



Production Date: 05/04/2011 Version 2.0

GLIDE: OT-2011-000025-LBY UNOSAT Activation: CE20110220LBY

## **Update 1: Analysis of the Chucha Transitional** Camp, Ben Guerdane, Tunisia (as of 21 March 2011)

ANALYSIS SUMMARY: A total of approximately 2,480 tents and building structures were identified with a high degree of confidence within the well-defined and structured transitional camp site encompassing a current area of approximately 40ha. Of this total, 2,220 tents were likely erected for displaced people as of 21 March 2011, with a further 260 tents and fixed buildings likely allocated for camp infrastructure and staff. Between 3 and 21 March 2011, the camp expanded significantly in both size and capacity, adding over 1,200 tent shelters as well as a range of purpose-built structures likely dedicated

for food, health, sanitation and camp management. Tent shelters erected in early March were also extensively reorganized in several areas in order to improve shelter density, distribution and internal foot traffic. Based on an analysis of the average tent shelter size, the camp had as of 21 March a capacity for a little over 12,000 people according to official UNHCR recommended standards. There was also ground prepared which could accommodate approximately 500-600 additional





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Note: Map has been rotated 156 degrees from North to improve image visualization

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data shown here are not warranted to be error-free nor do they imply information, research and analysis to UN humanitarian & development

Satellite Data (1): IKONOS Imagery Dates: 21 March 2011 Resolution: 1.0 m Copyright: GeoEye 2011 Source: EYEQ Satellite Data (2): WorldView-02

Imagery Dates: 03 March 2011 Resolution : 50 cm Copyright: DigitalGlobe 2011 Source: European Space Imagin Road and Camp Data : UNOSAT Other Data: USGS, NGA

Analysis: UNITAR / UNOSAT Production: UNITAR / UNOSAT Coordinate System: UTM Zone 32N Datum: WGS 1984 Analysis conducted with ArcGIS v10

IKONOS satellite image

recorded 21 March 2011



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Camp Center: lat: 33.1405N Long: 11.4619E

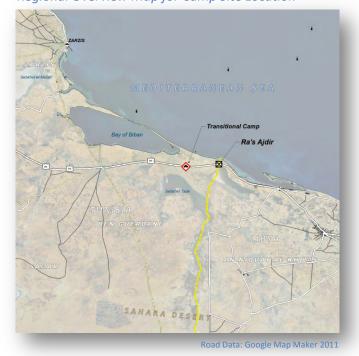
# Tunisian Transitional Camp Analysis By UNITAR/UNOSAT – 05 April 2011

ANALYSIS BACKGROUND: This is a satellite-based quantitative analysis of the Chucha transitional camp for displaced people fleeing the conflict in Libya, located along the southern side of highway route P1, 8.5 kilometers west of the Ra's Ajdir border crossing facility in Ben Guerdane, Tunisia. This assessment provides an updated estimate of the number of tent shelters erected within the camp, the average tent size, and the derived recommended camp population capacity, as based on satellite imagery recorded the morning of 21 March 2011<sup>1</sup>. Two annotated maps are included for reference (see pages 3-4). This report is part of an on-going satellite monitoring program of UNITAR/UNOSAT of the Libyan crisis in support of international humanitarian assistance and created to respond to the needs of UN agencies and their partners. Additional analytical reports and updates will be produced based on new satellite imagery tasking and analysis.

#### **TENT SHELTER COUNT ANALYSIS RESULTS:**

A semi-automated shelter detection analysis was conducted using satellite imagery recorded on 21 March 2011<sup>2</sup>. A total of approximately 2,480 tents and building structures were identified with a high degree of confidence within the well-defined and structured transitional camp site encompassing a

Regional Overview Map for Camp Site Location



current area of approximately 40ha. Of this total, 2,220 tents were likely erected for displaced people with a further 260 tents and fixed buildings likely allocated for camp infrastructure and staff.

Between 3 and 21 March 2011, the camp expanded significantly in both size and capacity, adding over 1,200 tent shelters as well as a range of purpose-built structures likely dedicated for food, health, sanitation and camp management. Tent shelters erected in early March were also extensively reorganized in several areas to improve shelter density, distribution and internal foot traffic. There were two main tent types identified, measuring approximately 3x6m and 4x5m in size respectively. Based on official UNHCR recommended standards<sup>3</sup> this would allow for a camp population capacity of a little over 12,000 people. There was also ground prepared that could accommodate approximately 500-600 additional tents. Chucha camp could be readily expanded beyond its current configuration if needed. This is a preliminary analysis and has not yet been validated in the field. Please send feedback to UNITAR/UNOSAT at the contact information below.

#### **Contact Information:**

Please send additions / corrections to UNITAR / UNOSAT:

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<sup>&</sup>lt;sup>1</sup> The Ikonos satellite contains a very high resolution optical sensor with a spatial resolution of 100cm. Imagery provided by European Space Imaging.

<sup>&</sup>lt;sup>2</sup> This is an update analysis of earlier report published by UNOSAT on 4 March 2011 (http://www.unitar.org/unosat/node/44/1545).

<sup>&</sup>lt;sup>3</sup> UNHCR Handbook for Emergencies 3rdED (2007)



## UNOSAT Update 1: Transitional Camp Analysis: 21 March 2011 **Tent Count, Camp Boundaries and Expansion Areas**

**Civil Conflict** 

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Map Scale for A4: 1:5,500 Note: Map has been rotated 12 degrees

from North to improve map visualization

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Transitional Camp Extent:

Total Camp Extent (21 March) Camp Extent Growth (3-21 March)

Camp Expansion Areas (21 March)

Camp Extent (3 March)

Transitional Camp Tent by Type:

■ Tents for Displaced People (21 March)

■ Camp infrastructure tents/buildings (21 March)

**Functional Road Class** 

----- Highway Tertiary ---- Trail



### Update 1: Transitional Camp Overview 21 March 2011

Civil Conflict

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