



12 September 2023

Preliminary Night-time Light Loss Assessment Following the Adassil/Al Haouz Earthquake (8 September 2023, M6.8) in Marrakech-Safi Region

Morocco

Status: Power outage areas observed.

 $\stackrel{\scriptstyle <}{_{\star}} \equiv$ Further action(s): continue monitoring



MOROCCO

Marrakech-Safi



 Mainshock epicentre (8 september 2023, M6.8)

The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the United Nations. The United Nations Satellite Centre - UNOSAT is not responsible for the misuse or misrepresentation of the map.

72-

The state

EKelaat Es Sraghna

Marrakech

M6.8 [8 Sep 202

Marrakech-Safi

Night-time Light Assessment in Tameslohte Village, Al Haouz Province, Marrakech-Safi Region.

Significant power outage was observed in Tameslohte (20 km SW Marrakesh) on the first day after 08°15'37"W the earthquake. Power supply in the area has restored to pre-earthquake level on 10 September.



JNOSAT

Night-time Light Assessment in Amizmiz Village, Al Haouz Province, Marrakech-Safi Region, Morocco

Significant power outage was observed in Amizmiz (50 km SW Marrakesh) on the first day after the earthquake. Power supply in the area is in recovering but not yet at the pre-earthquake level.

32°N

31°30'N

31°N



Image center:

31°29'07"N

08°15'37"W

JNOSAT

United Nations

SUMMARY OF FINDINGS



- Significant power outage was observed in Tameslohte (20 km SW Marrakesh) immediately after the earthquake. Power supply in the area is apparently restored to pre-earthquake level on 10 September 2023.
- Significant power outage was observed in Amizmiz (50 km SW Marrakesh) on the first day after the earthquake. Power supply in the area is in recovering but not yet at the pre-earthquake level.
- High-resolution night-time light images are ordered to assess the night-time light situation in rural areas of the atlas mountains South of Marrakesh.

COPYRIGHTS & SOURCES



Data sources:

(1) Satellite Images

Satellite Data : VIIRS VNP46A1 & VIIRS VNP46A2 Acquisition date: 01 August 2023 - 11 September 2023 (UTC) Resolution: 500 m Copyright: NASA Source: NASA

Satellite Data : VIIRS VNP46A3 Acquisition date: 01 July 2023 - 31 August 2023 (UTC) Resolution: 500 m Copyright: NASA Source: NASA

(2) Ancillary data

Administrative boundaries: OCHA Field Information Services Section (FISS)

(3) Scientific references

Jia, M., Li, X., Gong, Y., Belabbes, S., Dell'Oro, L., 2023. Estimating natural disaster loss using improved daily night-time light data. International Journal of Applied Earth Observation and Geoinformation. 120, 103359

Analysis: Wuhan University & United Nations Satellite Centre (UNOSAT) Production: United Nations Satellite Centre (UNOSAT) & Wuhan University

This work is supported by Pilot Initiative "Night-Time Light Remote Sensing for Sustainable Development Goals" under Work Programme 2023-2025 of Group on Earth Observations (GEO).





UNOSAT, United Nations Institute for Training and Research (UNITAR)7 bis, Avenue de la Paix, CH-1202 Geneva 2, Switzerland

T +41 22 917 4720 E unosat@unitar.org www.unosat.org