Snow Cover Mapping Using MetOP/AVHRR Data

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Weather and meteorological processes are affected by the varying snow cover. Snow areal extent is essential information for weather forecasting and nowcasting. Successful snow detection is possible using data from geostationary satellites (e.g. LSA SAF snow cover product based on MSG/SEVIRI data). However these products have limited resolution especially in polar regions. Polar orbiting satellites offer some advantages which might be used to improve snow cover products in these areas.

LSA SAF snow cover product for MSG/SEVIRI has been available some years. The methods used for the development of the MSG/SEVIRI algorithm have been modified and applied to the development of the LSA SAF MetOP/AVHRR snow cover algorithm. We describe the snow cover product and present some preliminary results.