

TanDEM-X: Science Activities

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In this paper the status of the TanDEM-X science activities, the first order as well as the global TanDEM-X digital elevation model and the first results obtained from the science phase will be presented. The goal of the TanDEM-X mission is to provide a higher level product (the digital elevation model) and to serve the science community with basic interferometric Synthetic Aperture Radar products (a pair of CoSSC's). The focus in this paper will be given to the activities within the Announcement of Opportunity launched up to date in terms of description of the science team and their research field of interest, the amount of data acquired and the first results obtained from the science team. In addition the collected science requirements for the Science Phase is outlined and described. A strong focus will be given to the status of the global TanDEM-X DEM. However, also the concept of the Science Phase (executed from October 2014 to December 2015) will be presented. During the Science Phase the scientist have the possibilities to define their needed formation of the satellite in order to perform their experiment. The requirement for the science phase have been collected during the 4th TanDEM-X science meeting in June 2012 and is in the moment consolidated in terms of ground segment and instrument feasibility.