
SAND2015-4134C

Sandia National Laboratories

U.S. DEPARTMENT OF ENERGY

National Nuclear Security Administration

LDRD
LABORATORY DIRECTED RESEARCH & DEVELOPMENT

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# Poster Spotlights

**Session 1A: Tuesday Morning, June 25th**

# A Model-Based Approach to Finding Tracks in SAR CCD Images

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Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.This work was supported by PANTHER, a Laboratory Directed Research and Development (LDRD) Project at Sandia National Laboratories. For additional information about PANTHER, please contact Kristina Czuchlewski, Ph.D., krczuch@sandia.gov.

# A Model-Based Approach to Finding Tracks in SAR CCD Images

## SAR CCD

- Synthetic aperture radar (SAR) provides all-weather, day or night imagery
- Coherent change detection (CCD) imagery is produced by registering two SAR images of the same scene
- CCD imagery can be used to detect minute scene changes, such as vehicle tracks

## Motivation

- Automatic track detection has applications in surveillance, search and rescue
- Difficult due to various sources of noise: SAR speckle, radar shadow, vegetation, weather phenomena

## Approach

- Fully automatic
- Finds optimal set of tracks that explain data by minimizing Bayesian Information Criterion objective function