



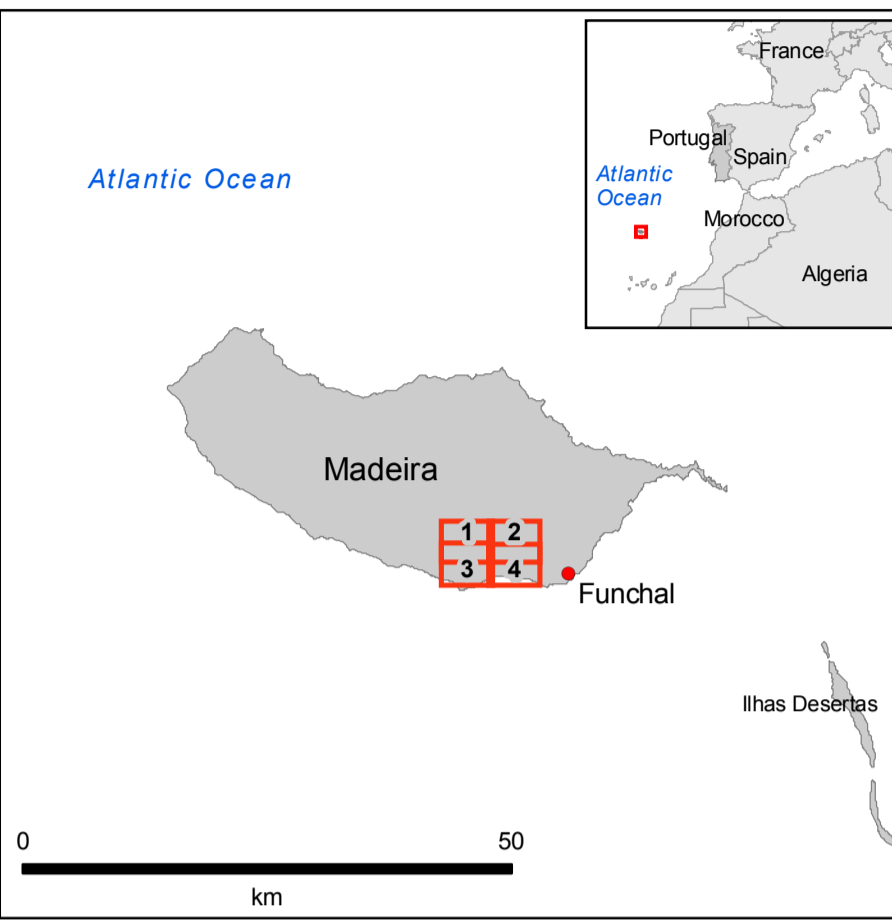
PORTUGAL - Madeira

Flood - Damage Assessment

Sheet 4

February 23, 2010
 Scale 1:7,500

Location Diagrams



Legend

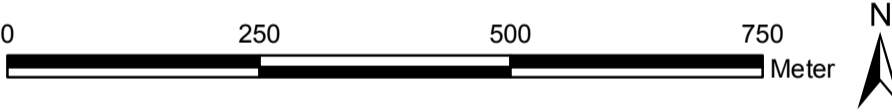
- | | |
|---|---------------------------|
| Infrastructure | Points of Interest |
| — Major road | Administrative building |
| — Minor road | Embassy / Consulate |
| — Bridge | Hospital |
| — Tunnel | Hotel |
| ✈ Airfield | School |
| ✈ Helicopter landing zone | Police station |
| ⚓ Harbour | Fire station |
| | Cemetery |
| | Church |
| | Power installation |
| Damage Assessment | |
| 🟡 Potential mudflow / landslide | |
| 🟢 Potential change in vegetation / land cover | |
| 🟠 Potentially damaged / blocked / affected infrastructure | |

Interpretation

Heavy rainfall on February 20, 2010 caused floods and landslides on the Atlantic island of Madeira. At least 48 people were reported dead and 120 injured. The higher parts of the capital Funchal were hit particularly severely. Several mudflows and landslides affected vegetation and infrastructure. Furthermore, many roads on the island were destroyed or blocked.

Damage assessment was done through visual interpretation of post-disaster GeoEye-1 imagery acquired on February 23, 2010, and of pre-disaster aerial photographs. The analysis may differ from actual damages on the ground.

Cartographic Information



Local projection: UTM Zone 28 North, Datum: WGS 84
 Geographic projection: Lat/Lon (DMS), Datum: WGS 84

Scale: 1:7,500 for A1 prints

Data Sources

- | | |
|----------------|---|
| GeoEye-1 | © GeoEye, Inc. / e-GEOS 2010 |
| Aerial imagery | © Direcção Regional de Informação Geográfica e Ordenamento do Território 2007 |

Damage assessment © DLR 2010

Vector data © European Union Satellite Centre 2009

Framework

The products elaborated for this Rapid Mapping Activity are realised to the best of our ability, within a very short time frame, during a crisis, optimising the material available.

All geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials. No liability concerning the content or the use thereof is assumed by the producer.

The ZKI crisis maps are constantly updated. Please make sure to visit <http://www.zki.dlr.de> for the latest version of this product.

Map produced on February 24, 2010 by ZKI
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