		H-SAF CASE STUDY	
Product Name	H12 – SN-OBS-03	Validation Institute	FMI
Case Study Period	04-03-2010 and 14-06-2010	Case Study Geographical Area	Finland
METEOREOLOGICAL EVENT DESCRIPTION			
Two main issues with the H12 product quality are misinterpreted clouds and georeferencing errors of the NOAA/AVHRR data. As examples of these two issues we present the following two cases			

The case study 1 is from 4th of March 2010 (figure 15). It demonstrates the errors with georeferencing, which can be best seen in the snow covered area between the Black Sea and the White Sea (Ukraine, Belarus and Russia). This area is magnified in figure 16. In the area the merging of different overpasses with slightly different georeferencing cause the duplication of fractional snow cover features. Figure 6 shows the SEVIRI composite area of the same day where pink can be interpreted as snow.

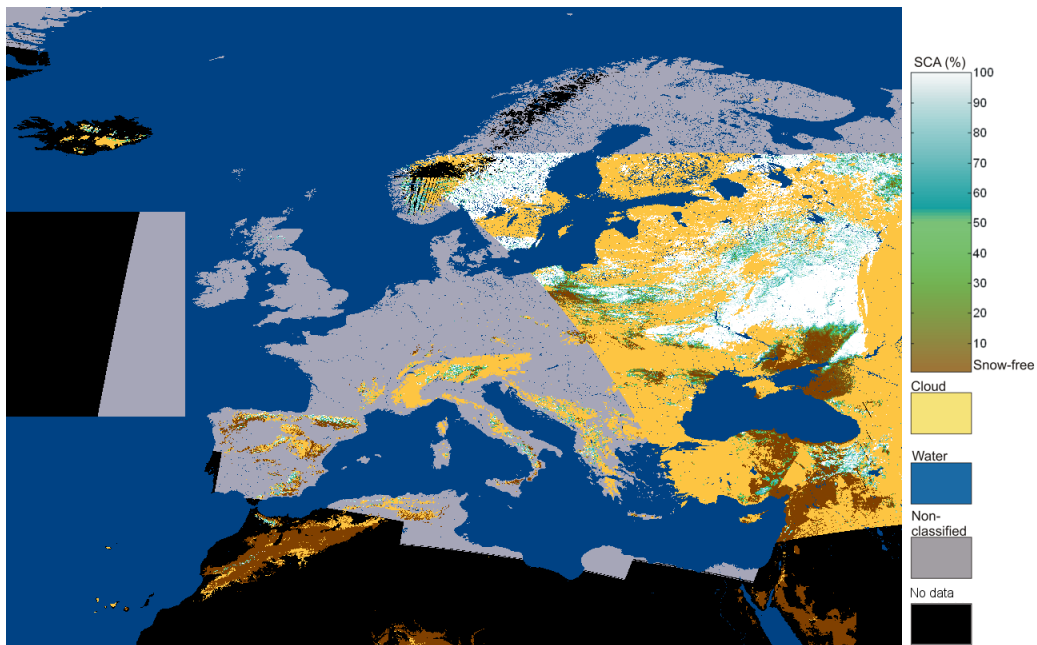


Figure 1 H12 product for 4th March 2010

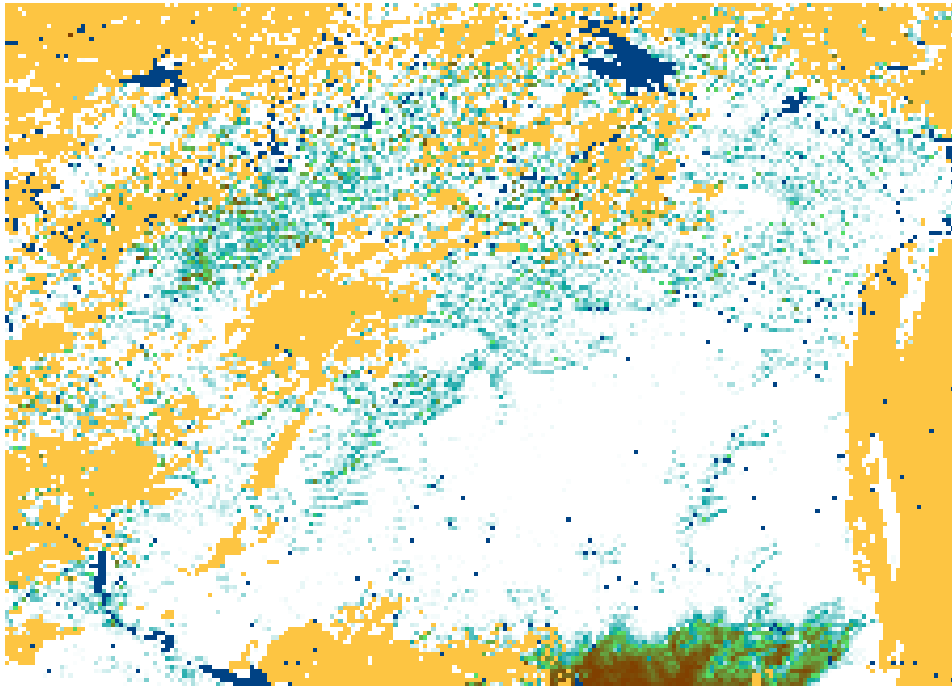


Figure 2 A magnification of the problem area of H12 product for the 4th March 2010

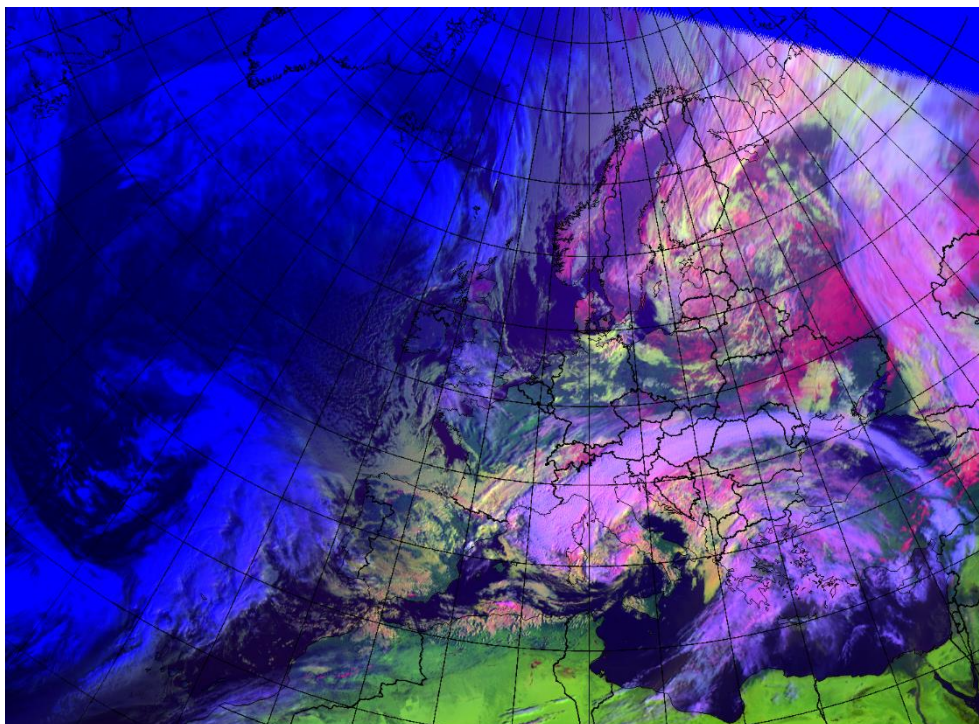


Figure 3 A SEVIRI composite for channels 0.6, 1.6 and 10.8 with country borders for 4th March 2010. The dark pink areas are snow covered

The case study 2 is from 14th June 2010 (Figure 18). It demonstrates the problems with cloud masking, this time in Finland and Russian Karelia. The area is magnified in **Figure 29**. There was no snow cover in Finland during the day of the case study. The $FSC > 0$ values of the area are mostly misinterpreted clouds or areas with scattered clouds.

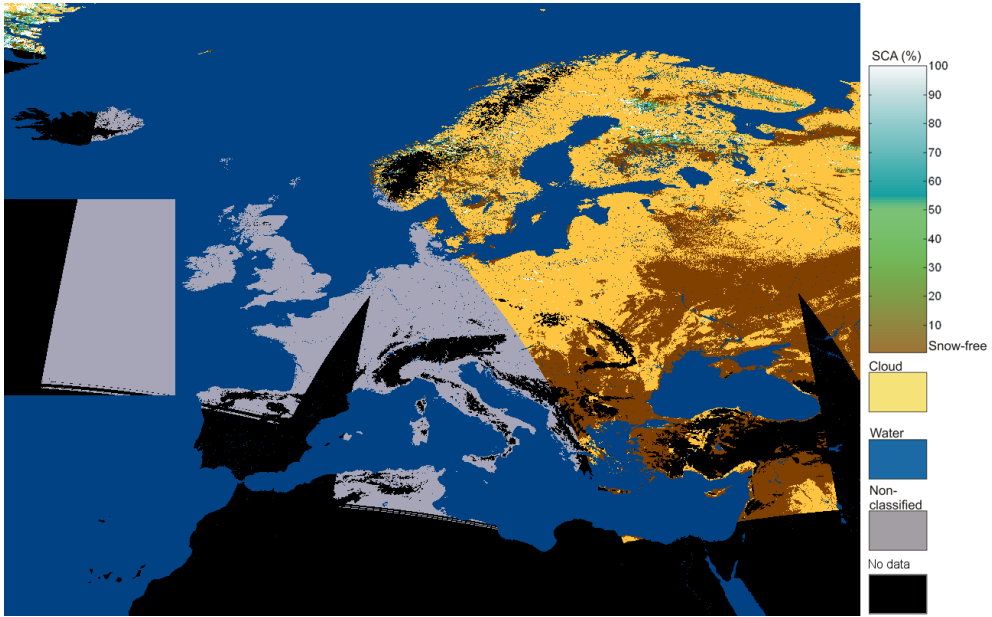


Figure 4 H12 product for 14th June 2010

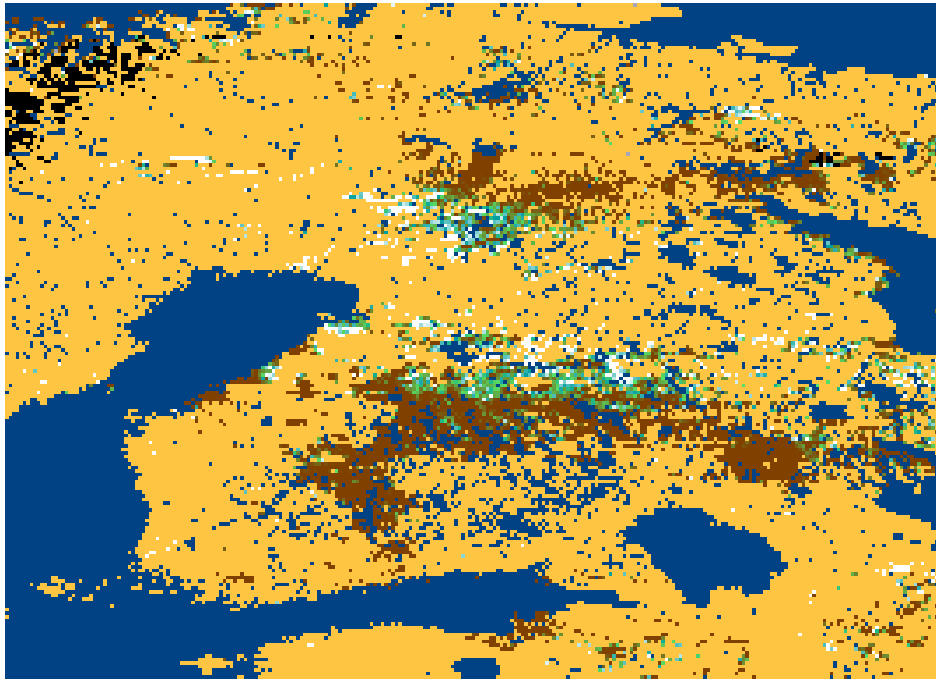


Figure 5 A magnification of the problem area of H12 product for the 14th June 2010