



CEOS WGCV Plenary # 40

Agency Report - DLR

Albrecht von Bargaen

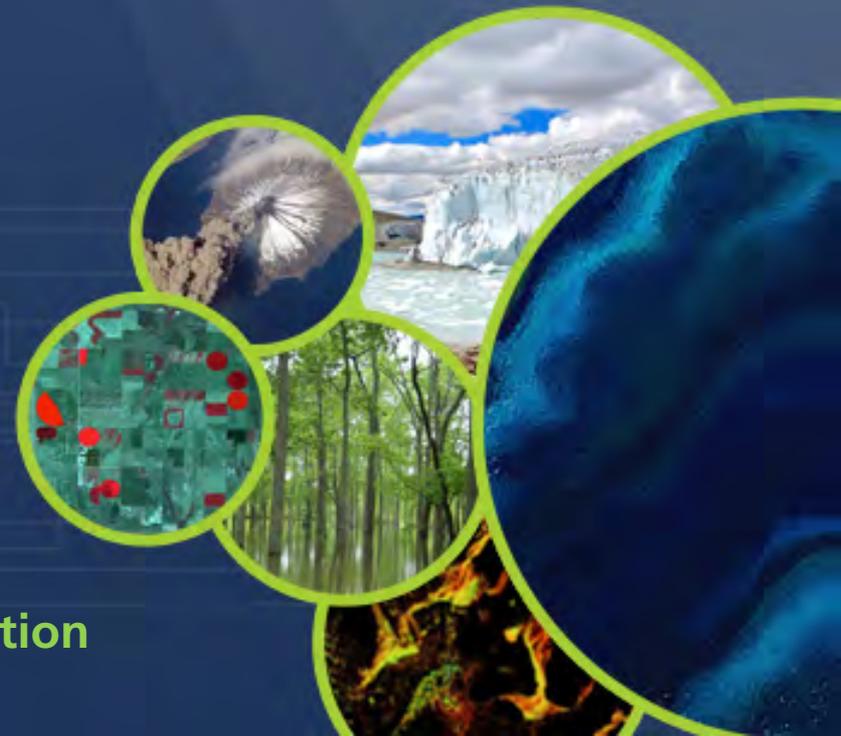
Chair CEOS WGCV

Agenda Item 001

WGCV Plenary # 40

Canberra

March 14- 18, 2016



Working Group on Calibration and Validation



1. **Germany largest participant in European EO Programmes**
 - ESA EO Envelope Programme, Copernicus and EUMETSAT Programmes
2. **Complementary German EO Programme (national)**
 - Missions, Technology, Data Exploitation

Activities in the national Earth Observation Programme

Missions

- TerraSAR-X, TanDEM-X, RapidEye, EnMAP, METimage, MERLIN, GRACE FO

Scientific and technical Mission Preparation

- HRWS, Lidar, IR Detectors, TerraSAR-X HD, Tandem-L

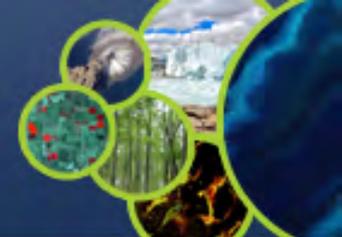
Mission Support & Development of Applications

- TerraSAR-X, TanDEM-X and EnMAP algorithms,
- Synergy between national missions + Sentinels, new Applications for national missions

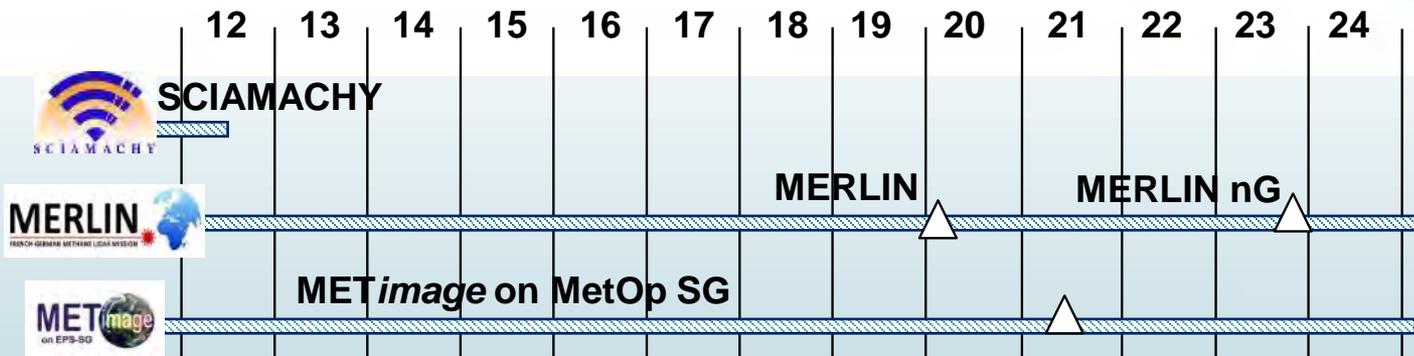
Market Development and Copernicus

- Sentinel services, Copernicus Pilot programme, Copernicus

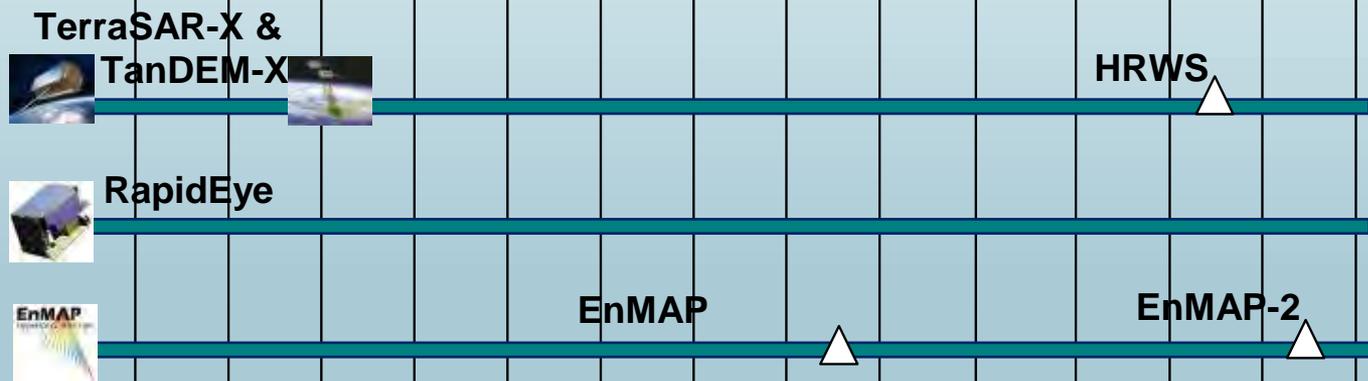
German National Missions



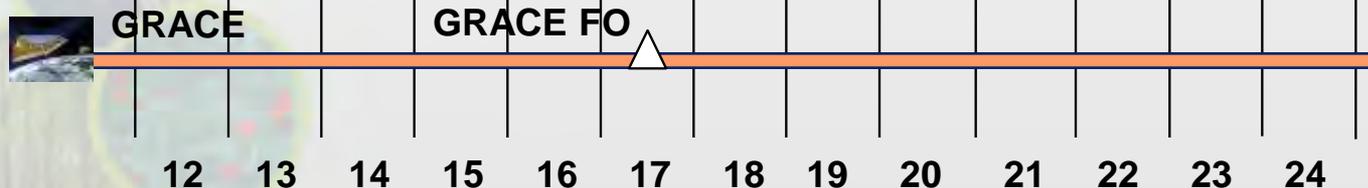
Atmosphere, Meteorology, Climate



Land, Hazards



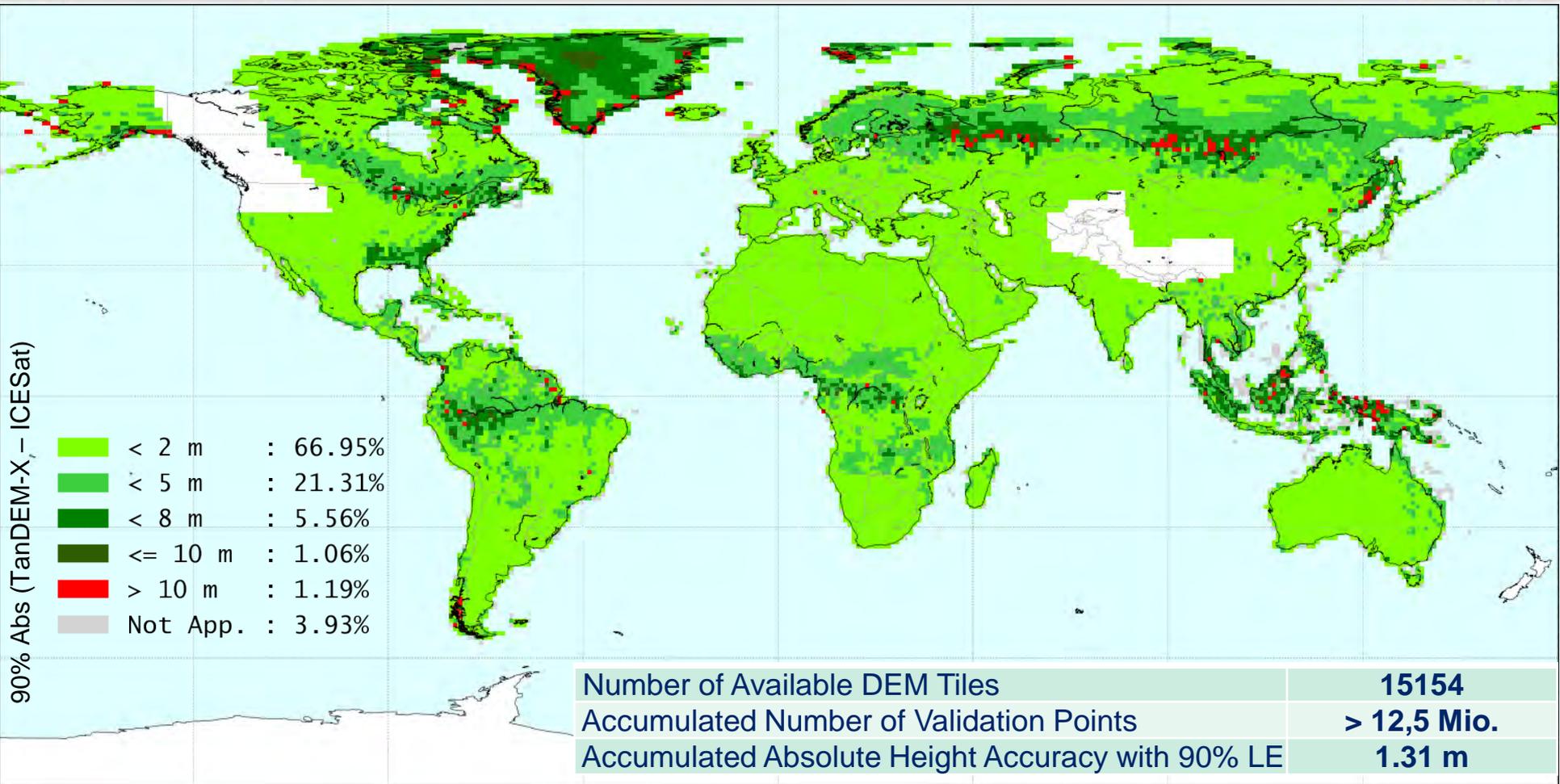
Geophysics

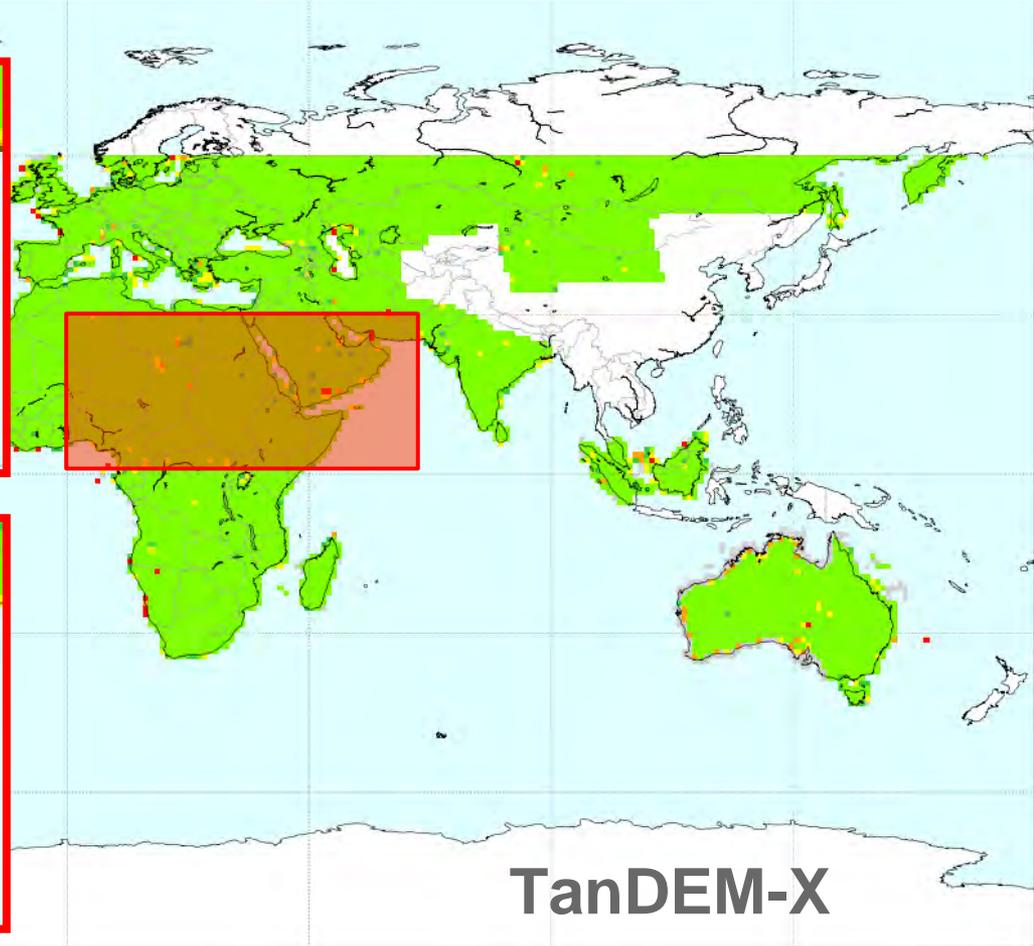
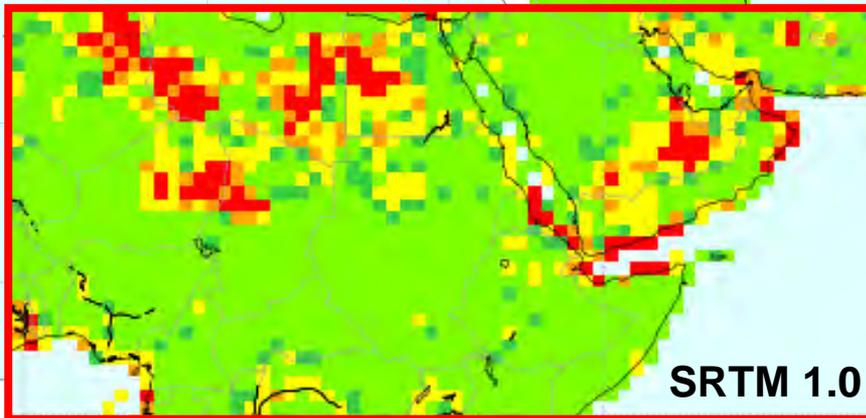
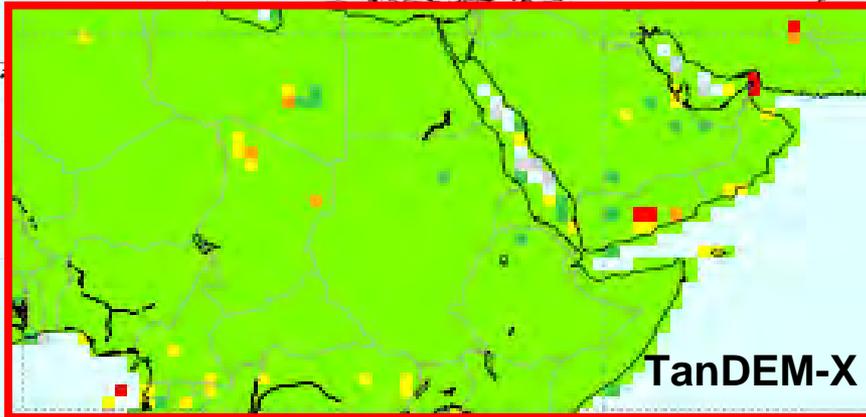


- Cindy Ong (CSIRO) now member of EnMAP-SAG team

Status TerraSAR-X & TanDEM-X

(Manfred Zink, DLR-HR)





TanDEM-X Data Set shows significantly less voids

Sedan Crater

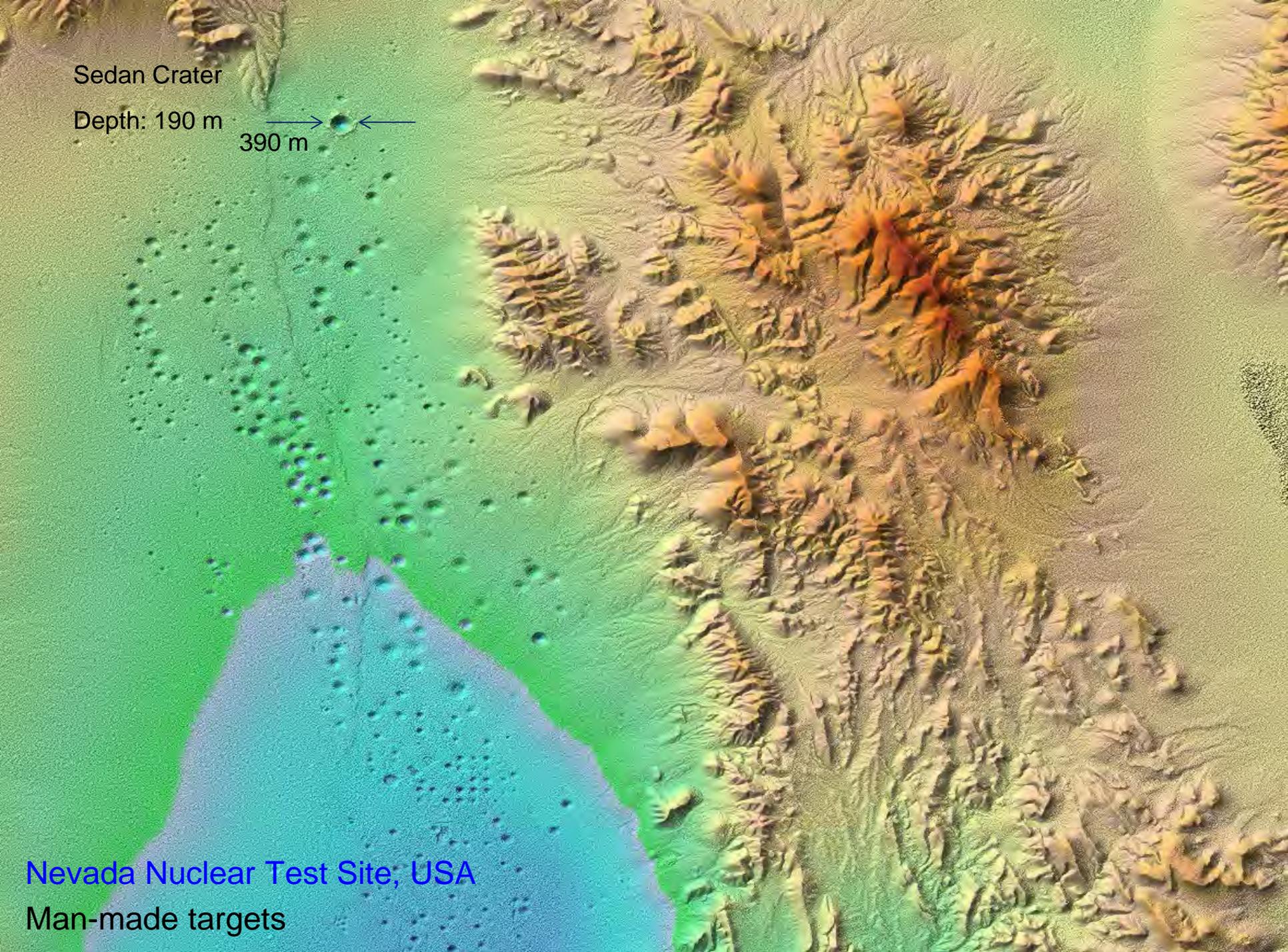
Depth: 190 m

390 m



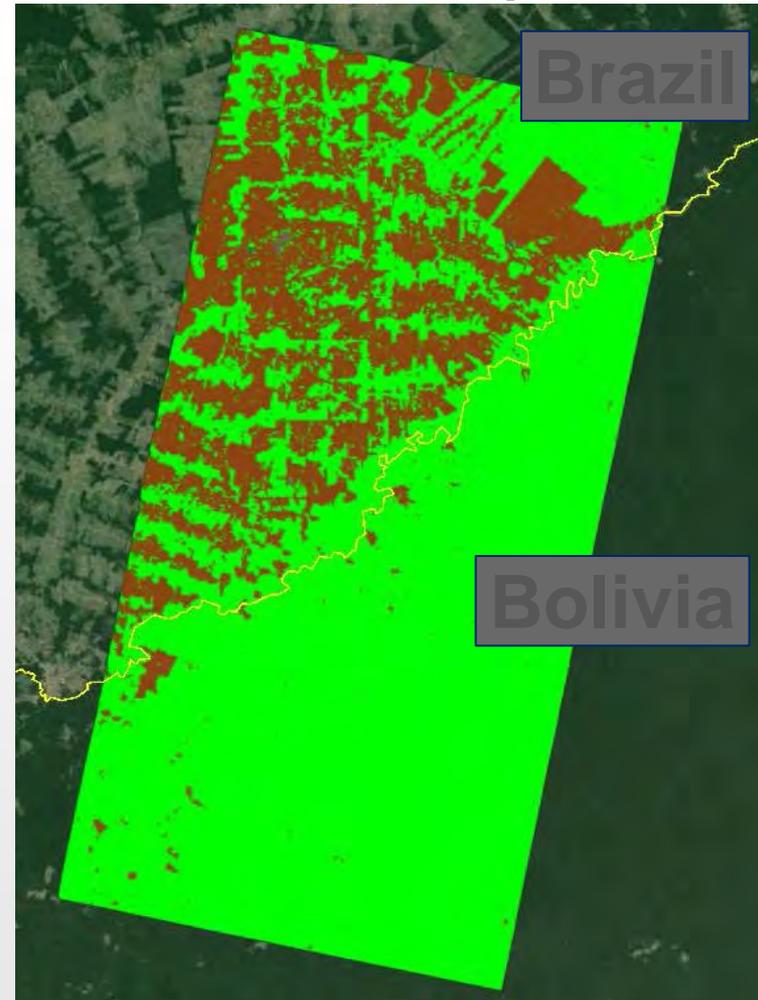
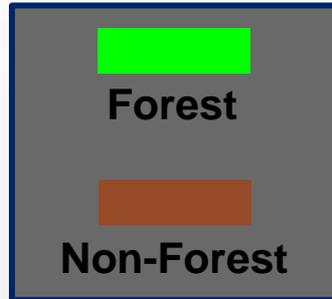
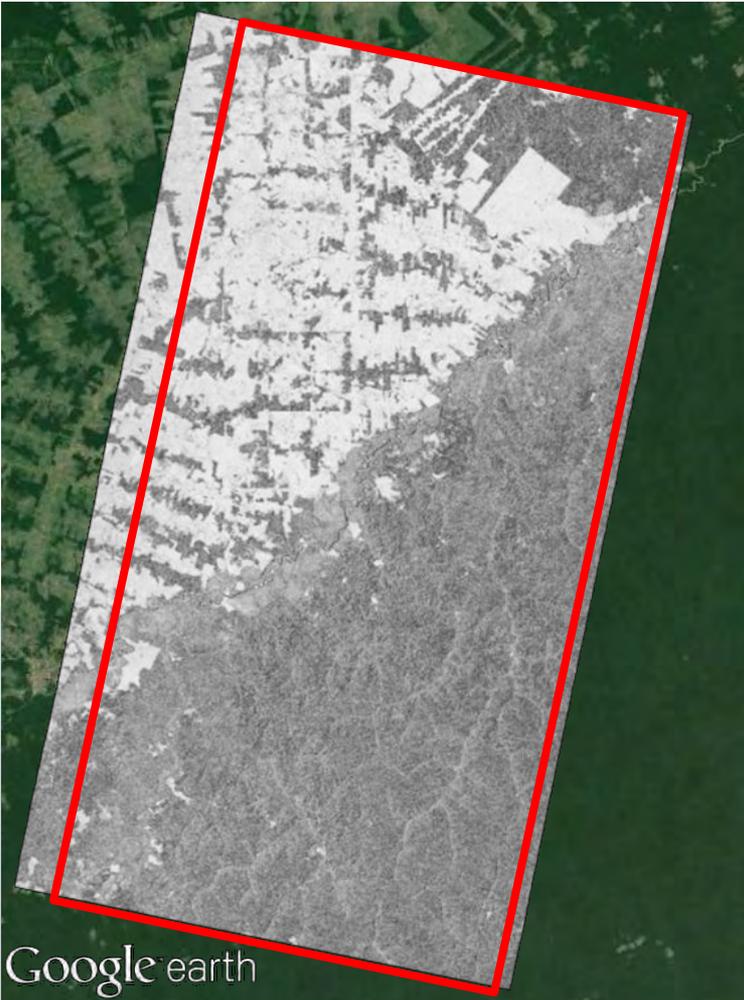
Nevada Nuclear Test Site, USA

Man-made targets



Coherence map

Forest map





- Stable operations in close formation since Oct-2010, outstanding calibration of the interferometric system
- > 80% of the final TanDEM-X DEMs processed (available data well within specifications); global TanDEM-X DEM to be completed mid 2016
- **AO for global TanDEM-X DEM in preparation (to be issued ~end of March)**
- Global forest / non-forest map in preparation
- Currently acquisition of data for high-resolution DEMs (HDEM)