

DESDynI support Special Topics Session

Unavco Science Workshop, Boulder, Co, March 9 2010

Summarized by F. Amelung, University of Miami

How to express support for DESDynI?

Letter from the members of the Unavco Science workshop to:

- Members of Hazard committee of Congress
- Members of Climate Change committee of Congress
- Office of Science and Technology committee (Holdron)
- Letters to Directors/Administrators of NASA, USGS, NSF
- Salazar (DOI): focusing on land changes in Alaska and water availability in Western US

Letter (1 page) will be signed by the members of the WinSAR Executive Committee on behalf of the WinSAR member institutions. All member Universities need to be listed.

Who does what ?

- Draft 3 letters (one focussing on Climate the other on Hazard, one to DOI focusing on land changes, water availability): (**Action: Tim Dixon**)
- EC DESDynI support subcommittee was formed, chaired by David Schmidt and Matt Pritchard.
- Subcommittee will research details about addressees, personalize letters, and follow-up (**Action: D. Schmidt, M. Pritchard**)
- Letters will be posted on WinSAR website (new tab "DESDynI support"). WinSAR scientists from districts of relevant Senators/Congressmen will be encouraged to personally contact their representatives.

Letter bullets:

- The geodetic imaging mission DESDynI is climate mission (direct: Cryospheric-InSAR. indirect: understand rheology, GIA)
- Haiti and Chile earthquake demonstrated the utility of L-band mission. We were fortunate to have ALOS. Without we would know hardly anything about Haiti earthquake.
- Analogy of Haiti and Loma Prieta earthquake (similar quakes, size and mechanism). With an L-band we would know much more about Loma Prieta and could better estimate seismic hazard in San Francisco Bay area.
- Without DESDynI there is a risk that a large US earthquake without good geodetic data. (There is no InSAR data for the 2004 Sumatra earthquake -> Lost opportunity to significantly improve our understanding Megathrust earthquake that will eventually hit Casacadia).
- DESYnI provides uniform, temporarily repeated snapshots, spatially and temporally dense time series to assess interseismic deformation
- Several other climate related thrusts addressed: carbon sequestration, coastal inundation, ecosystem, sealevel rise. (more content on DESDynI Application workshop webpage)
- DESDyNI lidar for hazard response, penetrating canopy.
- Letter to NSF: resurrect EarthScope's 4th leg
- Letter to DOI: emphasize uniqueness of radar (more powerful) compare to optical (LandSat), clouds, works at night, land subsidence through interferometry.