INSAR AND ITS CONTRIBUTION TO SURVEYING AND GEODESY

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Abstract: Interferometric Synthetic Aperture Radar (InSAR) has in the past decade become a very important surveying and geodetic technology. The technology has had some profound impact on surveying, geodesy and many other scientific fields. Although the technology was not initially developed by surveyors or geodesists, it has in recent years attracted keen interest from researchers working in the filed of surveying and geodesy. This paper discusses the development of the technology, its capabilities, limitations and key issues to be resolved in terms of surveying and geodetic applications, and how researchers in surveying and geodesy can better contribute to its future development. The activities of the FIG Task Force 6.1.3: Satellite SAR Interferometry for Measurement of Deformations and IAG Sub-Commission 4.4: Applications of Satellite & Airborne Imaging Systems are also briefly reported and discussed.