

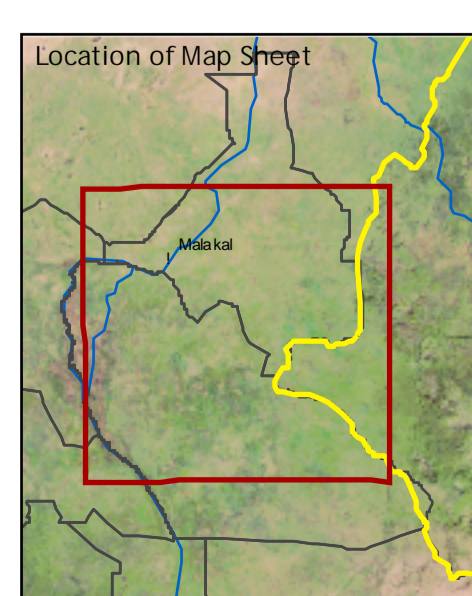
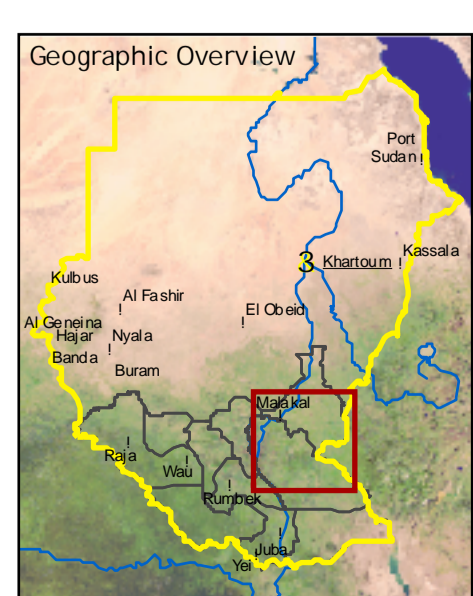


Southern Sudan State Map Series

Upper Nile State

Sudan
1 : 500'000

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Federal Department
of Foreign Affairs
3003 Berne, Switzerland



- Political boundaries**
 - State boundary (tentative)
 - National boundary
 - North-South demarcation line 1956 (tentative)
- Settlements**
 - State capital
 - Principal town
 - Secondary town
 - Administrative town
 - Settlement (verified)
 - Settlement (not verified)
 - Built-up area
- Topography**
 - Spot height
 - Main contour (100m interval)
 - Intermediate contour (40m interval)
 - Supplementary contour
- Geographical features**
 - Hills and mountains
- Infrastructure features**
 - Acristy (CEE)
 - Main road (CDE)
 - Gravel road (CDE)
 - Dirt road (CDE)
 - Street (CDE)
 - Railway (CDE) (non-operational)
 - Main road (ES)
 - Gravel road (ES)
 - Street (ES)
 - Dirt road and track (ES)
- Hydrological features**
 - Canal (griffished)
 - Main river
 - Seasonal river
 - Occasional river
 - Episodic river
 - Dry river
 - Canal
 - Lake and riverbed
- Elevation classes**
 - below 400m
 - 401 - 450 m
 - 451 - 500 m
 - 501 - 550 m
 - 551 - 700 m
 - 701 - 900 m
 - 901 - 1'300 m
 - 1'301 - 1'800 m
 - 1'801 - 2'500 m
 - above 2'500 m
- Land cover classes**
 - Forest
 - Bushland
 - Spars vegetation
 - Arable land
 - Surface water
- Wetlands**
 - Freshwater marshes and floodplains
 - Saline wetland

Project Information
The present map sheet is composed of field maps (1:250,000) and a series of state maps of the Southern Sudan State Map Series (1:500,000). The maps and the geodatabase were prepared by the Centre for Development and Environment (CDE) of the University of Berne, Switzerland, with funding from the Swiss Federal Department of Foreign Affairs. The map is being released as a technical contribution to support the humanitarian peacekeeping and reconstruction efforts in Southern Sudan. Boundaries, towns, locations, settlement locations and the North-South demarcation line of 1956 shown on this map are not authoritative and should not be considered as such. The CDE (University of Berne) would welcome any information that could improve this map. For comments and suggestions, please contact the CDE at info@cde.unibe.ch.

Data sources
Most of the line and point features were provided by Earthview Information Services, Minneapolis, USA (ES) based on the National Aeronautics and Space Administration (NASA) 1:500,000 scale vector data (1:250,000 and 1:100,000 scales). Many vector objects (quantity information, but such as roads, boundaries, rivers, etc.) were not available. Vector data were provided by the Swiss Federal Department of Foreign Affairs (SDF) and the Swiss Federal Office of Topography (swisstopo). Vector data were provided by the Swiss Federal Office of Topography (swisstopo). Vector data were provided by the Swiss Federal Office of Topography (swisstopo).

Data compilation
Georeferencing of spatial data was obtained through vector-to-image rectification. Except for the non-sloping areas, NASA 1:500,000 data were used as a reference for topographic features and for the development of a digital terrain model (DTM). The DTM has a 90-meter resolution and shows contours. Aerial photos and satellite imagery were not applied. Average geometric distortion is estimated to be below 0.15 m. Rectification, however, both in the horizontal and vertical plane, were not applied. Ground truthing and control points were not applied. Ground truthing and control points were not applied.

Coordinate system
Projection: Universal Transverse Mercator (UTM)
UTM Zone: UTM 34 Q (20° east of Greenwich)
Meridian of Origin: 23 degrees 00 minutes (central meridian)
Latitude of Origin: Equator
Horizontal Datum: WGS84
Vertical Datum: Mean sea level
Spheroid: WGS84

Scale
1:500'000
0 5 10 15 20 25 km

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