

4th TDM Science Team Meeting

Geosphere/Urban

Geosphere: Super Test Site Candidates



Volcanos:

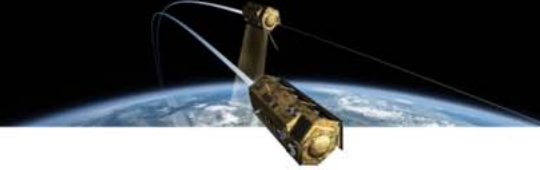
- Merapi (Westerhaus) → add additional incident angles
- Soufriere Hills (Wadge)
- Kilauea (Poland/Lundgren)
- Kamchatka (Shiveluch, Bisiminiani) Lundgren
- Iceland Vulcano* (Grimsvotn & Breidamerkurjokull) Andy Hooper
- Kivu (Kervyn) - Albino
- La Reunion (Froger)
- Etna, Neaples (Minet and others...)
- Colima (Westerhaus) → add additional incident angles
- New: Assal
- New: El Hierro
- Global active volcano map (2010-2013 → 2014/2015) ?? Zhong Lu
- Add all active volcanoes in the 3rd and 4th acquisition timeline Zhong Lu
 - Indicate priority in the list



Tectonic Sites (so far only TerraSAR-X):

- Wenchuan (China): Li, Wang
- Three Gorges: Li (Here a best possible DEM is needed, a TerraSAR-X time series is available by TerrSAR-X proposal) → **check further TDX acquisitions – high resolution DEM required**

3rd TDM Phase: Definition



Volcano - Planning requirements for the 3rd TDM Phase:

- Feedback from the science community and PI's
- Following information are requested:
 - Experiment / Application: established super test sites, other sites?
-- see previous slides
 - Imaging mode: Stripmap – standard
 - New: Spotlight** - only 1-3 acquisitions (all super test sites + Cleveland (Alaska), Kivu (Kervyn)) – (6 – 8 Bits)
 - Baseline (along and across):
 - Standard stripmap, increase from 150 – 500 m (bi-static)
 - Coverage:
 - Different ascending, descending, incident angles (4 acquisitions – use standard DLR specification)
 - Time frame / Number of acquisitions:....
 - As many as possible

3rd TDM Phase: Definition



Urban - Planning requirements for the 3rd TDM Phase:

- Feedback from the science community and PI's
- Following information are requested:
 - Experiment / Application: established super test sites, other sites?
 - Las Vegas, Munich, Berlin (shift to TDX acquisition during science phase)
 - (extend to other Megacities - London, Paris, Beijing, L.A., Mexico,...)
 - Imaging mode: Stripmap – standard
 - High resolution Spotlight – 6 to 8 bit quantization,
 - Baseline (along and across):
 - 150 – 4 km (either bi-static or monostatic)
 - Coverage:
 - Different ascending, descending, incident angles – swap back to the original Helix is required
 - Time frame / Number of acquisitions:.....
 - As many as possible

3rd TDM Phase: Suggested Time Line for 2014

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
Pol-InSAR DRA bistatic long/short	Agri.												
	Forest												
	Cryo												
Spot - long	Urban												
Strip - long	DEM												
	Geosphere												
	Permafrost												
DRA bistatic short/long	MTI Land/ Ocean												
DRA pm short/long	MTI Land/ Ocean												
ATI Alt. bistatic	Ocean currents												
ATI ScanSAR	Ocean currents												
HRWS DRA-short	Enhance image rec.												