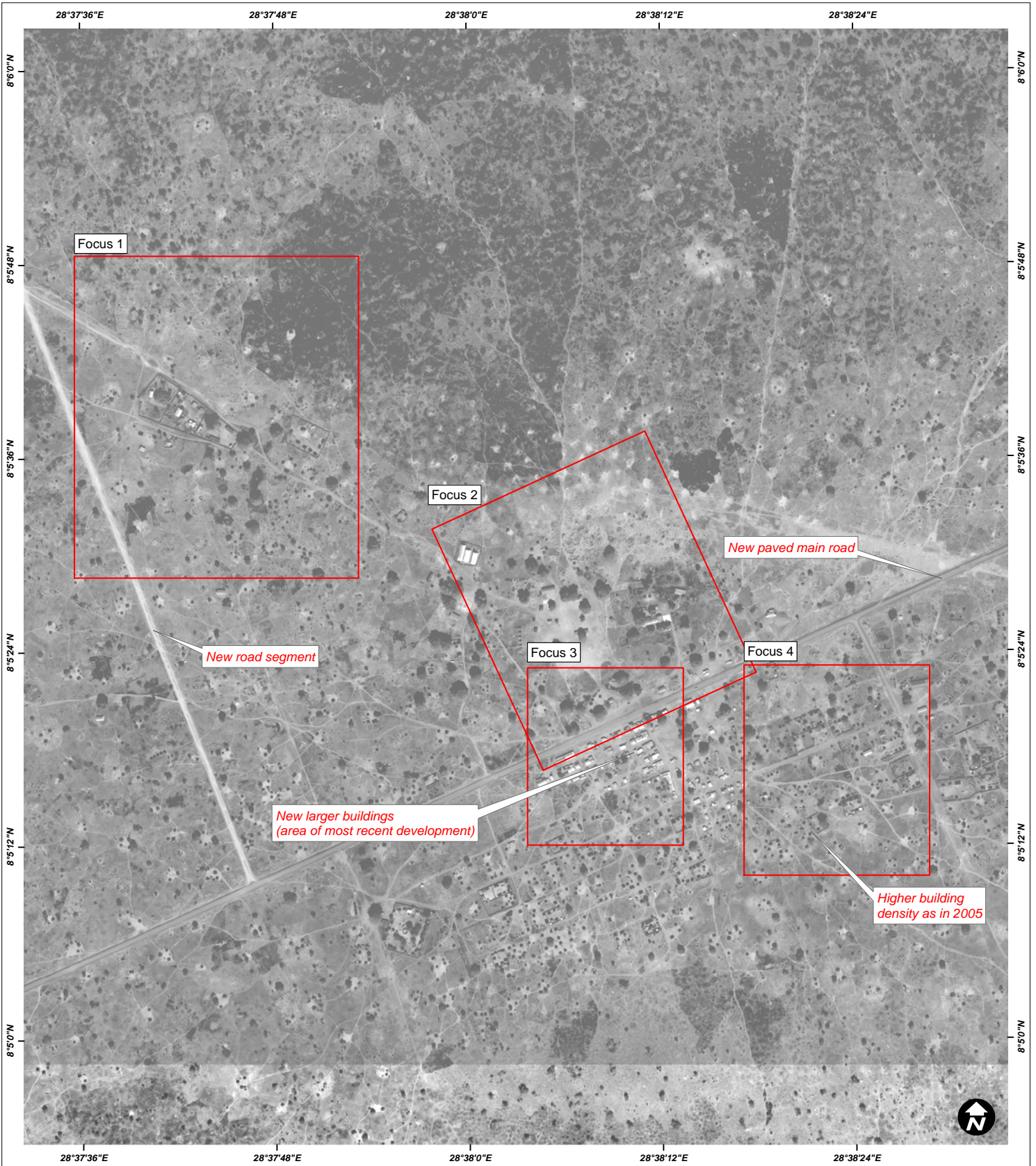
OVERVIEW OF RETURNEE AREAS AND INFRASTRUCTURE DEVELOPMENT IN KUAJOK, SUDAN

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Map Scale for A4: 1:10,000



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VISUAL SATELLITE ASSESSMENT:

This map series shows the town of Kuajok and its returnee areas and infrastructure development since 2005. The displayed World View 1 image was acquired on the 22nd of December 2010. The most obvious changes are road works and new / extended build up areas.

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Satellite Imagery Worldview-01
 Resolution 50cm
 Imagery Date 22 December 2010
 Source DigitalGlobe
 Copyright DigitalGlobe 2010
 Report Analysis UNITAR / UNOSAT
 Projection UTM Zone 35N WGS-84

Image donated by DigitalGlobe



FOCUS 1 OF RETURNEE AREAS AND INFRASTRUCTURE DEVELOPMENT IN KUAJOK, SUDAN

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CE-2010-001201-SDN



Map has been rotated by 180 degree
Map Scale for A4: 1:2,900

VISUAL SATELLITE ASSESSMENT:

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Satellite Imagery Worldview-01
Resolution 50cm
Imagery Date 22 December 2010
Source DigitalGlobe
Copyright DigitalGlobe 2010
Report Analysis UNITAR / UNOSAT
Projection UTM Zone 35N WGS-84

Image donated by DigitalGlobe



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0 50 100 Meters

FOCUS 2 OF RETURNEE AREAS AND INFRASTRUCTURE DEVELOPMENT IN KUAJOK, SUDAN

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CE-2010-001201-SDN



Map has been clockwise rotated by 25 degree

Map Scale for A4: 1:2,400



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Satellite Imagery Worldview-01
 Resolution 50cm
 Imagery Date 19 December 2010
 Source DigitalGlobe
 Copyright DigitalGlobe 2010
 Report Analysis UNITAR / UNOSAT
 Projection UTM Zone 35N WGS-84

Image donated by DigitalGlobe



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FOCUS 3 OF RETURNEE AREAS AND INFRASTRUCTURE DEVELOPMENT IN KUAJOK, SUDAN

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Build up aera with more small buildings than in 2005

New larger buildings, probably non residential (recent development)

New larger buildings (area with most recent development)

New main road (paved)

Map has been rotated by 180 degree
Map Scale for A4: 1:1,600



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Imagery Date 19 December 2010
Source DigitalGlobe
Copyright DigitalGlobe 2010
Report Analysis UNITAR / UNOSAT
Projection UTM Zone 35N WGS-84

Image donated by DigitalGlobe



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FOCUS 4 OF RETURNEE AREAS AND INFRASTRUCTURE DEVELOPMENT IN KUAJOK, SUDAN

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Map Scale for A4: 1:1,900

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