

EuroDEM and the EuroDEM30 prototype

Presentation to: INSPIRE KEN workshop

By: Saulius Urbanas (EuroGeographics); Sebastian Lass (BKG, DE)

Date: 29 September 2015





EuroDEM product

- 8 10m vertical accuracy
- 2 arc seconds grid width
- Grid 60m
- CRS: ETRS89, EVRS
- 40 countries
- Delivery formats:
 - ESRI Grid, ESRI Grid ASCII, GeoTIFF, XYZ ASCII







EuroDEM30 pilot

 Pilot for production of DEM30 based on the requirements of EuroControl (TOD - Terrain and Obstacle Data): DE, PL, CZ

	Area 1	Area 2	Area 3	Area 4	
Post spacing	3 arc seconds	1 arc second	0.6 arc seconds	0.3 arc seconds	
	(approx. 90 m)	(approx. 30 m)	(approx. 20 m)	(approx. 9 m)	
Vertical accuracy	30 m	3 m	0.5 m	1 m	
Vertical resolution	1 m	0.1 m	0.01 m	0.1 m	
Horizontal accuracy	50 m	5 m	0.5 m	2.5 m	
Confidence level	90%	90%	90%	90%	





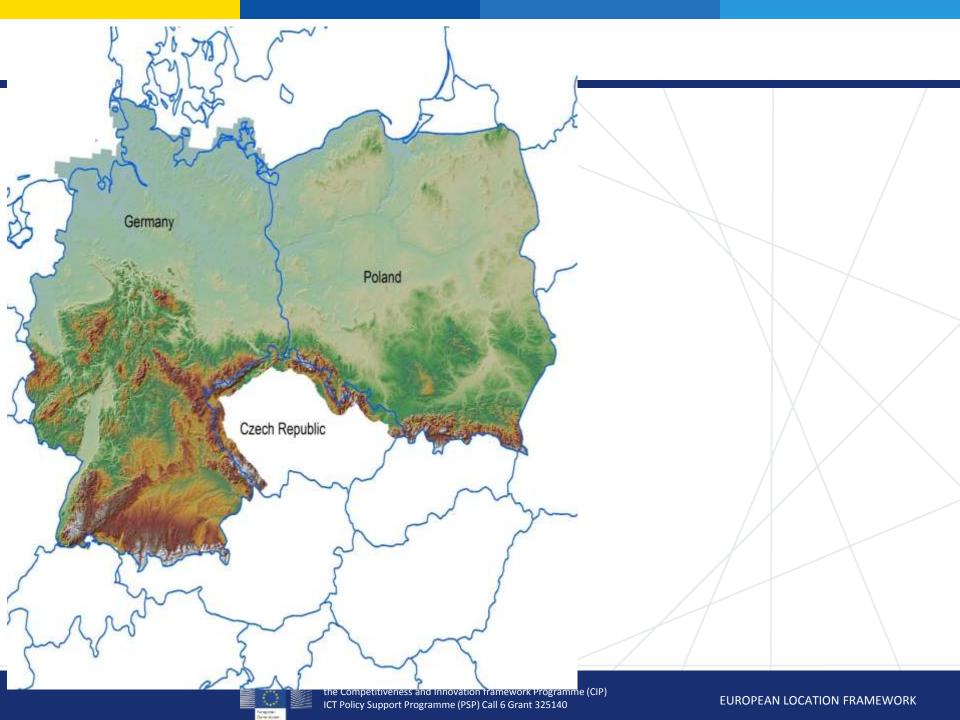
Description of the dataset

- Pan-European Digital Terrain Modell with a grid width of 1 arc second
- Successor to EuroGeograpics' EuroDEM (2 arc seconds)
- Pilot dataset contains data from Germany, Poland and a 20km strip of Czech Republic at the borders
- Produced in cooperation with NMCAs
- Seamless dataset which was harmonised at the country borders



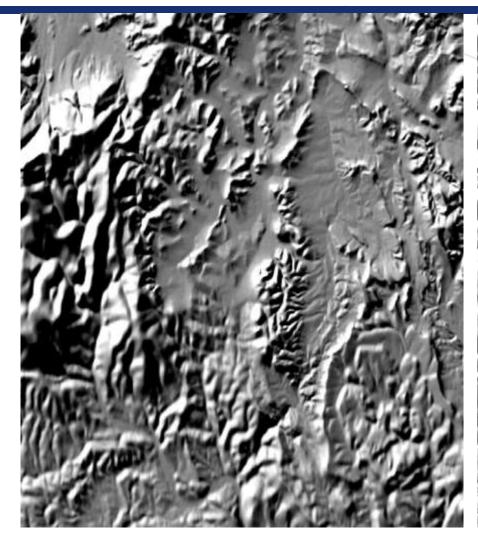
Technical Specifications

- Raster data
- ,Bare earth' heigths
- Heights were derived by Laserscanning and Stereo-Photogrammetry
- Grid width 1 arc second →
 ~30m in meridian direction
- 1 3 meters vertical accuracy
- Geodetic Datum: ETRS89
- Vertical Datum: EVRS
- File Formats: ESRI Grid, ESRI





Comparison between EuroDEM and EuroDEM30 – Mountain areas



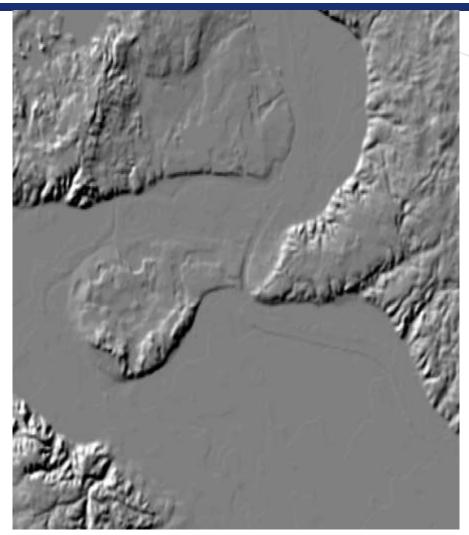


EuroDEM30





Comparison between EuroDEM and EuroDEM30 – River areas

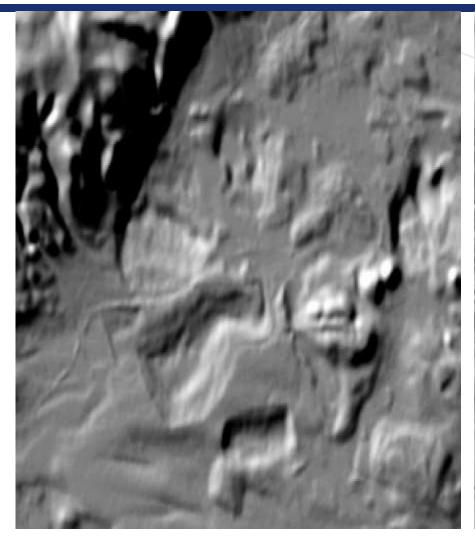


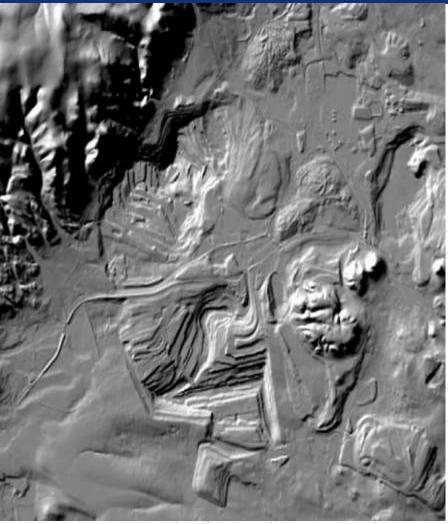


EuroDEM30



Comparison between EuroDEM and EuroDEM30 - Open-cast mining



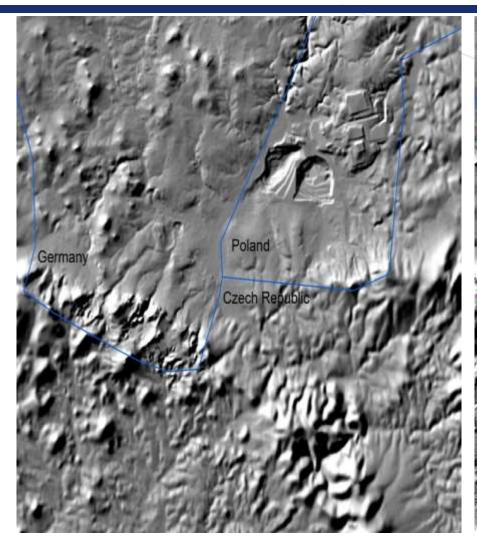


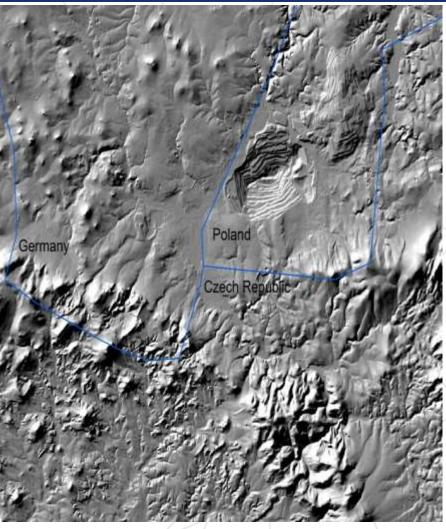
EuroDEM EuroDEM30





Comparison between EuroDEM and EuroDEM30 – Border region





EuroDEM30





Meeting in EuroControl, 23rd Sept 2015

- Positive appreciation "mapping is not our primary business!"
- Interest to test the prototype by EuroControl and its partners
 - Airbus Helicopters
 - Jeppesen
 - Lufthansa Systems
 - Navtech
- Tests on the ground and in the air

