

Validation of

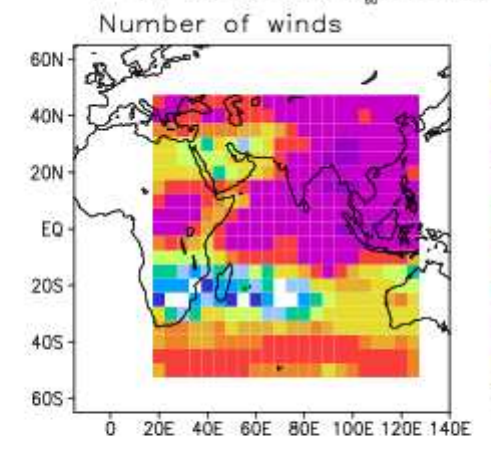
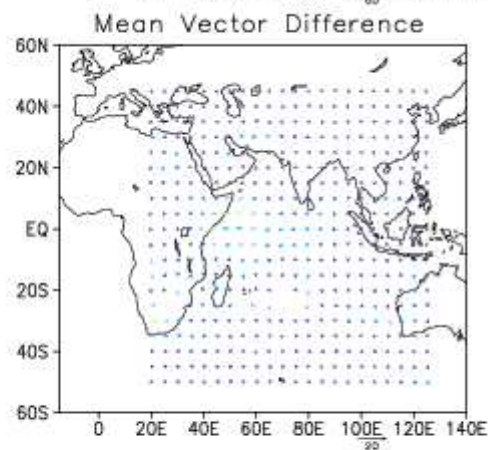
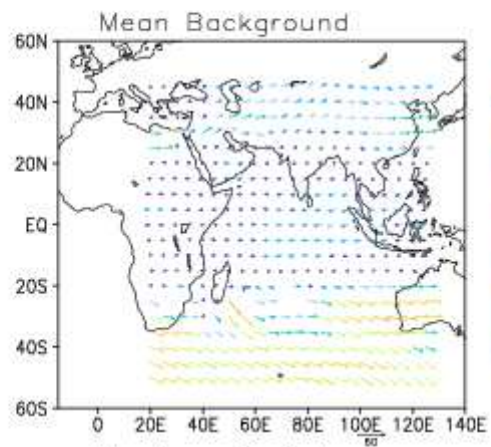
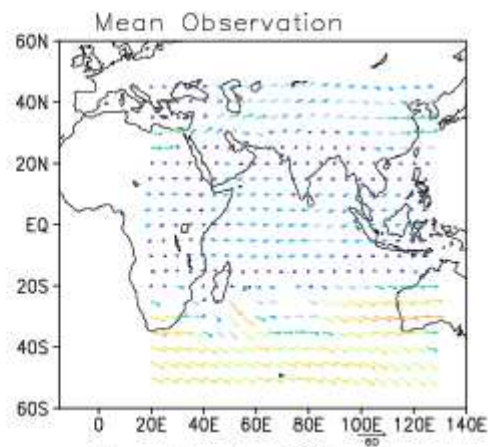
INSAT-3D

Atmospheric Motion Vectors

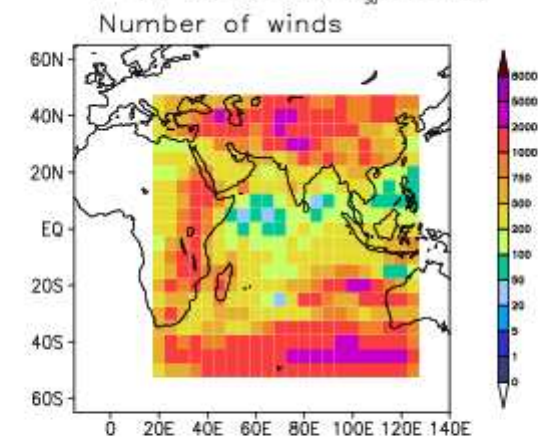
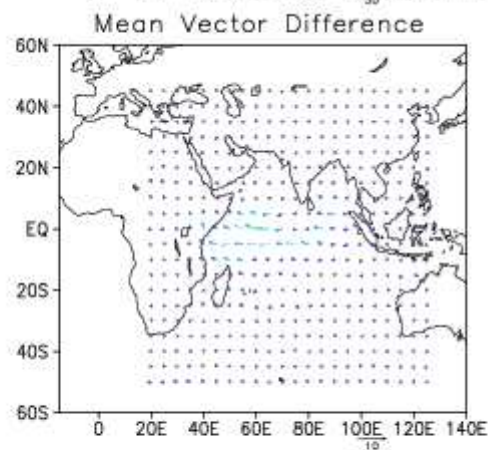
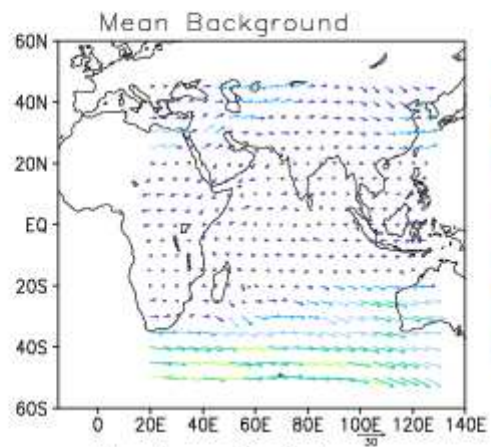
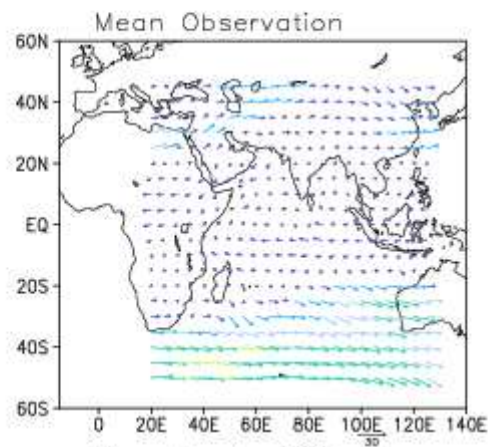
June 2018

Validation Against
NCMRWF NGFS First Guess

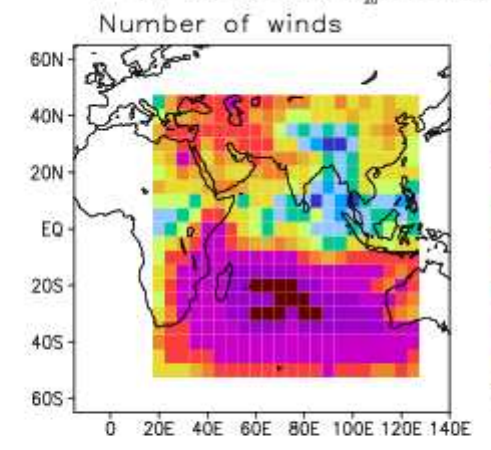
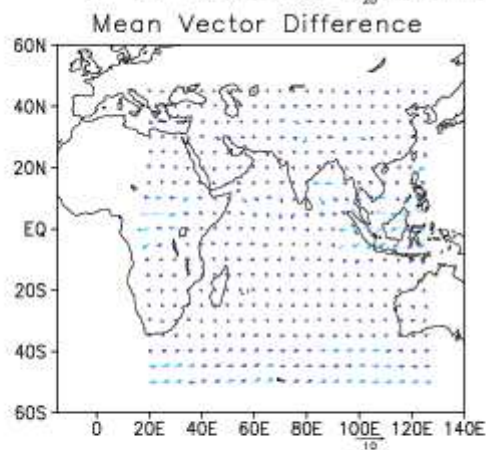
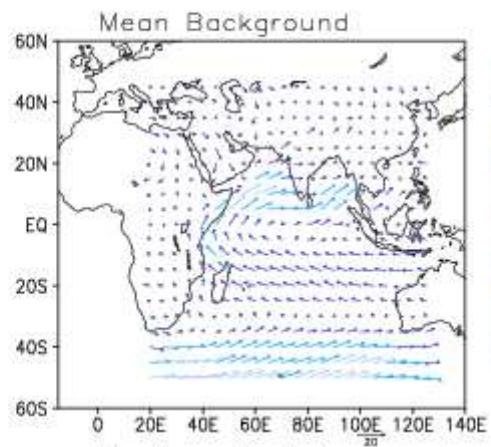
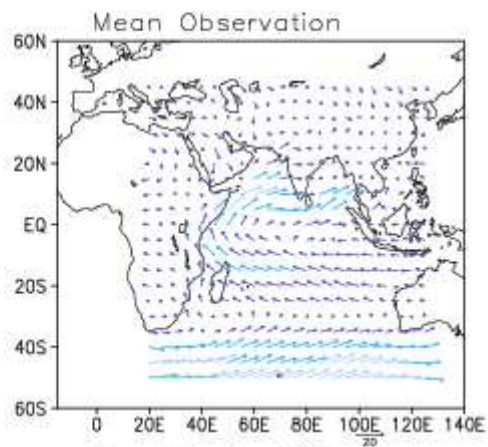
INSAT-3D IR(10.8), High Level, Above 400 hPa, June 2018



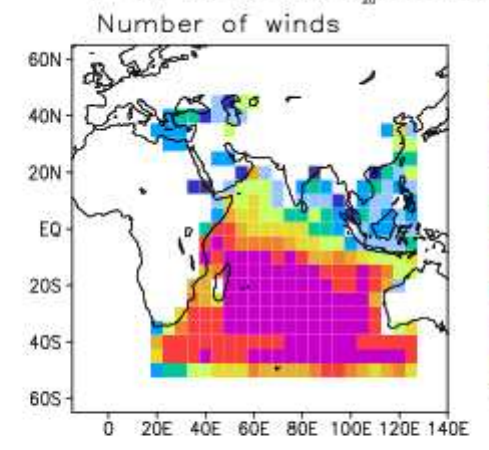
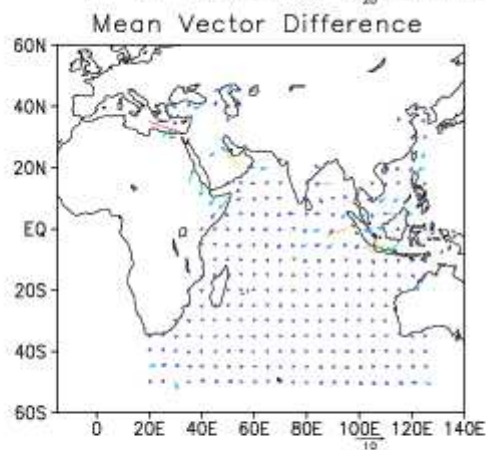
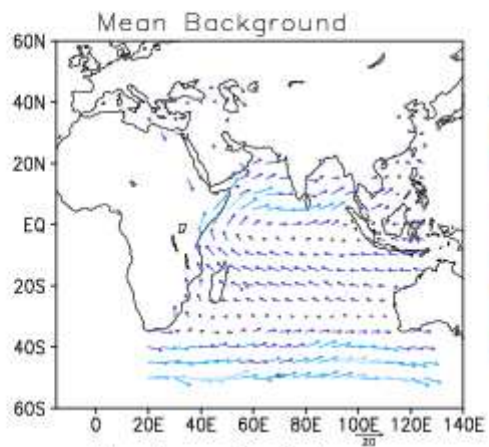
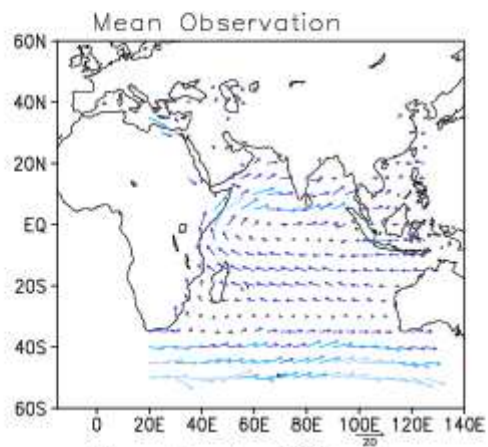
INSAT-3D IR(10.8), Mid Level, 700 – 401 hPa, June 2018



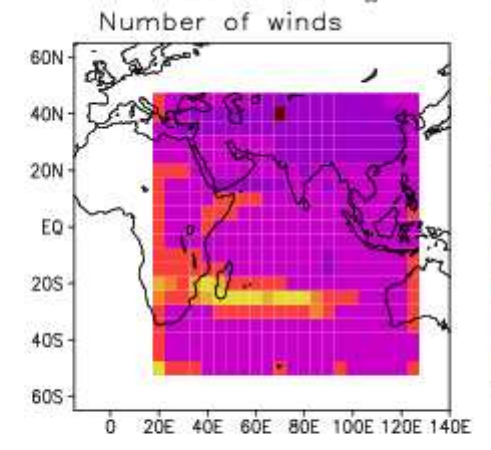
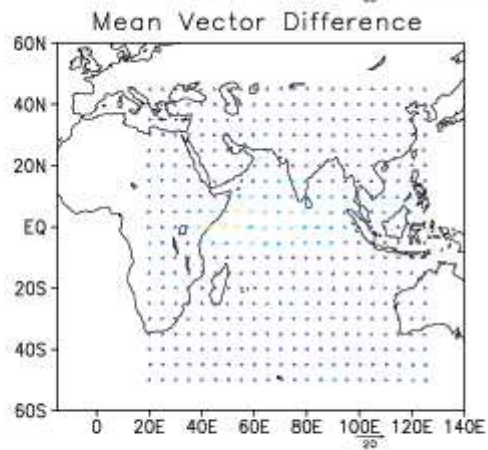
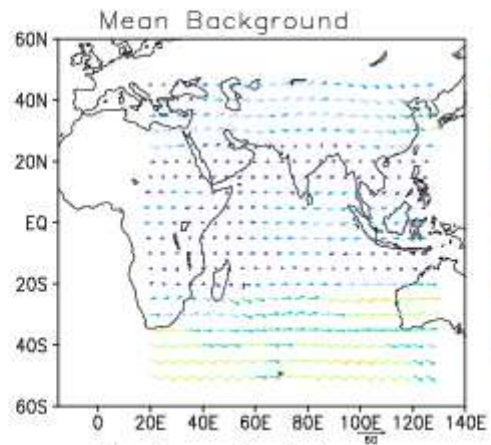
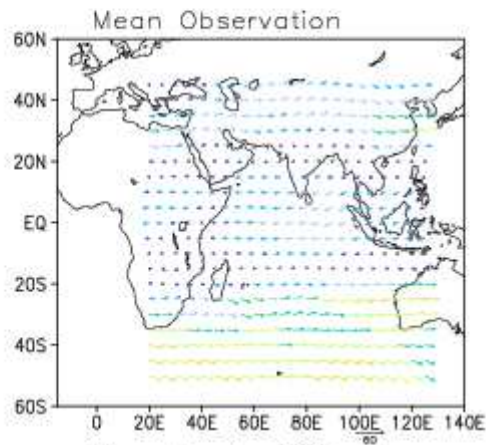
INSAT-3D IR(10.8), Low Level, Below 700 hPa, June 2018



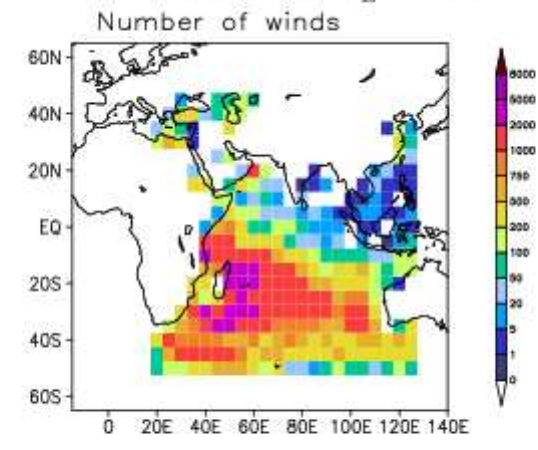
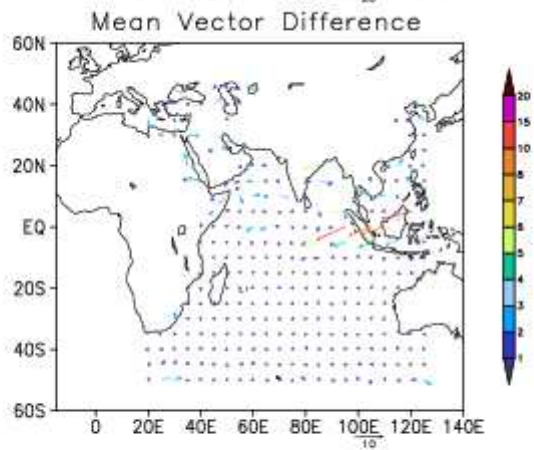
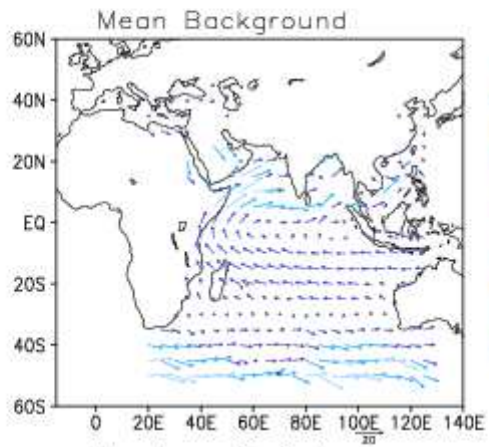
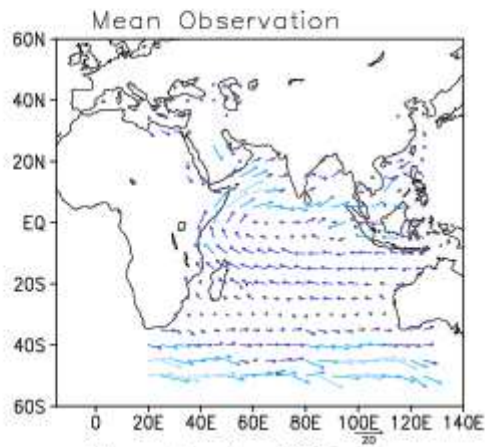
INSAT-3D IR(3.8), Low Level, Below 700 hPa, June 2018



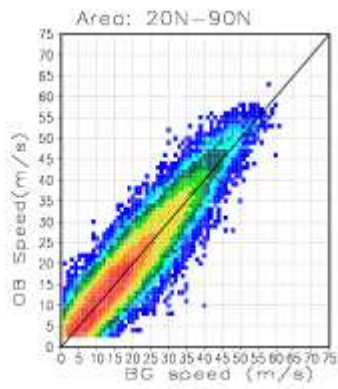
INSAT-3D WV, High Level, Above 400 hPa, June 2018



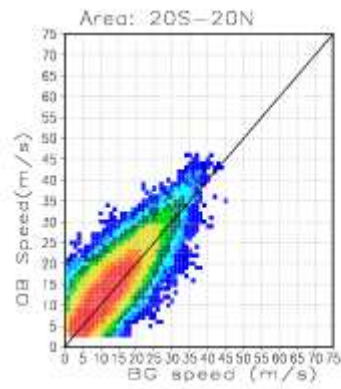
INSAT-3D VIS, Low Level, Below 700 hPa, June 2018



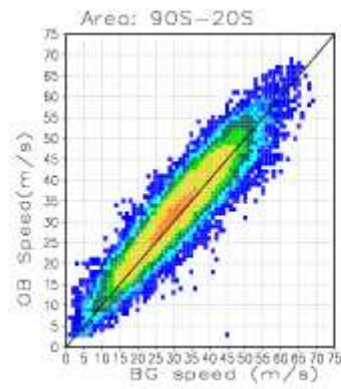
INSAT-3D IR(10.8), June 2018, High Level, Above 400 hPa



No. of OBS: 299887
Bias : 0.32
STD : 3.17

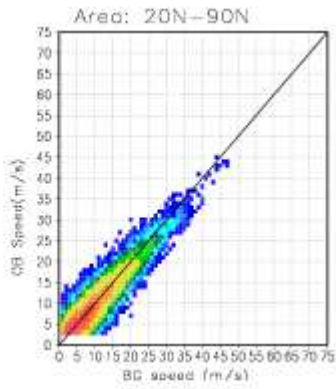


No. of OBS: 381678
Bias : 1.25
STD : 3.40

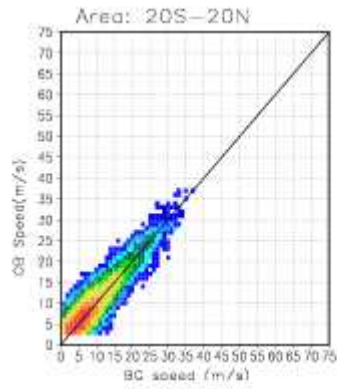


No. of OBS: 114980
Bias : 1.48
STD : 3.20

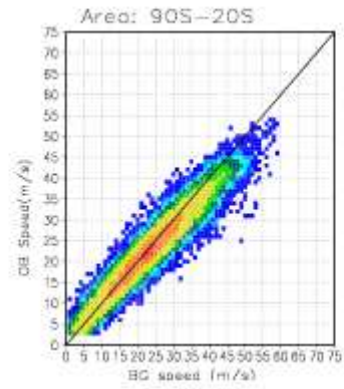
INSAT-3D IR(10.8), June 2018, Mid Level, 700 – 401 hPa



No. of OBS: 98601
Bias : -0.14
STD : 2.27

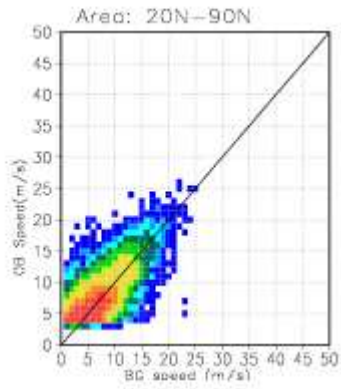


No. of OBS: 73941
Bias : 0.52
STD : 2.19

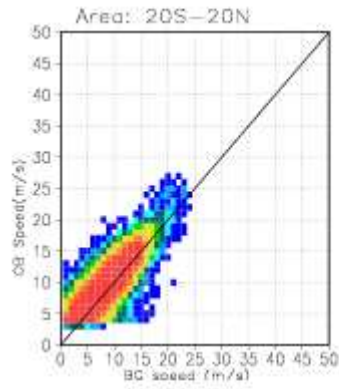


No. of OBS: 132277
Bias : -0.64
STD : 2.56

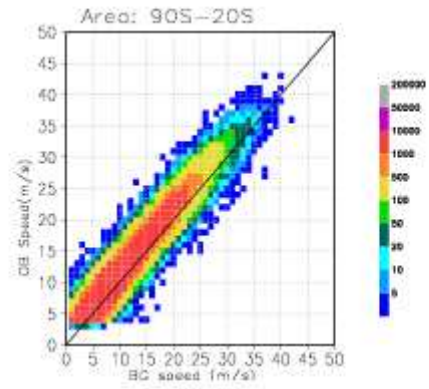
INSAT-3D IR(10.8), June 2018, Low Level, Below 700 hPa



No. of OBS: 84562
Bias : 0.49
STD : 2.41

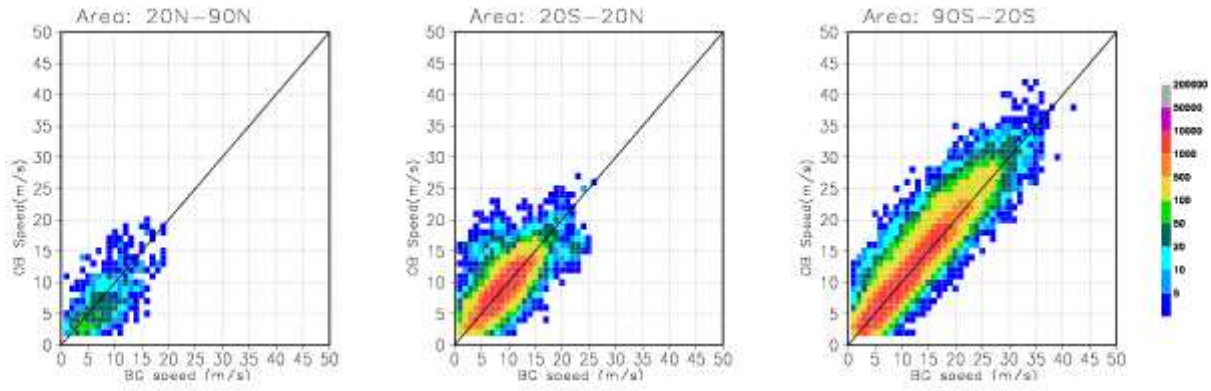


No. of OBS: 266658
Bias : 0.98
STD : 1.96



No. of OBS: 463750
Bias : 1.60
STD : 1.90

INSAT-3D IR(3.8), June 2018, Low Level, Below 700 hPa

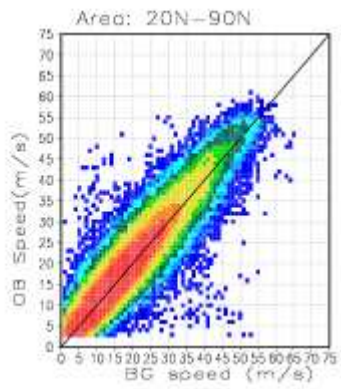


No. of OBS: 2357
Bias : -0.83
STD : 2.87

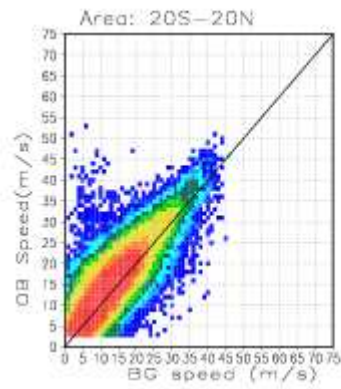
No. of OBS: 118398
Bias : -0.01
STD : 2.10

No. of OBS: 231402
Bias : 0.36
STD : 2.21

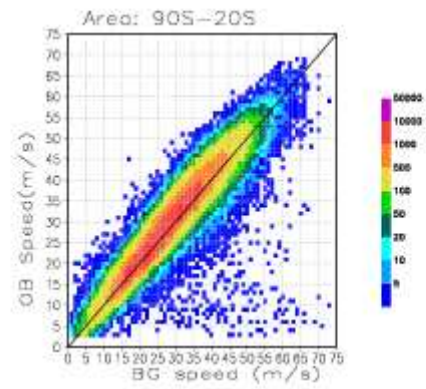
INSAT-3D WV, June 2018, High Level, Above 400 hPa



No. of OBS: 679973
Bias : 0.55
STD : 3.27

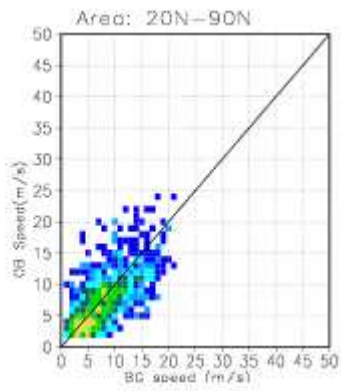


No. of OBS: 553374
Bias : 1.53
STD : 3.44

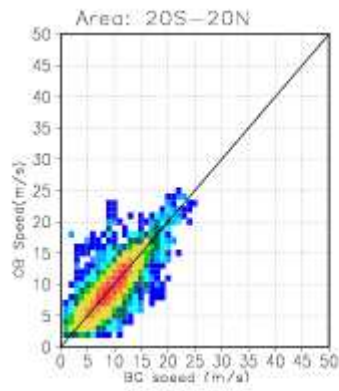


No. of OBS: 372468
Bias : 1.23
STD : 3.27

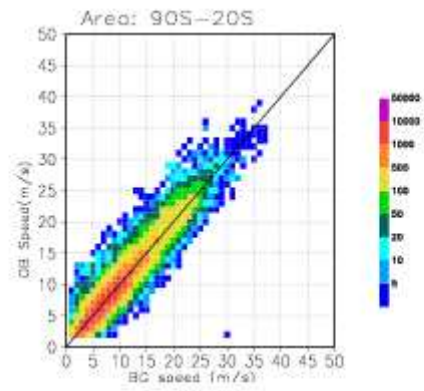
INSAT-3d VIS, June 2018, Low Level, Below 700 hPa



No. of OBS: 5664
Bias : -0.63
STD : 2.82

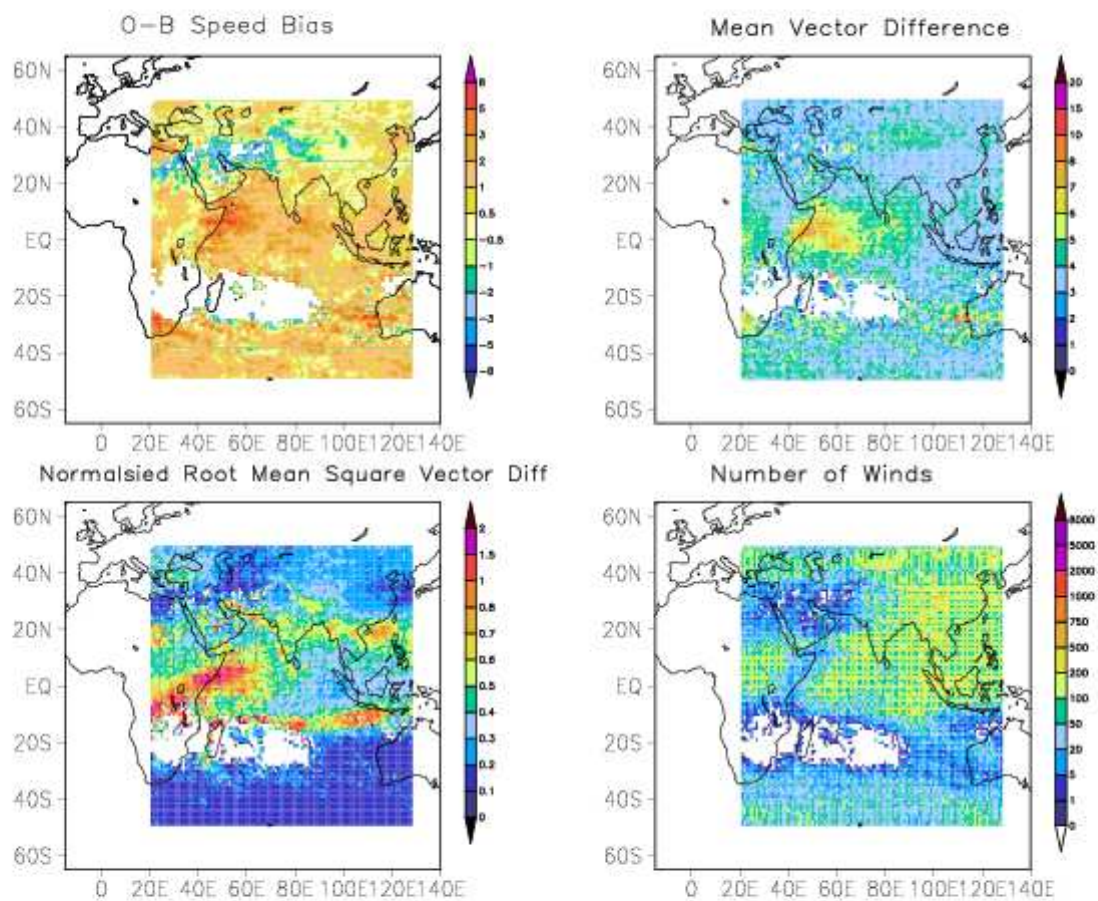


No. of OBS: 51998
Bias : 0.01
STD : 1.84

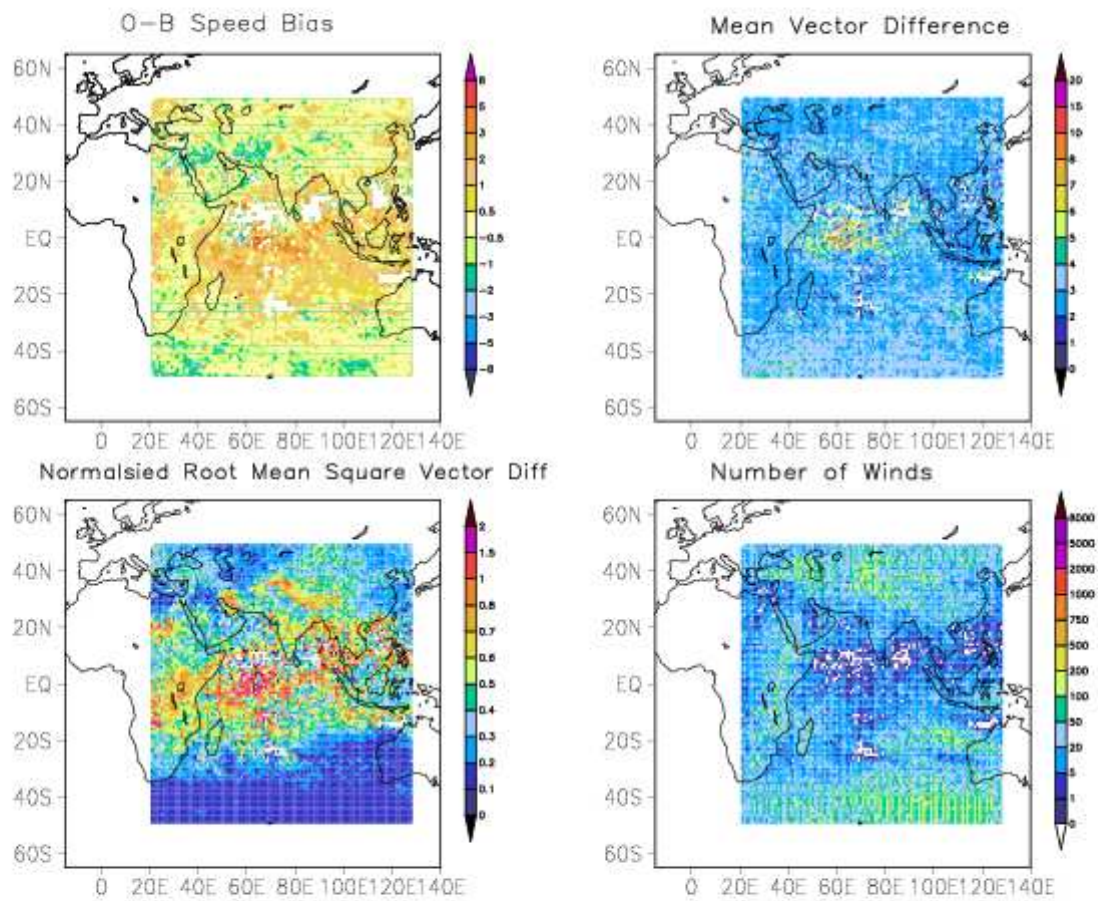


No. of OBS: 94767
Bias : 0.17
STD : 1.93

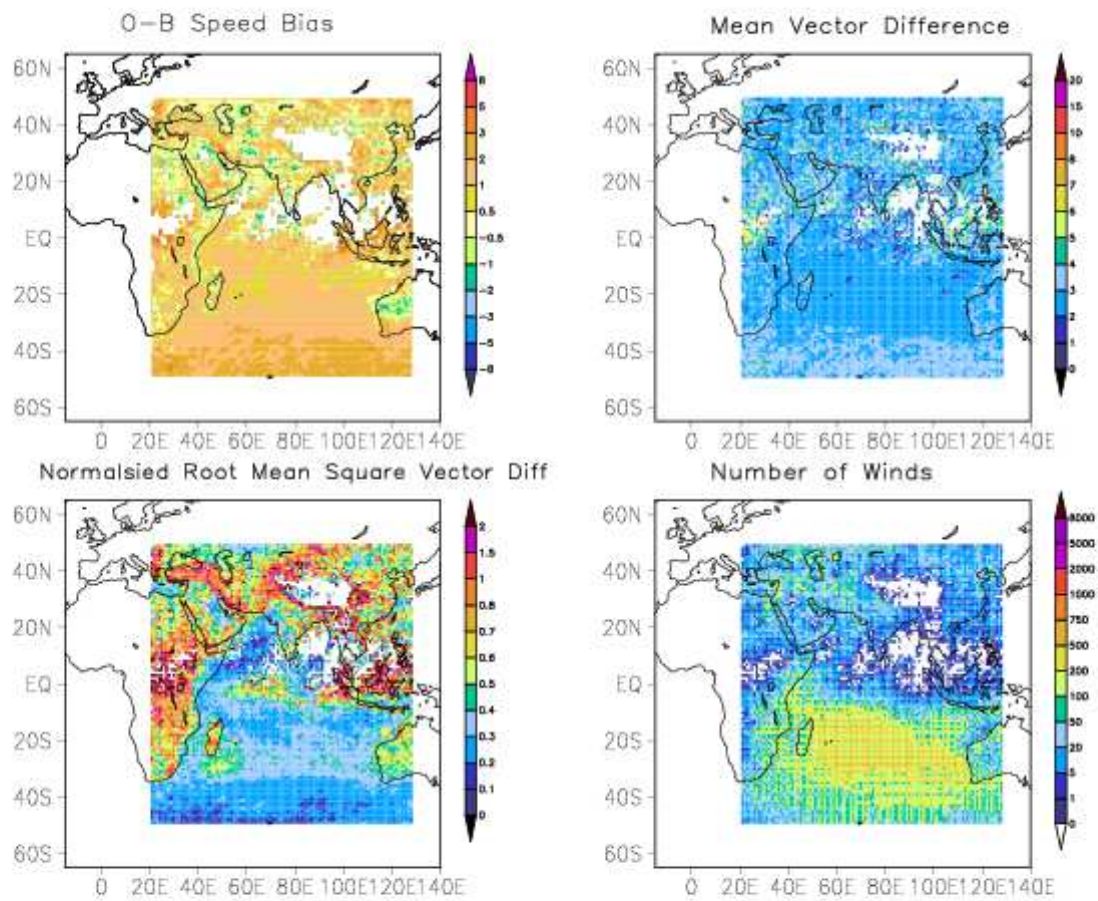
INSAT-3D IR(10.8), High Level, Above 400 hPa, June 2018



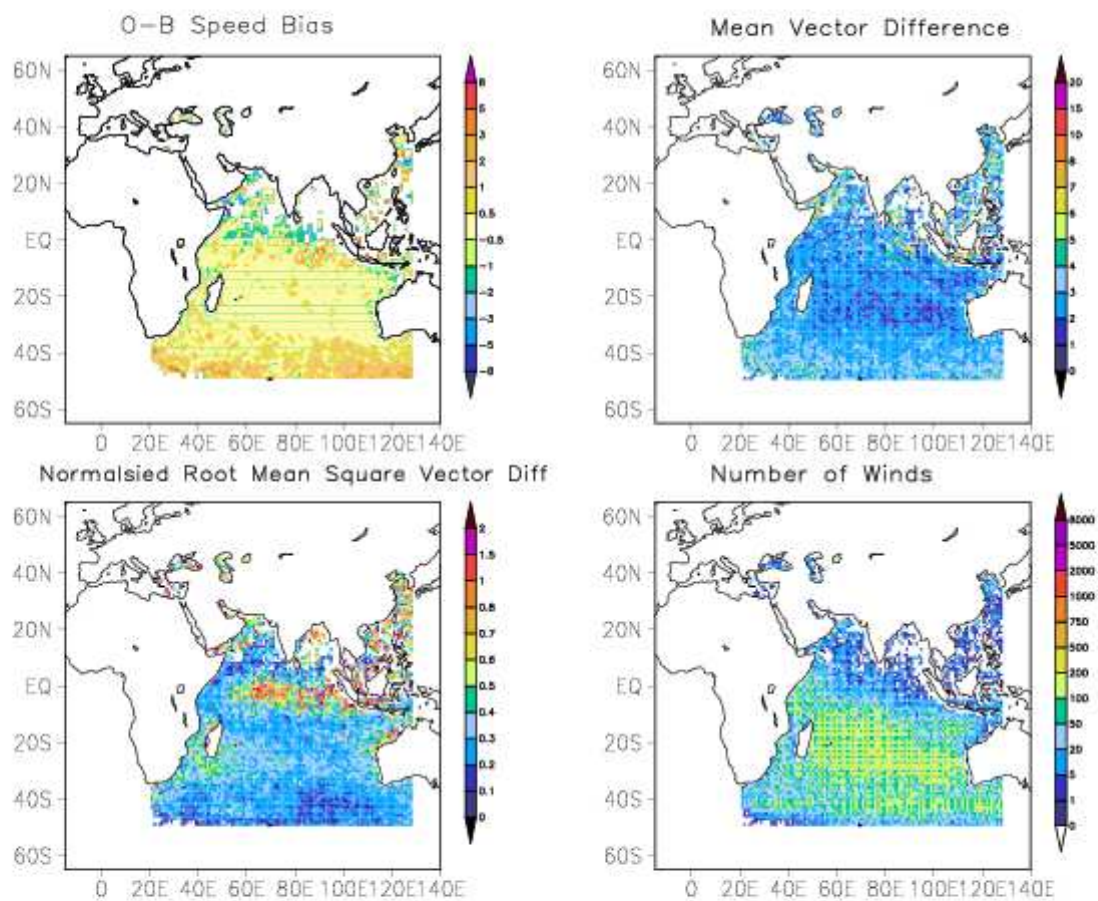
INSAT-3D IR(10.8), Mid Level, 700 – 401 hPa, June 2018



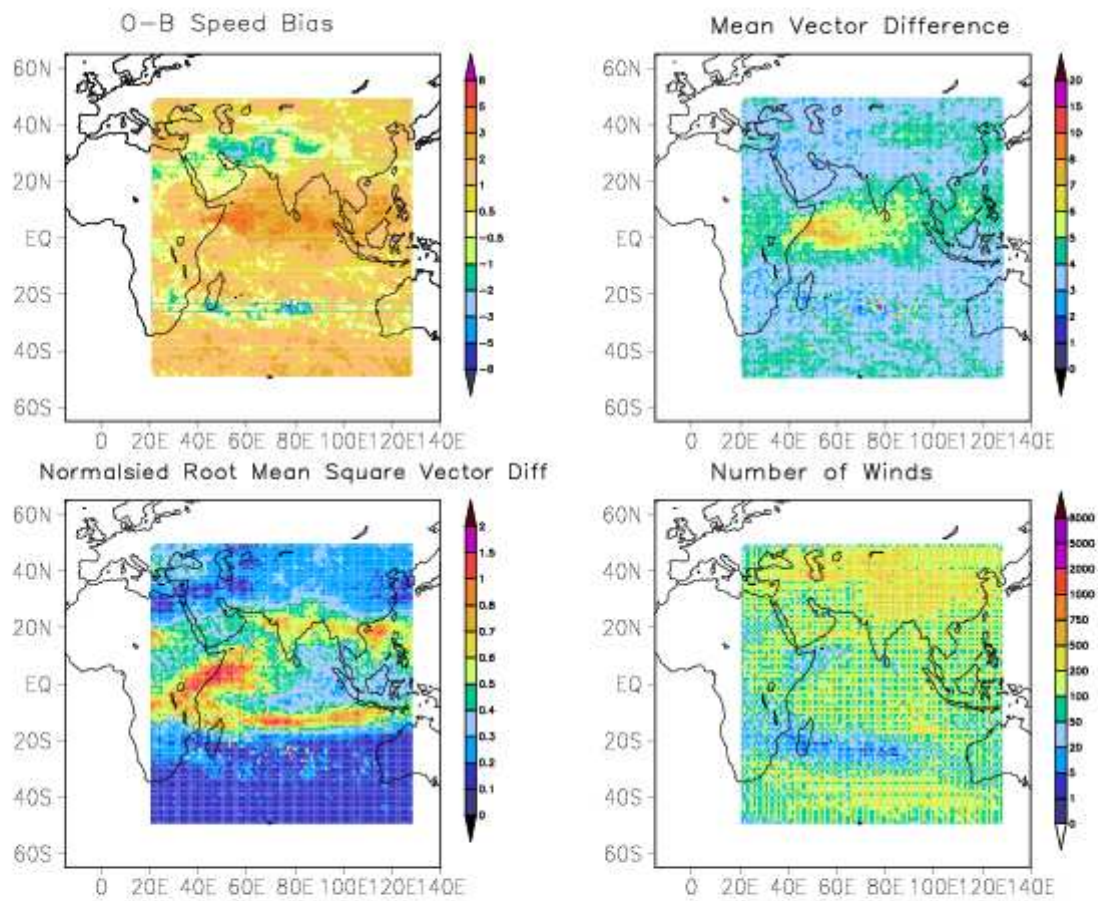
INSAT-3D IR(10.8), Low Level, Below 700 hPa, June 2018



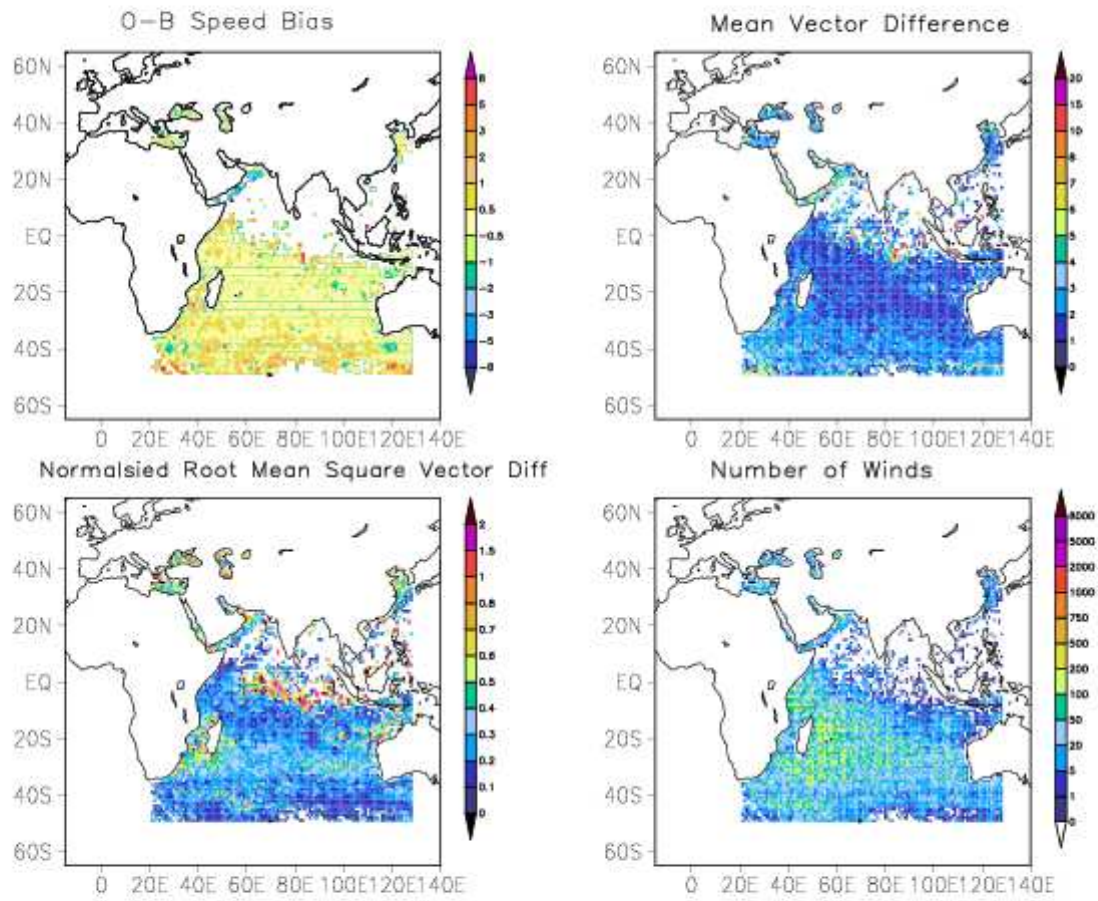
INSAT-3D IR(3.8), Low Level, Below 700 hPa, June 2018



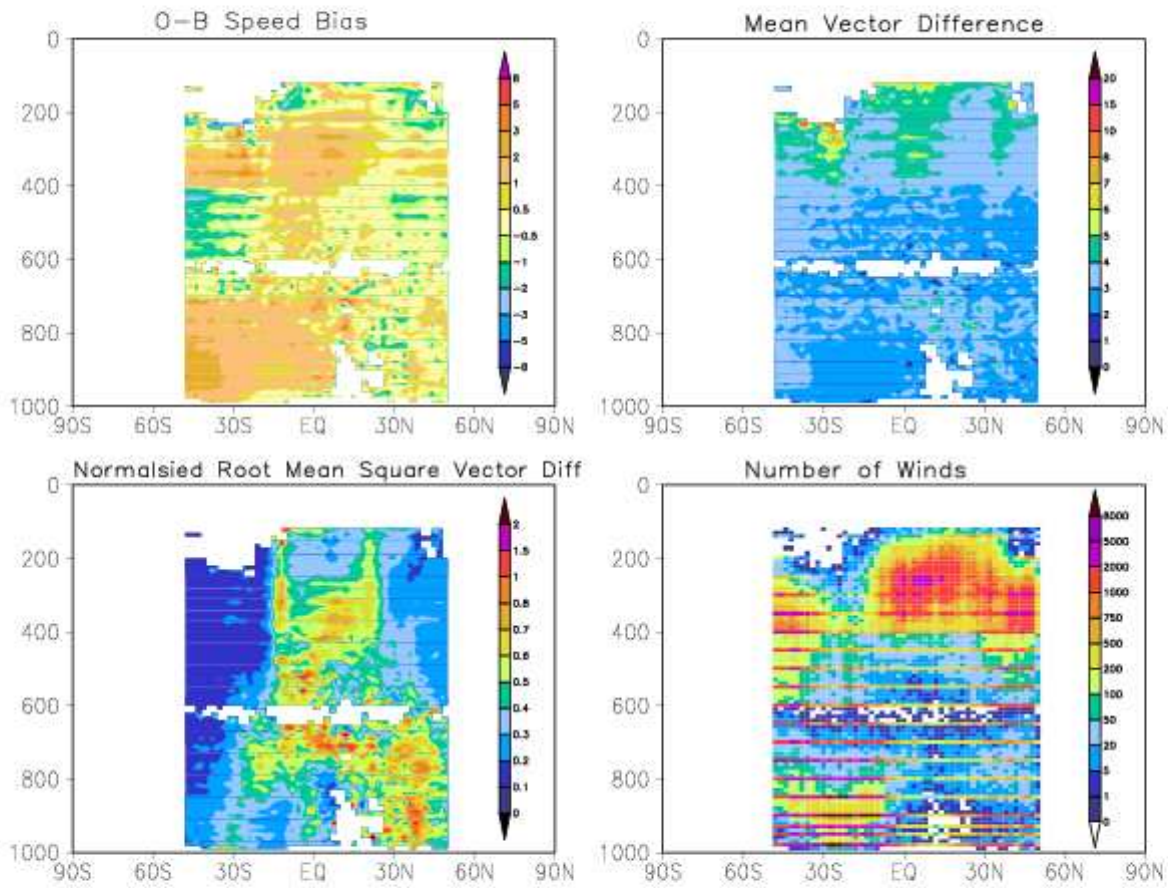
INSAT-3D WV, High Level, Above 400 hPa, June 2018



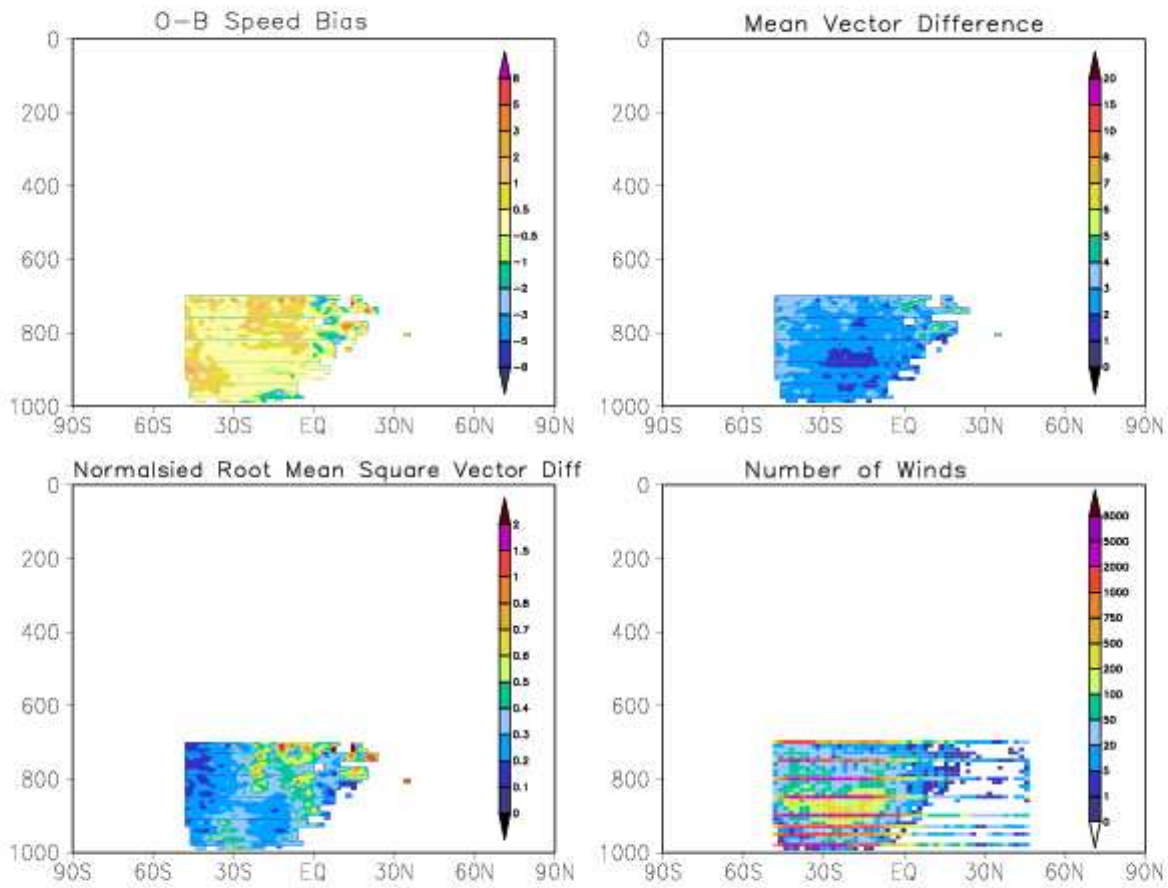
INSAT-3D VIS, Low Level, Below 700 hPa, June 2018



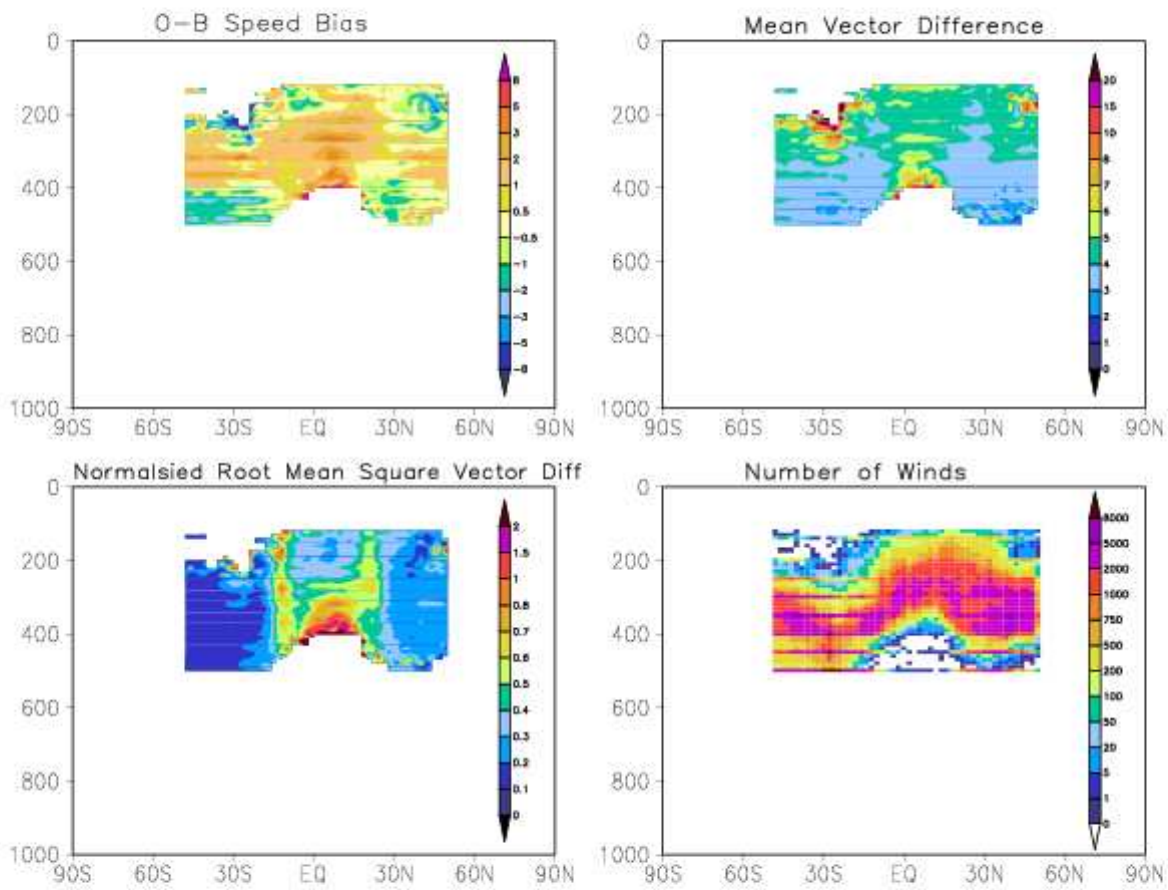
INSAT-3D IR (10.8), June 2018



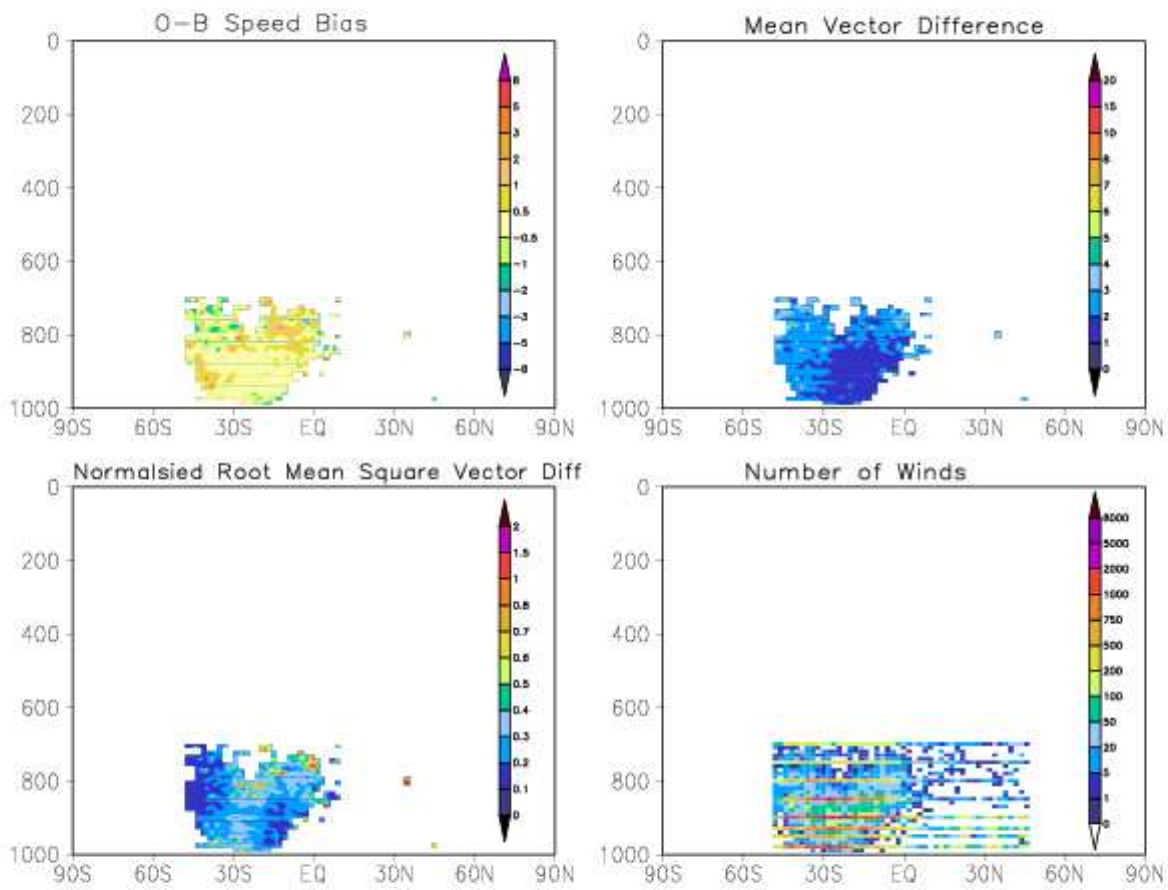
INSAT-3D IR (3.8), June 2018



INSAT-3D WV, June 2018



INSAT-3D VIS, June 2018



Validation against
Insitu Observations