

Using SAR data for wet snow monitoring

Abstract

This paper focuses on an existing method of snow information retrieval by means of satellite SAR data. The method was first presented by Malnes and Guneriusen (2002), and has been proven to be capable of sub-pixel classification of wet snow. It is also able to classify dry snow pixels. The classification is based on change detection, so a snow-free reference image is required. Some flaws in this algorithm have been discovered during the work on this paper and are discussed, as well as a possible solution is suggested. I have also proposed a modification of the algorithm which could improve the classification results and tested the modified algorithm.

Keywords: SAR, snow cover, remote sensing, wet snow