

Recommendations from WG 3: Height assignment

Recommend work toward derivation of ΔH_{error} (AMV Producers and collaborating cloud teams); AND ΔH_{layer} (K.Bedka, C.Velden, J-G. Pereda,); Evaluate/Stratify by cloud properties and AMV characteristics and communicate with NWP for guidance (Met Office, ECMWF)

Need for independent height and wind error estimates? If so, what input may be used? - Report $\Delta U/V$ from intermediate (sub-vector/displacement) AMV as a first step, More elaborate error may be developed at individual AMV centers.

Evaluate the individual pixel contribution HA (Borde and Oyama)

Recognised AMV heights in best agreement with Calipso; (best - low level, inversion correction and cloud base HAM); write up a paper/report; 'Prescribe' which AMV HAM are most reliable; (R.Borde, G.Seze)

Suggest adding most up-to-date cloud type/analysis info into the AMV product (i.e. new EUMETSAT CLA product, Geocat cloud product info, Now-casting SAF cloud type); (all AMV producers)

More stringent tests before derivation of vector: cloud phase, check change of vertical development, to extent possible use channels that all have on their satellites ? – Re-evaluate thresholds related to possible vertical development ; Optimise the use of Cloud phase and Cloud mask for HA purposes;

**Similarity of MISR winds ! i.e. bias not due to height assignment:
stratify MISR by cloud type for better comparison ? – It would be good if
more MISR data studies are performed – use ECMWF first guess,
stratification by cloud type**

Run new date case, CGMS study, extract on a grid, estimate height from same target/search box size as well as “as is” in operational algorithm; Report target albedo/BT; only with ECMWF forecast; 10.8microns only; (CIMSS/NESDIS)

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More stringent tests before derivation of vector: cloud phase, check change of vertical development, to extent possible use channels that all have on their satellites – OK! Re-evaluate thresholds related to possible vertical development ; Optimise use of Cloud phase and Cloud mask for HA purposes;

Similarity of MISR winds ! i.e. bias not due to height assignment: stratify MISR by cloud type for better comparison – It would be good if more MISR data studies are performed – use ECMWF first guess, stratification by cloud type