A Copernicus DEM from WorldDEM Data

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Abstract

ESA has recently contracted Airbus Defence and Space for the generation of a unique Copernicus Programme DEM. This globally homogenous Digital Elevation Model (DEM) will provide the Copernicus user community with an harmonized data set of high quality and fidelity. It is derived from Airbus' global WorldDEM DSM data set which has been generated by the TanDEM-X mission. The Copernicus DEM will comprise 3 levels of resolution (90m and 30m for global coverage, 10m for the coverage of EEA36), covering also regions beyond 60° North and South without any missing areas. The data will also be available in different formats. The 90m DSM will be freely available.

The presentation will describe the process of the WorldDEM DSM generation from the raw data in the context of the TanDEM-X mission characteristics, covering topics as error removal and hydro-enforcement. It will then detail the process of the Copernicus DEM derivation and discuss the resulting Copernicus DEM characteristics.

Keywords - Digital Elevation Model (DEM)