Validation of

METEOSAT-8

Atmospheric Motion Vectors

June 2019
Validation Against
NCMRWF NGFS First Guess
METEOSAT-8 IR, High Level, Above 400 hPa, June 2019
METEOSAT-8 IR, Low Level, Below 700 hPa, June 2019
METEOSAT-8 WV, High Level, Above 400 hPa, June 2019
METEOSAT-8 VIS, Low Level, Below 700 hPa, June 2019
METEOSAT-8 IR, Mid Level, 700 - 401 hPa, June 2019

Area: 20N-50N

No. of OBS: 3938
Bias : -0.04
STD : 2.25

Area: 20S-20N

No. of OBS: 123015
Bias : 0.26
STD : 1.91

Area: 50S-20S

No. of OBS: 167581
Bias : 0.07
STD : 2.00
METEOSAT–8 WV, June 2019, High Level, Above 400 hPa

Area: 20N–50N
No. of OBS: 176408
Bias: -0.33
STD: 4.07

Area: 20S–20N
No. of OBS: 333589
Bias: 1.07
STD: 4.18

Area: 50S–20S
No. of OBS: 159543
Bias: 0.54
STD: 6.42
METEOSAT-8 VIS, June 2019, Low Level, Below 700 hPa

Area: 20N–50N

No. of OBS: 55307
Bias : 0.19
STD : 2.45

Area: 20S–20N

No. of OBS: 178180
Bias : 0.27
STD : 2.00

Area: 80S–20S

No. of OBS: 157703
Bias : 0.09
STD : 1.62
METEOSAT-8 IR, High Level, Above 400 hPa, June 2019
METEOSAT-8 IR, Mid Level, 700 - 401 hPa, June 2019

O-B Speed Bias

Mean Vector Difference

Normalized Root Mean Square Vector Diff

Number of Winds
METEOSAT-8 VIS, Low Level, Below 700 hPa, June 2019

O-B Speed Bias

Mean Vector Difference

Normalized Root Mean Square Vector Diff

Number of Winds
METEOSAT-8 VIS, June 2019

- O-B Speed Bias
- Mean Vector Difference
- Normalised Root Mean Square Vector Diff
- Number of Winds
Validation against Insitu Observations
### Northern Hemisphere

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<thead>
<tr>
<th></th>
<th>AMV WS</th>
<th>INSITU WS</th>
<th>Speed</th>
<th>RMSVD</th>
<th>Collocations</th>
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### Tropics

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### Southern Hemisphere

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Hig Lev = Above 400 hPa  
Mid Lev = 700 - 401 hPa  
Low Lev = Below 700 hPa