Tutorial on exploitation of radar images

Armin Doerry, Sandia National Laboratories

Post-image-formation processing of Synthetic Aperture Radar (SAR) images will be discussed, including autofocus, speckle reduction, and dynamic range compression for image display. Basic SAR image-quality metrics will be presented. Finally, a number of SAR image exploitation techniques and modes will be discussed, including Coherent Change Detection, Interferometric SAR, Polarimetric SAR, Stereo SAR, and VideoSAR. The related topic of Inverse-SAR will also be briefly compared.