

## **International Operational AMV Algorithms Comparison Study – Status Report**

In response to CGMS Recommendation 34.15

It was a recommendation from the 8<sup>th</sup> International Winds Workshop to conduct a study among operational satellite AMV producers designed to inter-compare the algorithms in order to identify strengths and weaknesses. All processes (targeting, tracking, height assignment, quality control) will ultimately be examined. The performance metrics will be assessed in terms of AMV spatial coherence and accuracy vs. independent validation (i.e. RAOBS). The idea is to select a common image triplet time period from SEVIRI on MSG, and require that all producers apply the same ancillary data (i.e. model guess) as they run their algorithms on this case.

AMVs extracted from VIS(0.8 $\mu$ m), IR(10.8 $\mu$ m), IR(13.4 $\mu$ m), WV(6.2 $\mu$ m) and WV(7.3 $\mu$ m) spectral bands will be collected along with such additional information as each AMV target location, size and brightness temp., height and height corrections (low cloud, semi-transparent cloud, etc), tracking method, and quality indicators. Upon the successful collection of all datasets, an inter-comparison will be performed. CIMSS will focus on the various height assignment methods employed. Such a study would require that the AMV producers are willing to reprocess the SEVIRI images in a 'research mode', in which a number of targets will be selected for consistent heights assignment and tracking.