

Abstract

In the last two decades the use of terrestrial radar for the monitoring of different environments as landslides, glaciers and snow covered areas, has been rapidly increasing. In particular Ground Based SAR interferometers become a reliable tool for many Remote Sensing users. In these lectures the listener is introduced to the basic principles governing some of the applications, to achieve a deeper understanding of the physical mechanisms which govern these microwave based observations. Examples of applications in Geophysics and Civil Engineering are also shown aiming to provide an practical and exhaustive view to users and researcher.