

German Aerospace Center National Agency Report CEOS-WGCV Plenary # 38

Albrecht von Bargaen

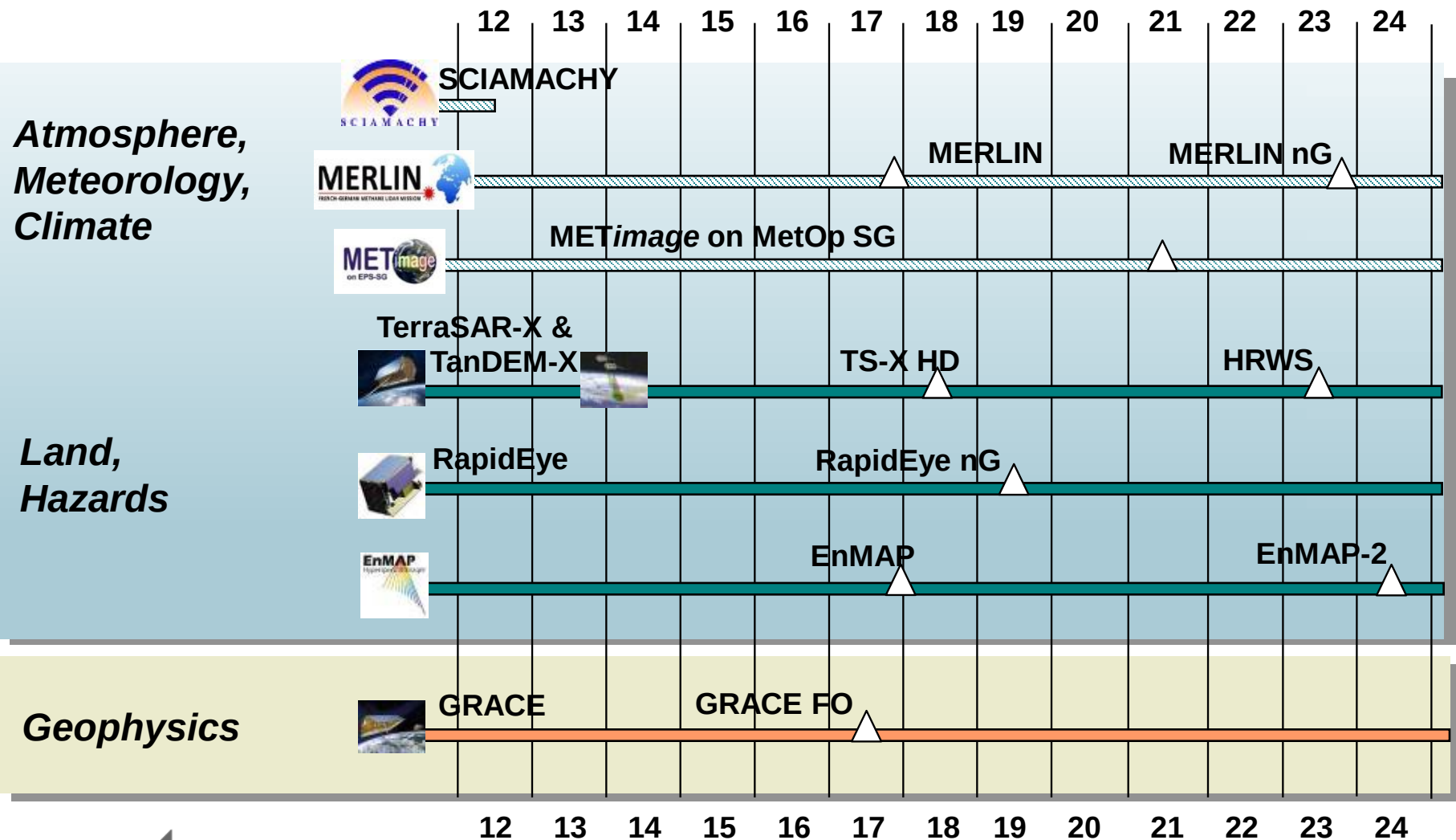
German Aerospace Center, Space Administration, Earth Observation



Knowledge for Tomorrow



National Missions



Status TanDEM-X



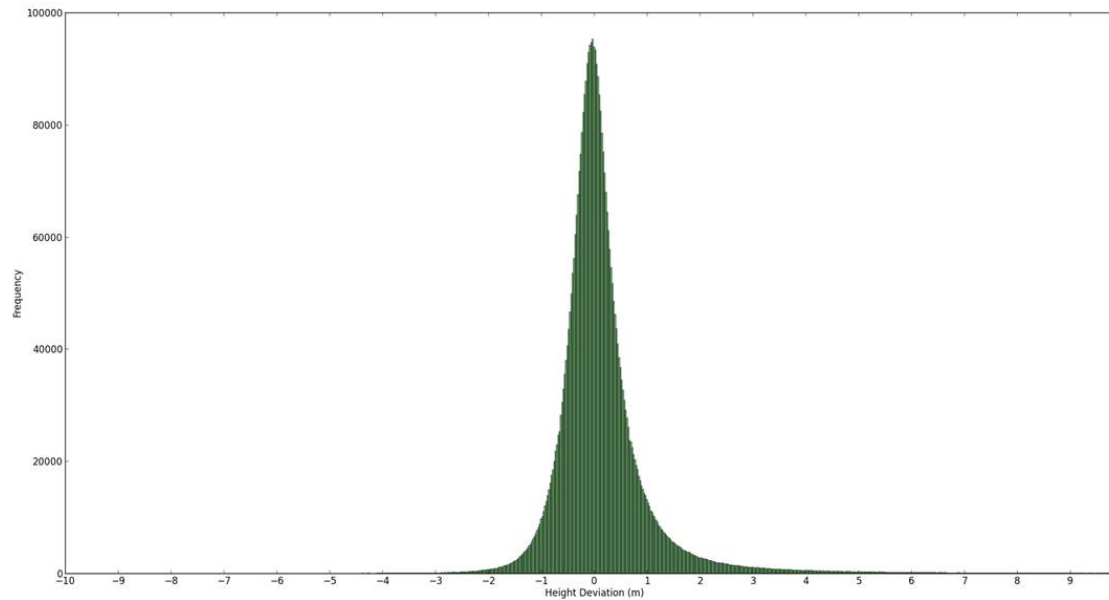
TanDEM-X Final DEM Production: Status Sep-2014

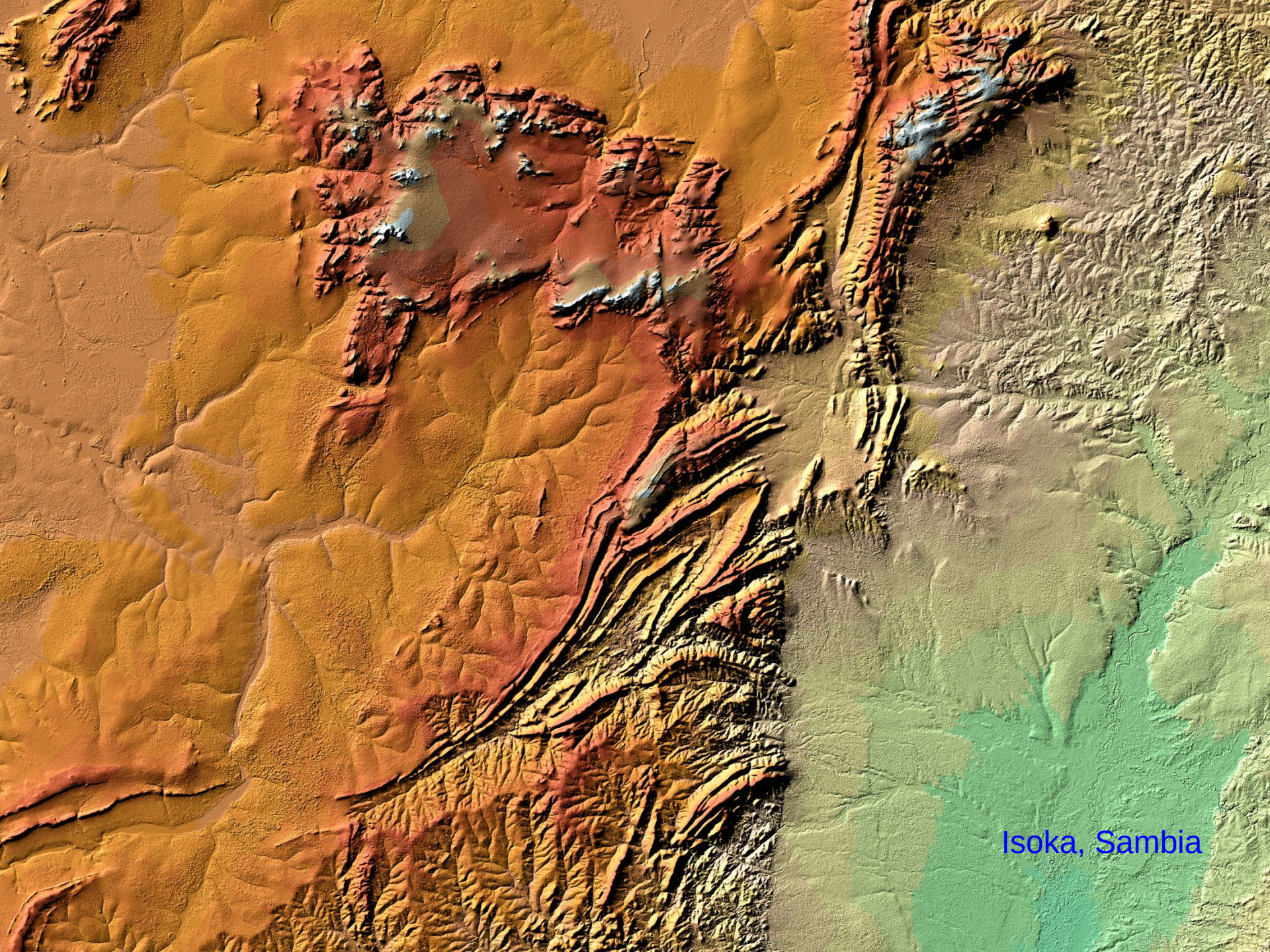


TanDEM-X Absolute Height Accuracy

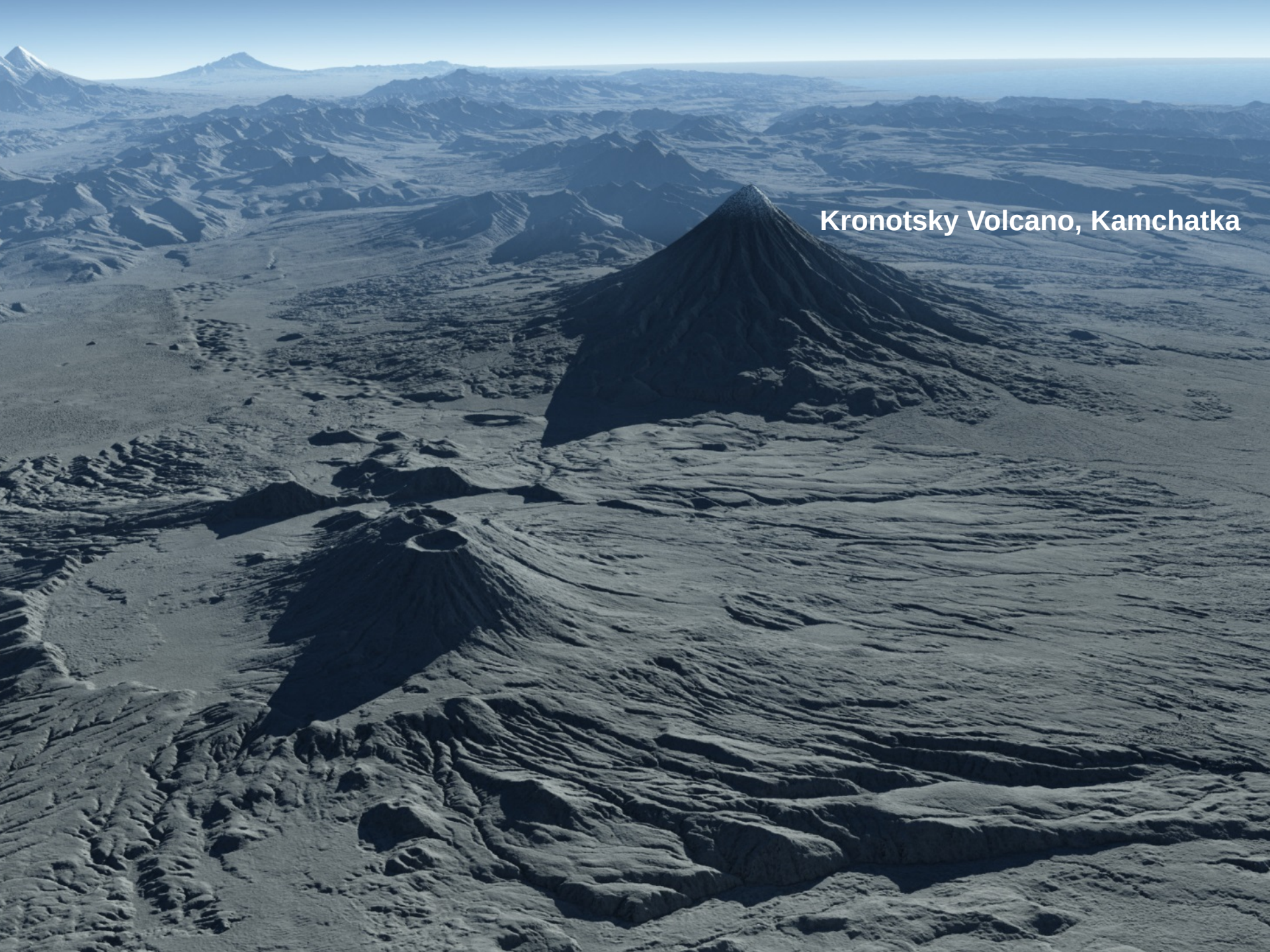
Analysis Date	26.09.2014
Number of DEM Tiles in EOWEB	4,422
Accumulated Number of ICESat Validation Points	4,204,261
Mean Height Deviation of Validation Points [m]	0.1597
Accumulated Absolute Height Accuracy of 10 m (linear error)	99.71%

Histogram of Height Deviation between -10 and 10 m





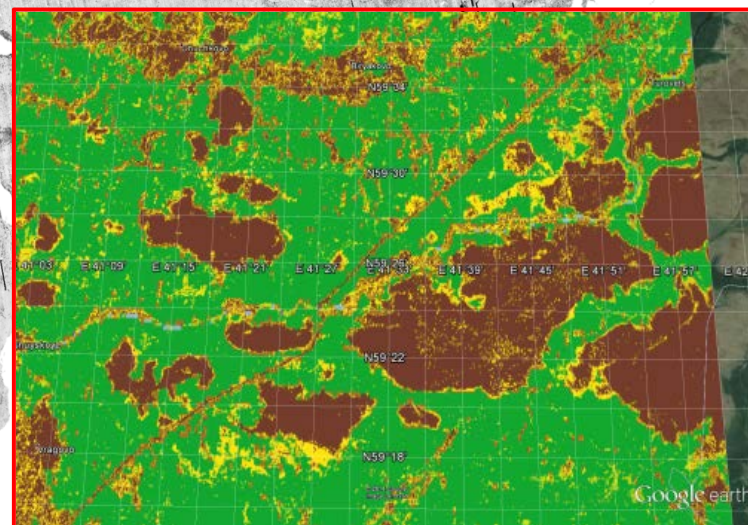
Isoka, Zambia



Kronotsky Volcano, Kamchatka

TanDEM-X Maps from Coherence

Forest Detection



Snow/Ice Classification



TanDEM-X Science Phase

Aug-Sept 14

Oct 2014 –Feb 2015

Mar – Aug 2015

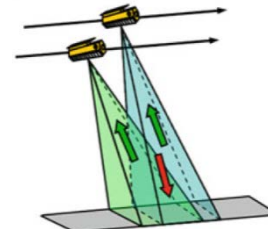
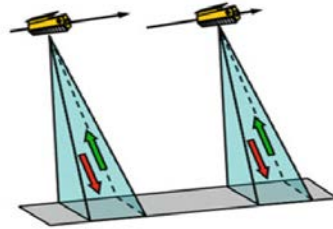
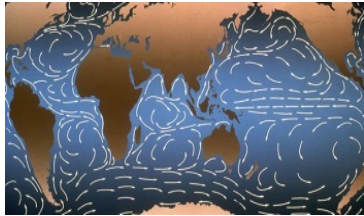
Sept –Dec 2015

Close bistatic
Small along-track
Northern Hemisphere

Pursuit Monostatic
76 km along-track
Helix drift in 104 days

Large bistatic
~ 3.6 km cross-track
at the equator

Close bistatic
Small along-track
Southern Hemisphere



from Dec. 2014: Dual Receive Antenna Mode



TDM Science Phase: Proposed Time Line for 2014 / 2015

Mode	Appli.	1 oc	2 no	3 de	4 ja	5 fe	6 ma	7 ap	8 my	9 ju	10 jl	11 au	12 se	13 oc	14 no	15 de
XTI		100-300 Bistatic		Drifting PM				3-4 km Bistatic					Drif ting	100-300 Bistatic		
Pol- InSAR DRA B	Agriculture															
	Forest															
	Cryo															
Spot	Urban															
	Vulcanos															
Strip	DEM															
	Geology															
	Permafrost															
DRA-Bist.	MTI Land/ Ocean															
ATI Alt. B	Ocean currents															
ATI ScanSAR	Ocean currents															
HRWS- DRA	Enhance image rec.	DRA		Pursuit Mono- static Drift 104 days				Very Long Baseline ~ 2000 m (+Phase of Libration)								