

## Calibration and Mosaicking Status IDEM & DEM DEM Product Specification

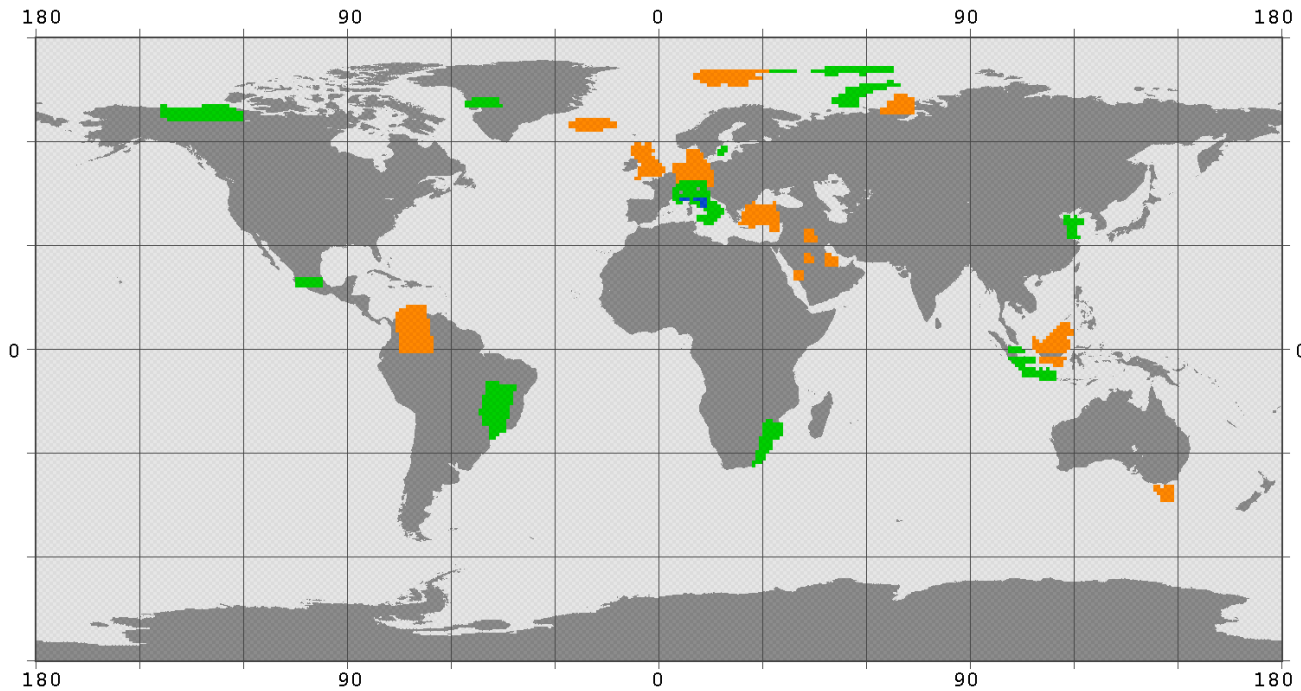
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A. Wendleder, A. Roth**



# Intermediate DEM (IDEM) Production Status (June 2013)

Start of IDEM production incl. archiving in the PL archive march 2013

w42 TDM IDEM



Investigated area: ul-lr lon/lat -180 90 - 180 -90

Found cells: 1331  
Total kbytes: 750051772  
Covered skm: 6364761.8

- cell created
- cell updated
- cell archived
- cell reloaded
- cell deleted

## Characteristics of IDEMs

Missing single Raw DEMs  
due to phase unwrapping errors

Gaps: For IDEM potential erroneous  
scenes are left out (conservative approach)

Missing single raw DEMs  
due to „PI-Ambiguity“ errors

Gaps: For the final DEM these errors can be eliminated  
to a large extent by (dual-baseline) re-processing  
— all scenes will be mosaicked; in case of inconsistencies  
these are annotated in the consistency mask (COM)

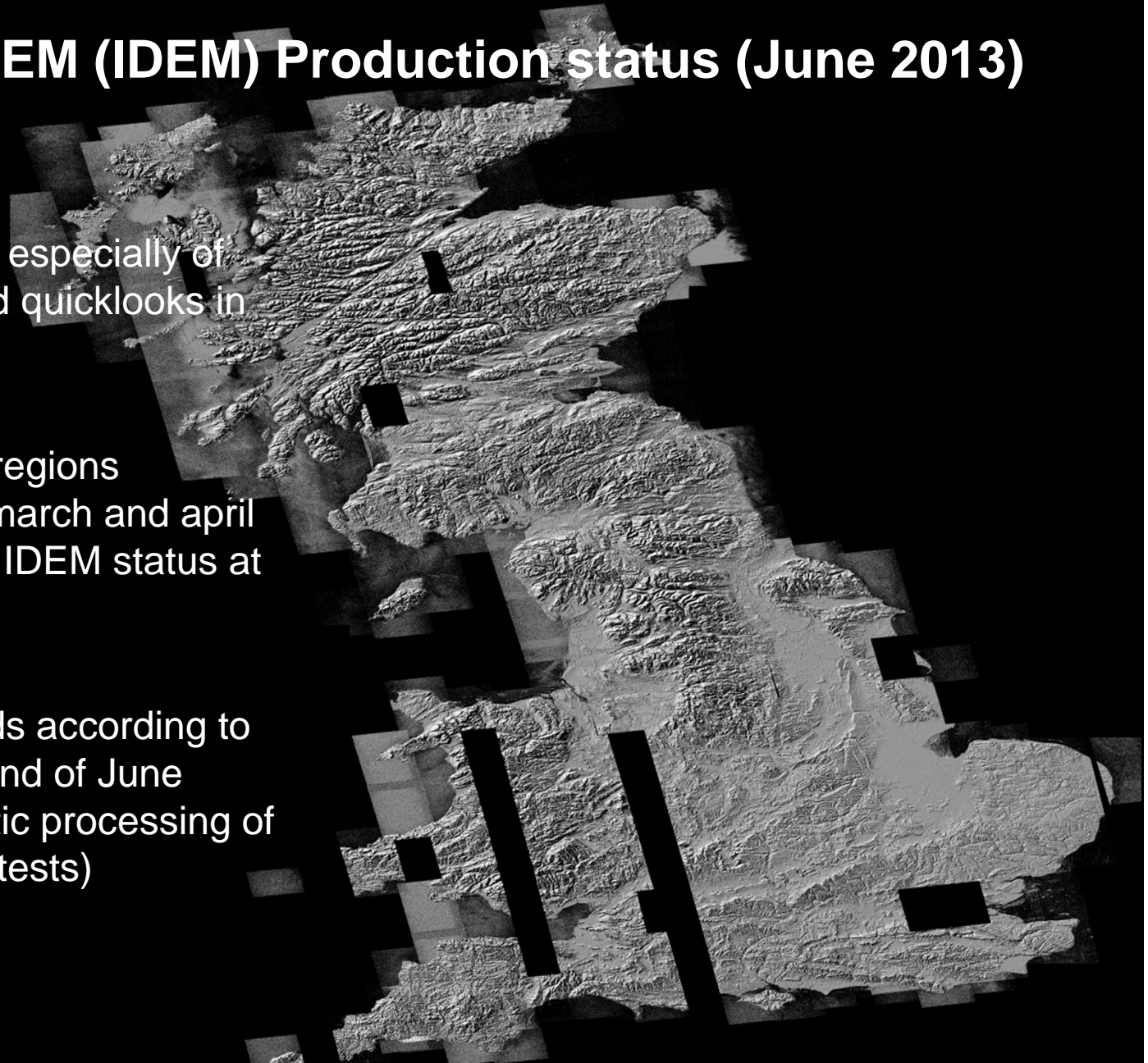
IDEM consisting of first and additional for the first coverage  
-> demTileStatus „COMPLETED“

## **Intermediate DEM (IDEM) Production status (June 2013)**

Finalization of format especially of the metadata xml and quicklooks in april

Re-processing of all regions processed between march and april for a homogenous IDEM status at EOWEB

IDEM Production ends according to the production plan end of June 2013 with a systematic processing of North Canada (load tests)



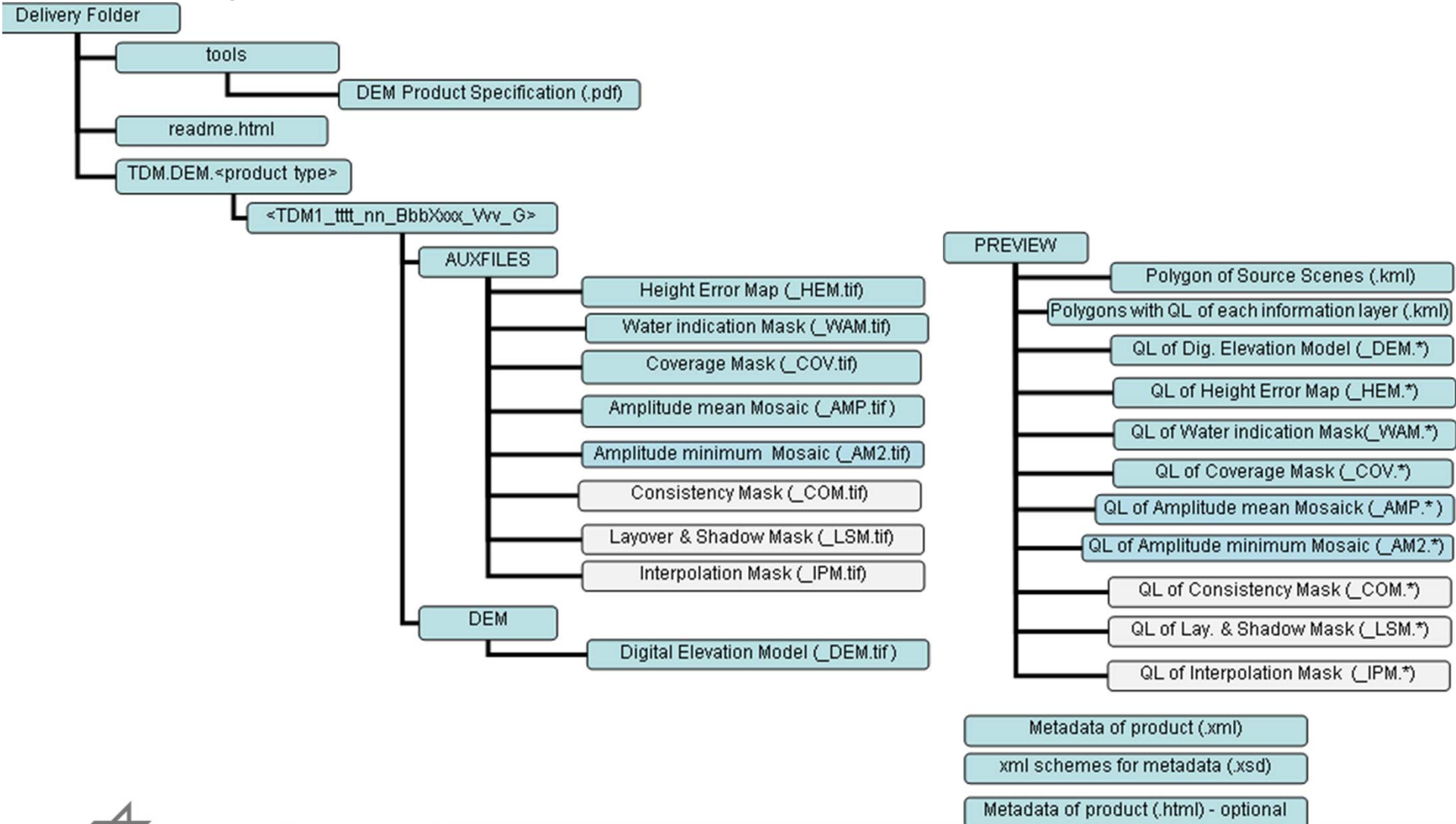


## Presentation of IDEM tile N56W004 via Google Earth

- Before the session: start all kmles in imagesN56W004
- Show overview kml and its layers
- Show DEM details, switch with google earth, mountains, forests good visible
- Water in DEM -> AMP, AM2, HEM -> WAM and its annotation
- COM, COV
- Comparison to ICESat
  
- Hint to the poster session Thursday 17:20 – 19:30
- Two IDEM poster (not in the program)

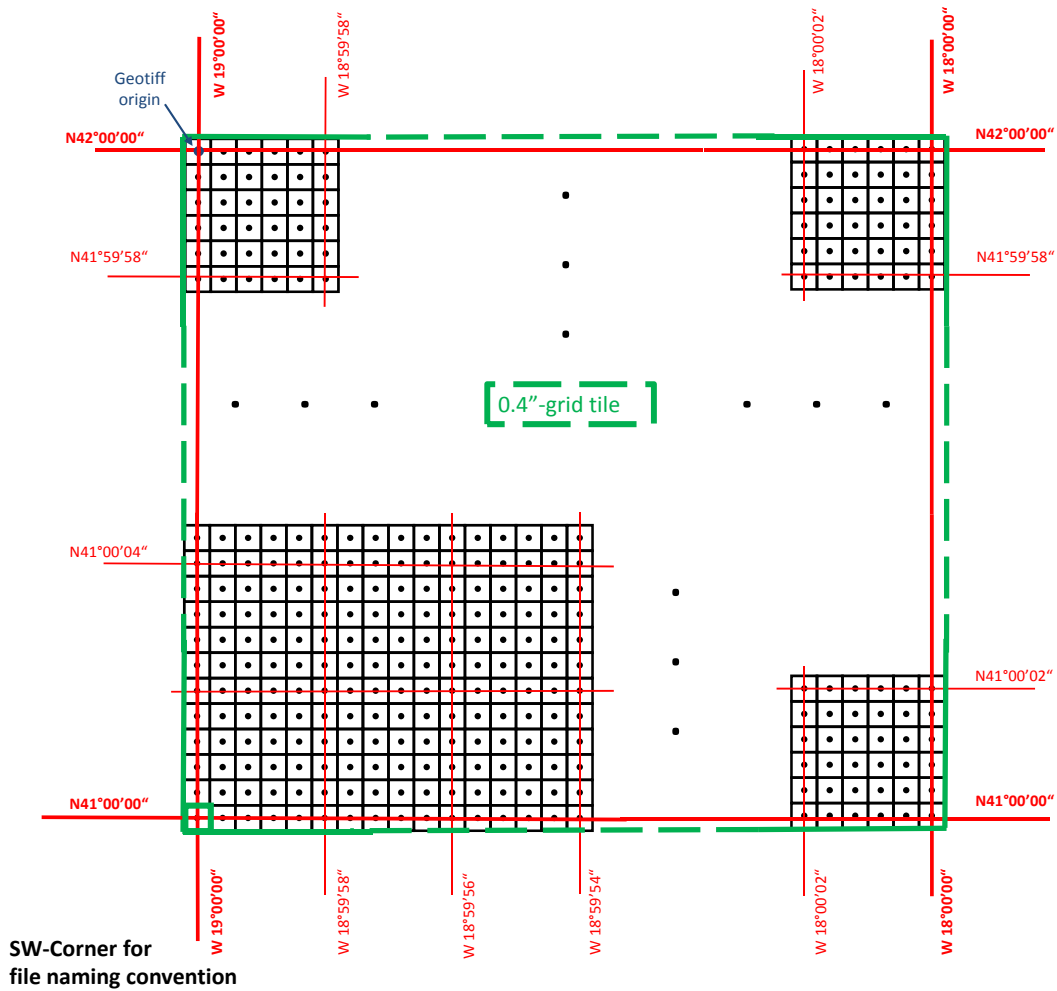


# Delivery format of IDEM





# Raster of one 1° x 1° TanDEM-X DEM





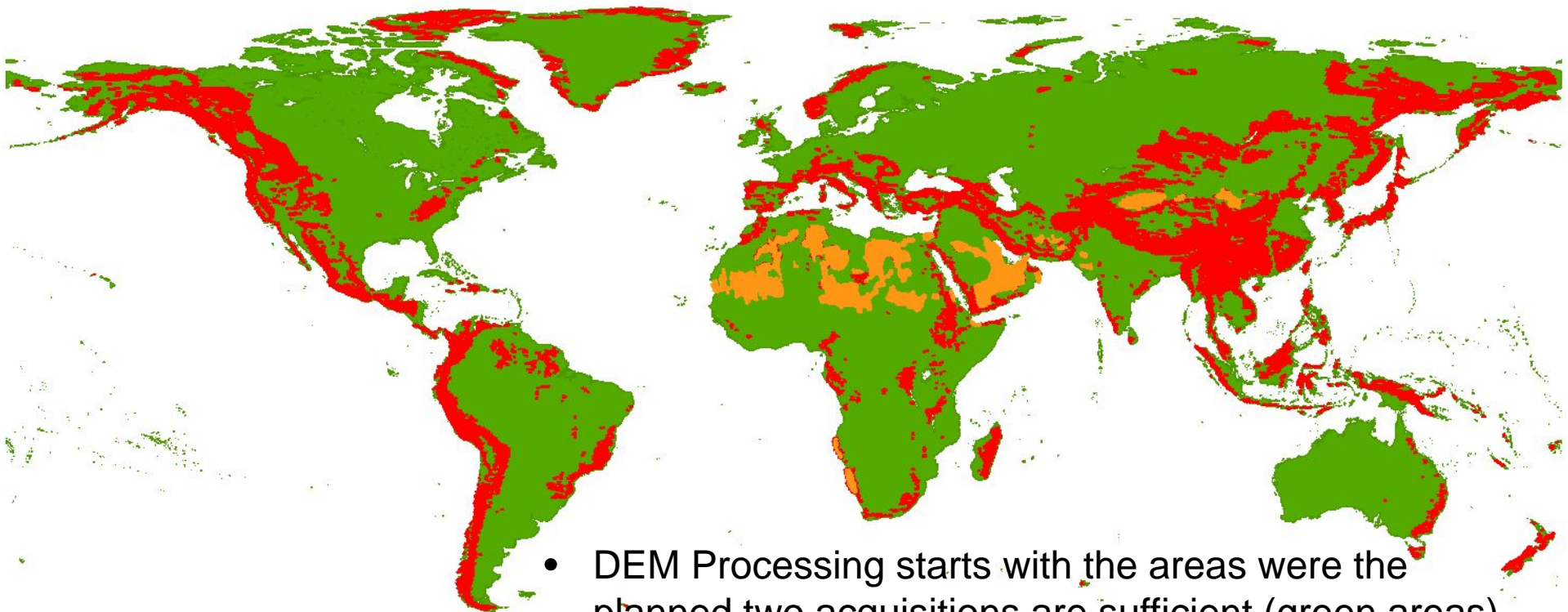
## Plan for final DEM Production

- Finalization of last validation tests (RawDEM Re-processing workflows)
- Finalization of load tests on the whole Ground Segment
- Mosaicking performance increase to end up with around 1.100 Raw DEMs/day and 50 geocells/day output
  
- Last DEM acquisitions (missings) were made in May and will be available end of June
- In summer 2013 the DEM production will start
- Estimated time for global DEM processing (90%) is about 1,5 years





## In green: regions processed first to final DEMs



- Shadow and Layover
- Desert

- DEM Processing starts with the areas where the planned two acquisitions are sufficient (green areas) about 50% of the earth's surface.
- First products will be provided begin of 2014
- Mid 2013 until mid of 2014 still acquisitions in „difficult terrain“ areas are made.





For more information:

Visit the poster session on Thursday  
17:20 – 19:30 for more DEM product  
details and layer information!

Download the TanDEM-X DEM  
Product Specification V2.0 at  
<https://tandemx-science.dlr.de/>