

Pattern Detection & Recognition in SAR Images

Fully focused images with multiple SAR looks allow to distinguish types of textures, vehicles, man made objects etc. Tracking a moving target is possible in SAR imagery with the help of Optical Flow techniques. When tracking objects that are in a state of motion the problem of defocusing can be simplified/negated with the help of Equivalent Static Point on the ground (ESP). In multibook images shift of ESP can be determined via Optical Flow technique. When performing image stitching in SAR Image, the SAR frame trajectory must be taken into account in order to account for deviations. To make stitching more efficient Speeded Up Robust Features (SURF) algorithm is used. This is done frame-by-frame in real time basis. Image stitching can be useful in tracking moving targets & to account for the distance travelled.