



Contribution ID: 360

Type: **Roundtable Member**

## **Change Detection Method for Radar Images –An Overview of Promising Methods**

Change-detection with a pair of radar images can indicate subtle change, for example, it can reveal tracks of disturbed earth that can be associated with vehicle movements across unpaved roads in the period between collection of the two images. Identifying changes of interest in radar imagery is challenging, and thus difficult to automate, because these changes of interest must be separated from changes due instrument effects, scattering effects (speckle), variations in backscatter (scattering from features of different type or shadow), image-processing effects and uninteresting environmental change. The paper has three goals: (1) describe change-detection methods for radar data with attention given to confidence measures, (2) describe some of the types of changes that radar can detect, and (3) illustrate the performance of change detection algorithms, including results from a new statistical change detection algorithm and a supervised Machine Learning (ML) algorithm.

### **Which "Key Question" does your Abstract address?**

SGI1.1

### **Which alternative "Key Question" does your Abstract address? (if any)**

### **Topics**

SGI1

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**Session Classification:** [TEC] Collection, Processing and Analysis of Satellite and Open Source Imagery Data

**Track Classification:** Leveraging technological advancements for safeguards applications (TEC)