Breakout Session: Geodetic Imaging

Chairs: Sue Owen (JPL), Matt Pritchard (Cornell), David A. Phillips (UNAVCO)

This session included presentations by community members and EarthScope facility personnel as well as open discussion periods intended to solicit feedback from the community. Discussions were guided by the following questions which were posed at the beginning of the session: (1) What are the emerging opportunities for geodetic imaging to advance EarthScope science? (2) What are the needs to take advantage of these opportunities? For example...facilities resources? Capacity building? Software, cyberinfrastructure and web services? Derived products, metadata and provenance? How to use infrastructure synergistically (e.g., NISAR and PBO)? To provide context, a series of overview presentations and demonstrations of existing resources were provided. Matt Pritchard (Cornell) presented an overview of satellite InSAR. Susan Owen (JPL) presented an overview of ARIA. Ramon Arrowsmith (ASU) presented an overview of OpenTopography and airborne lidar. Arjun Aryal (UH) presented an example of a terrestrial lidar application. Tim Bartholomaus (UTA) presented an example of a terrestrial radar interferometry application. David Phillips (UNAVCO) presented an overview of geodetic imaging resources available from UNAVCO. Interest and suggestions from community participants focused on topics such as: data availability from current and future SAR satellite missions; methods and resources for surface change detection from repeat lidar surveys; desire for community mobile laser scanning resources (e.g. TLS instruments on moving platforms such as cars); interest in imaging techniques via UAV's and drones; and structure from motion.