

## H-SAF CASE STUDY

<b>Product Name</b>	<b>H10 – SN-OBS-01</b>	<b>Validation Institute</b>	<b>BfG</b>
<b>Case Study Period</b>	<b>26-01-2010</b>	<b>Case Study Geographical Area</b>	<b>Germany</b>

### METEOREOLOGICAL EVENT DESCRIPTION

As case study was chosen the whole area of Germany for 26<sup>th</sup> January 2010.

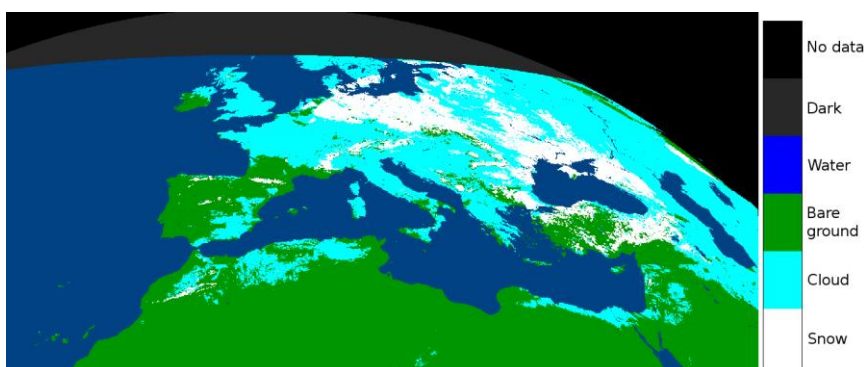


Figure: H10 product time stamp 26th January 2010

### DATA/PRODUCTS USED

From German Weather service snow cover [cm] is provided for 2024 stations for period October 2009-September 2010. Table below shows the different available stations.

Station Type	Flat are	Mountain area	Total
Climatic	461	0	461
Precipitation	1402	161	1563

Table: Snow stations available for validation in Germany

### RESULT OF COMPARISON

The table below shows the results of categorical statistic. From observation data points the snow (snow cover  $\geq 2$  cm) /no snow information was taken for comparison. The probability of detection was about 0.9, the false alarm rate about 0.14. The accuracy (critical success index) also was very good with 0.84, which means that most of snow predictions were observed.

<b>val_points</b>	8500
<b>BIAS</b>	1.13
<b>HSS</b>	0.844
<b>HSS2</b>	0.117
<b>POD</b>	0.974
<b>FAR</b>	0.138
<b>POFD</b>	0.893
<b>ACC</b>	0.844
<b>TS</b>	0.842

Table: Results of the categorical statistic

**CONCLUSION**

A very good probability of detection with very small false alarm rate shows, that H10 product in this case has good performance. On the other side in many of cases H10 produces no valid data because of clouds.