

Validation of

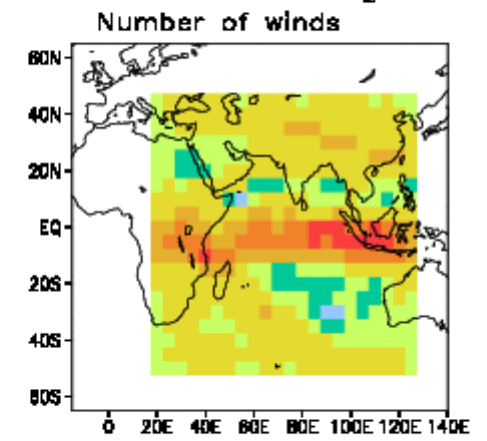
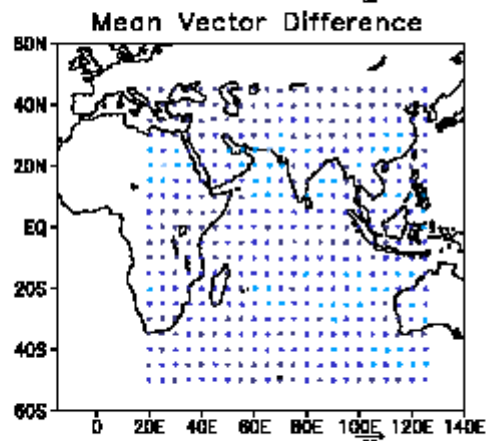
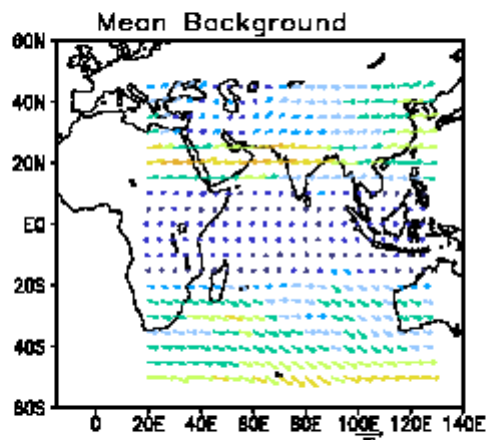
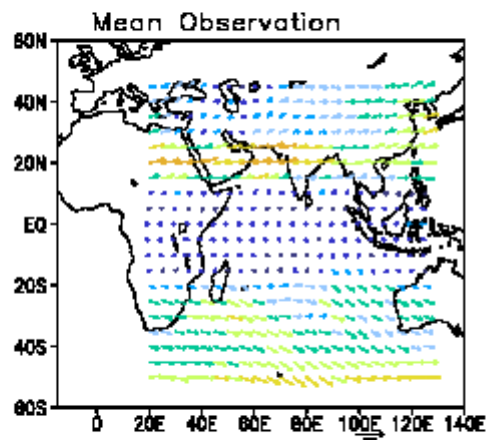
INSAT-3DR

Atmospheric Motion Vectors

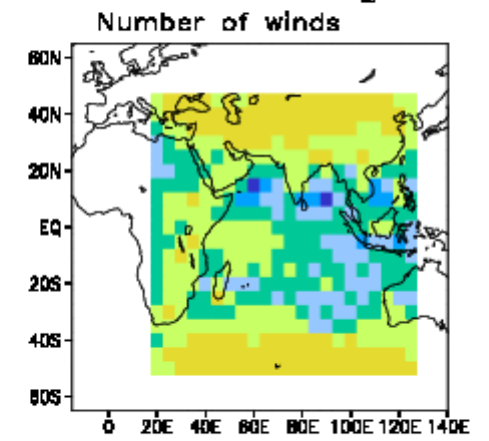
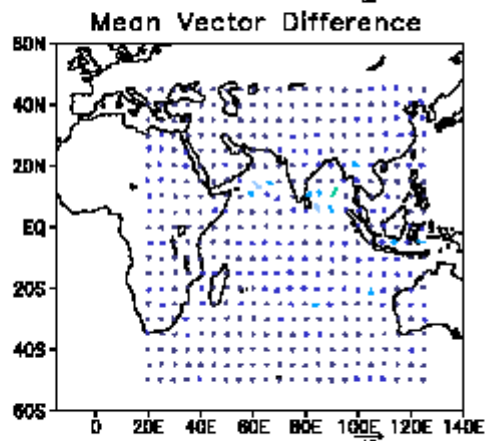
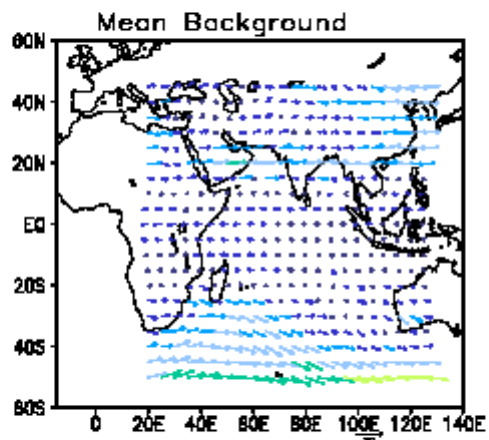
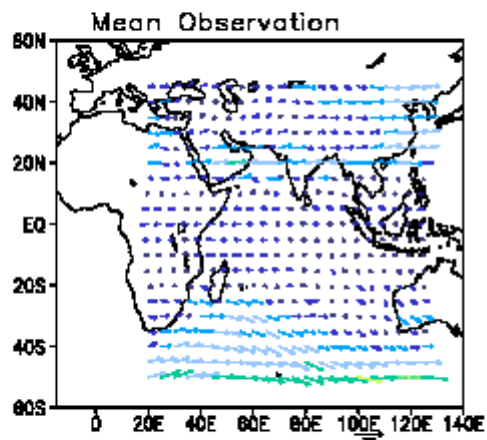
April 2024

Validation Against
NCMRWF NGFS First Guess

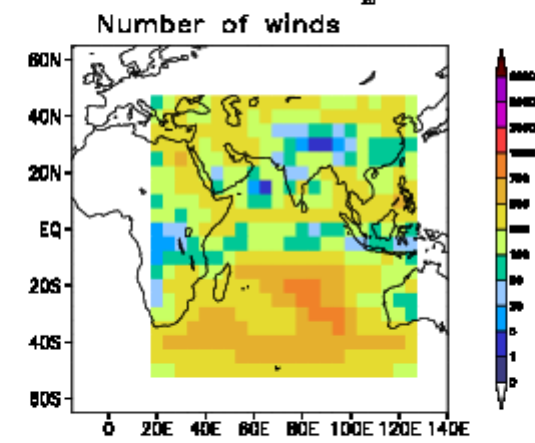
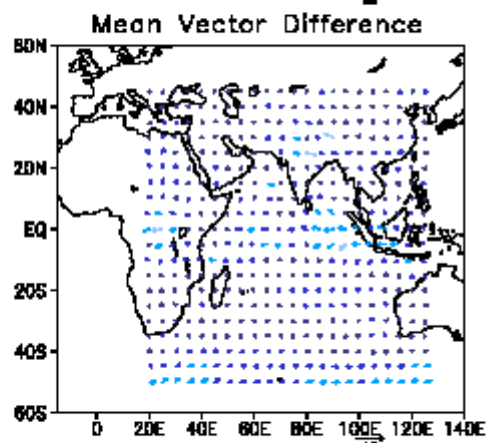
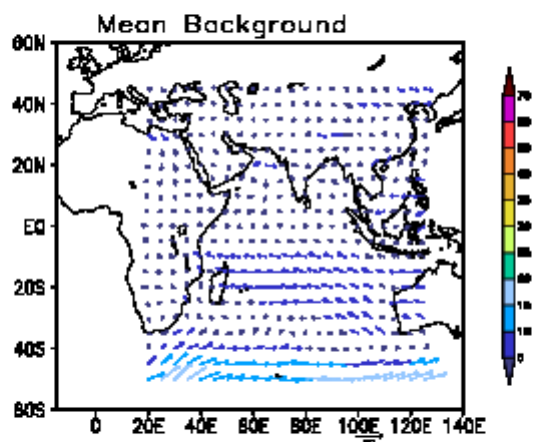
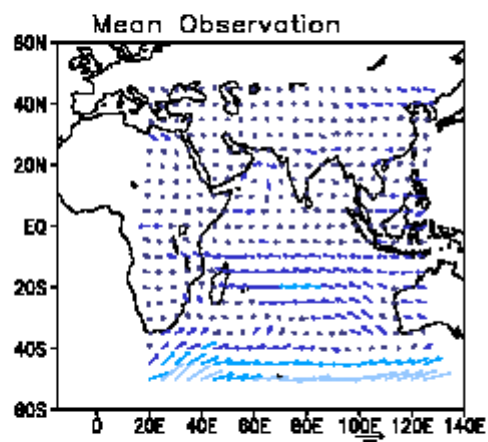
INSAT-3DR IR(10.8), High Level, Above 400 hPa, April 2024



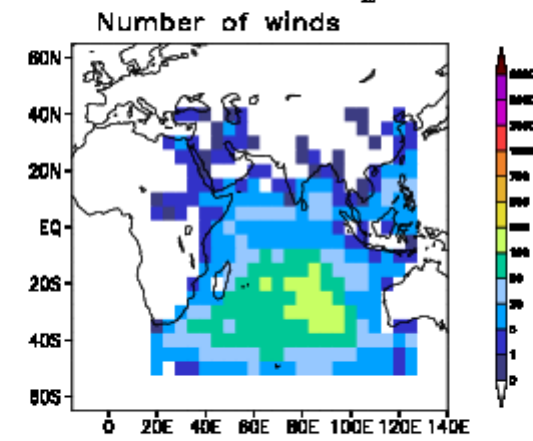
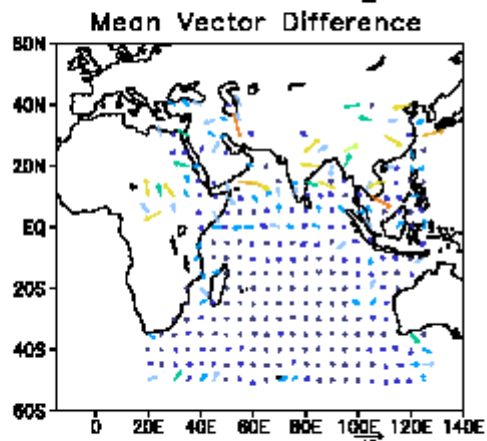
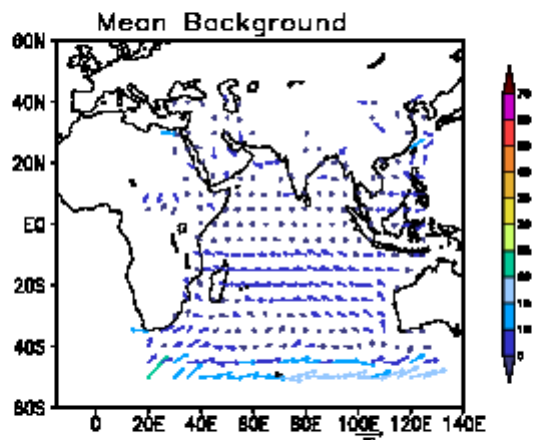
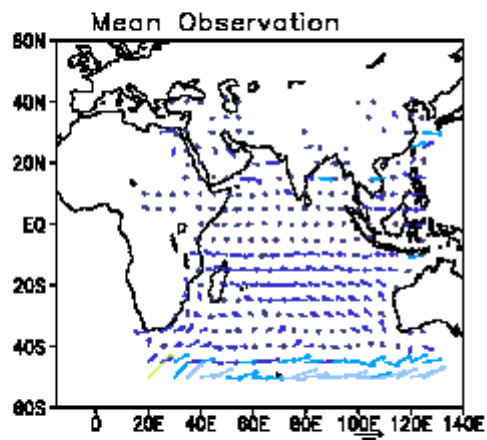
INSAT-3DR IR(10.8), Mid Level, 700 - 401 hPa, April 2024



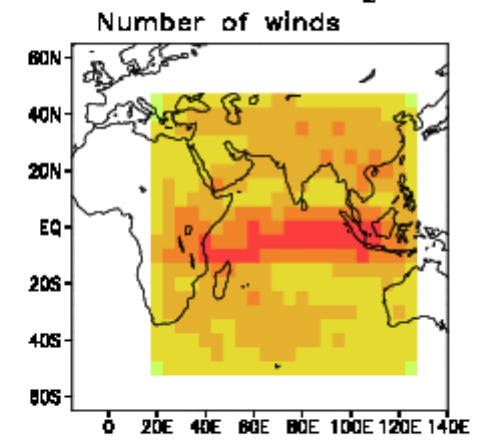
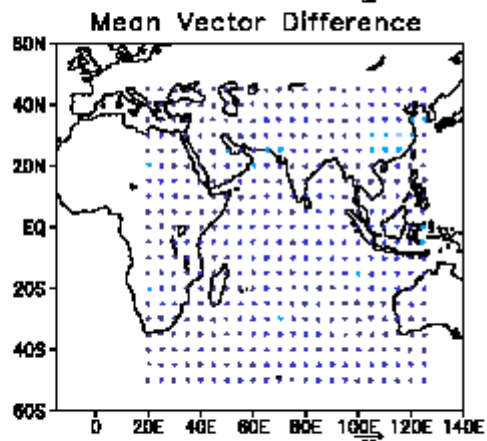
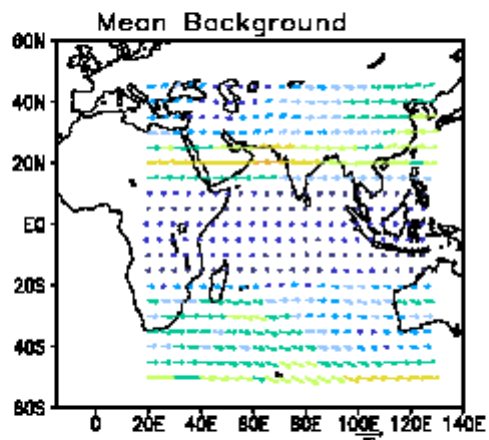
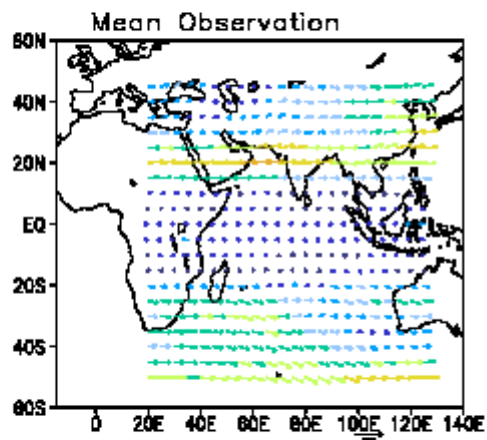
INSAT-3DR IR(10.8), Low Level, Below 700 hPa, April 2024



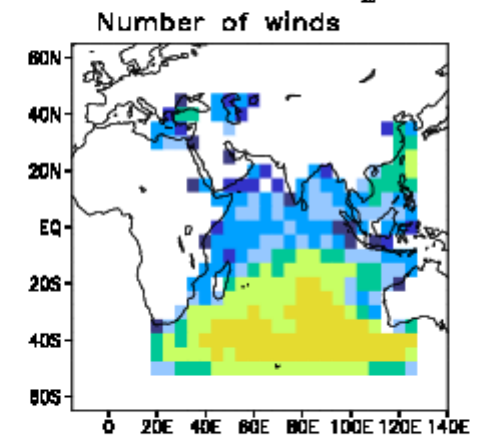
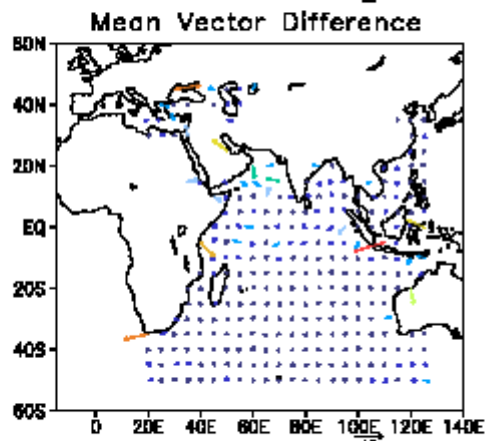
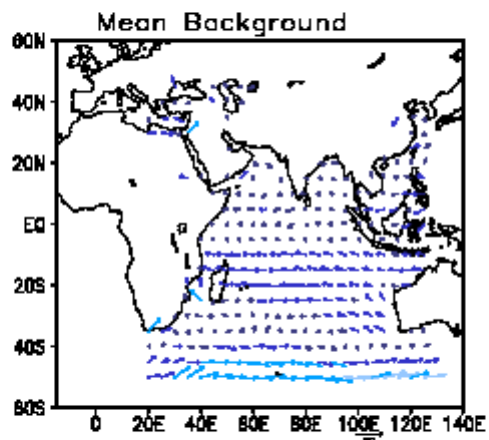
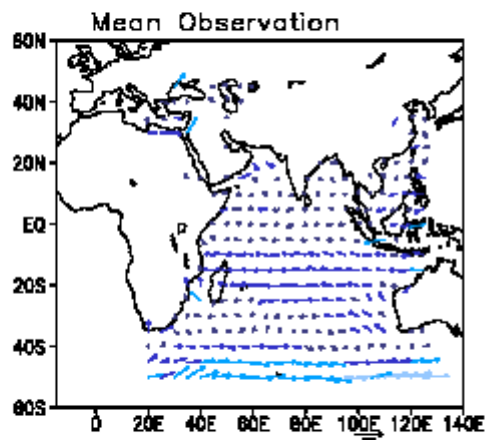
INSAT-3DR IR(3.8), Low Level, Below 700 hPa, April 2024



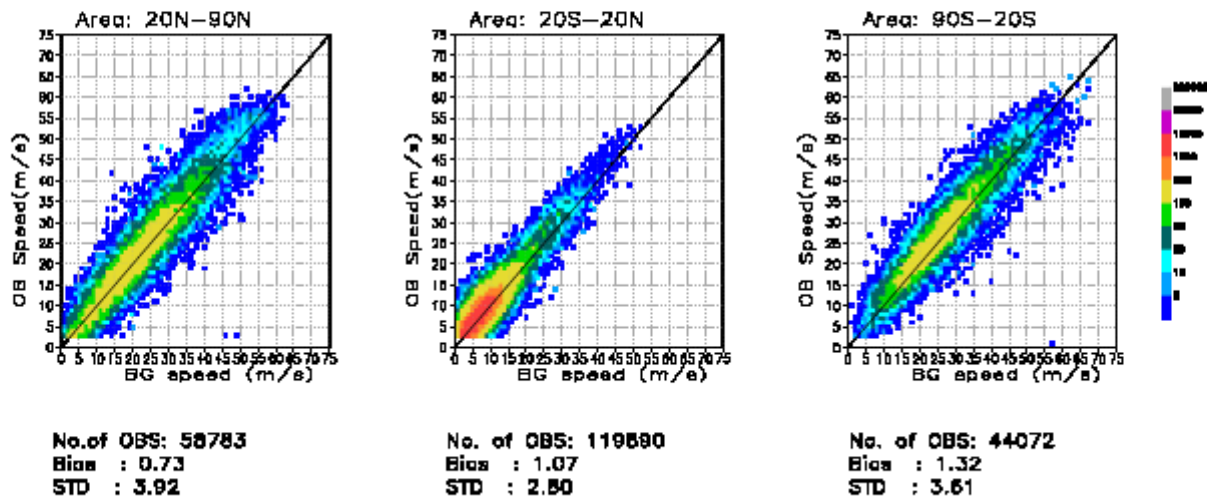
INSAT-3DR WV, High Level, Above 400 hPa, April 2024



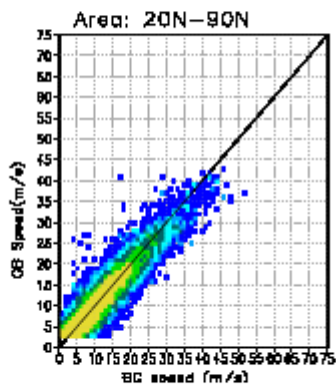
INSAT-3DR VIS, Low Level, Below 700 hPa, April 2024



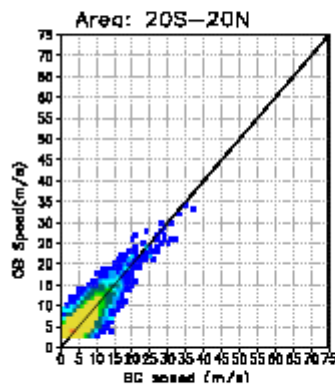
INSAT-3DR IR(10.8), April 2024, High Level, Above 400 hPa



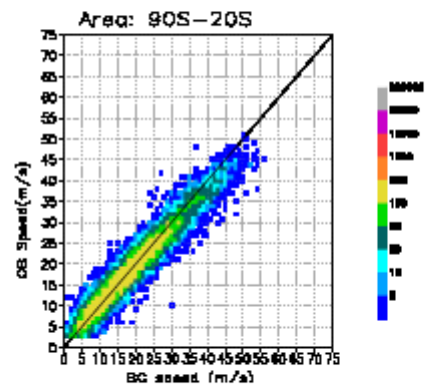
INSAT-3DR IR(10.8), April 2024, Mid Level, 700 – 401 hPa



No. of OBS: 33764
Bias : -0.22
STD : 2.83

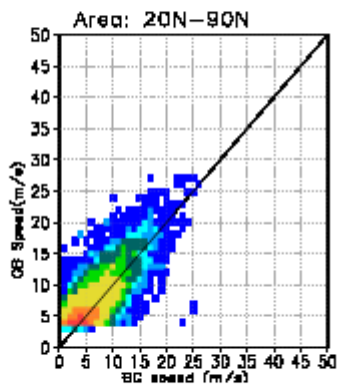


No. of OBS: 18183
Bias : 0.48
STD : 2.28

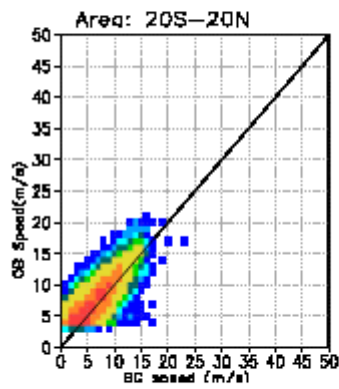


No. of OBS: 32761
Bias : -0.17
STD : 2.63

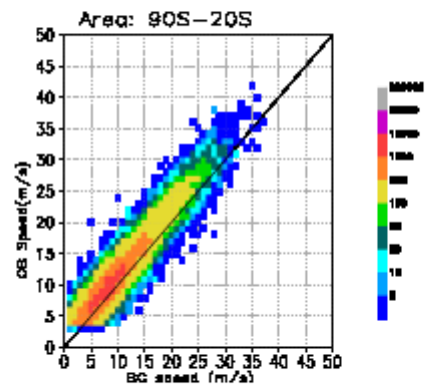
INSAT-3DR IR(10.8), April 2024, Low Level, Below 700 hPa



No. of OBS: 32238
Bias : 0.85
STD : 2.51

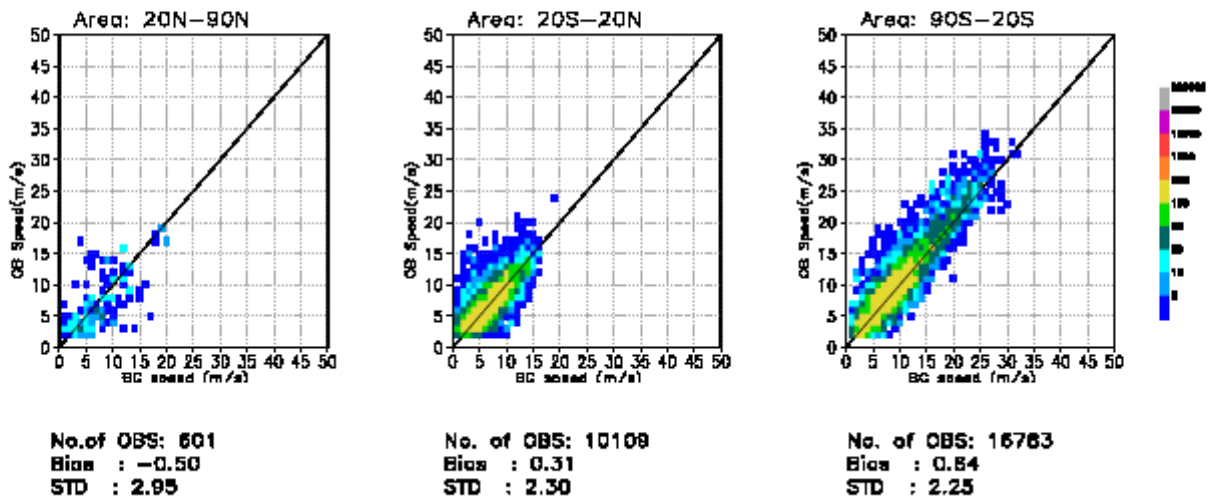


No. of OBS: 59317
Bias : 1.14
STD : 2.09

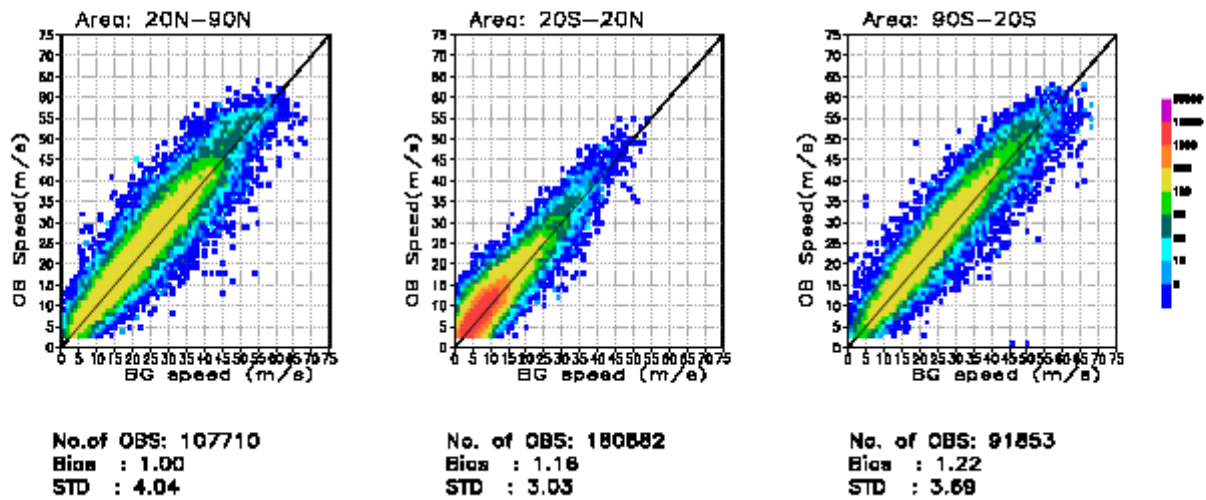


No. of OBS: 65162
Bias : 1.73
STD : 2.08

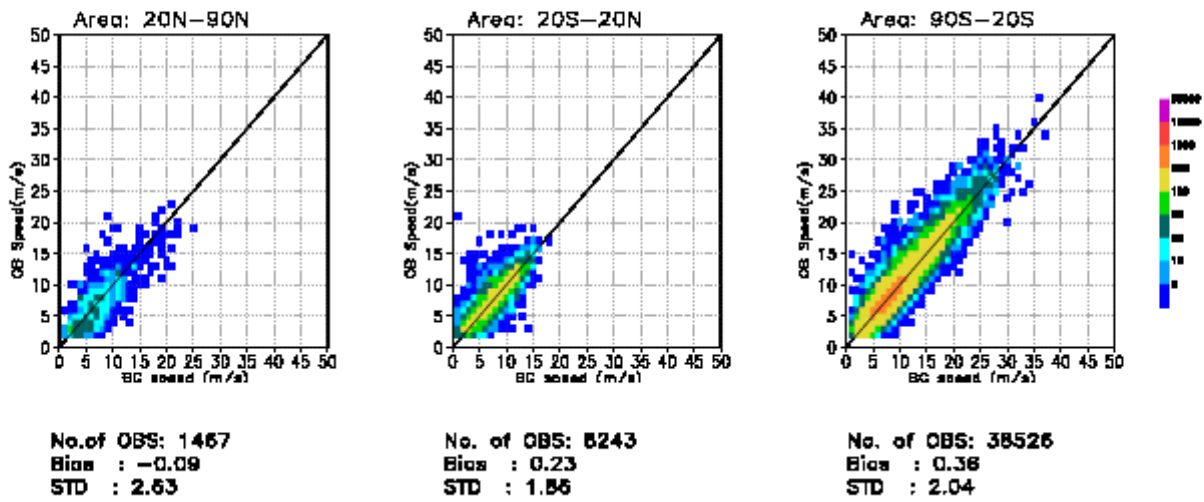
INSAT-3DR IR(3.8), April 2024, Low Level, Below 700 hPa



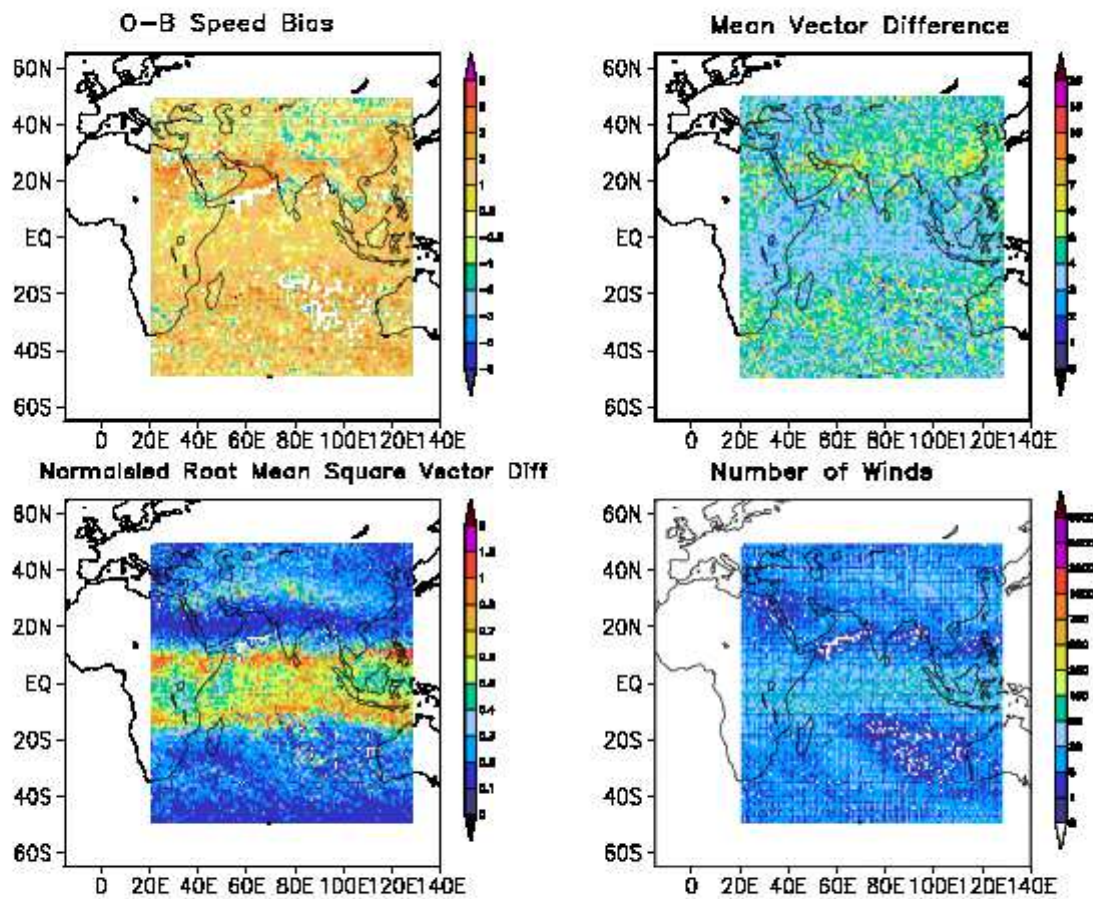
INSAT-3DR WV, April 2024, High Level, Above 400 hPa



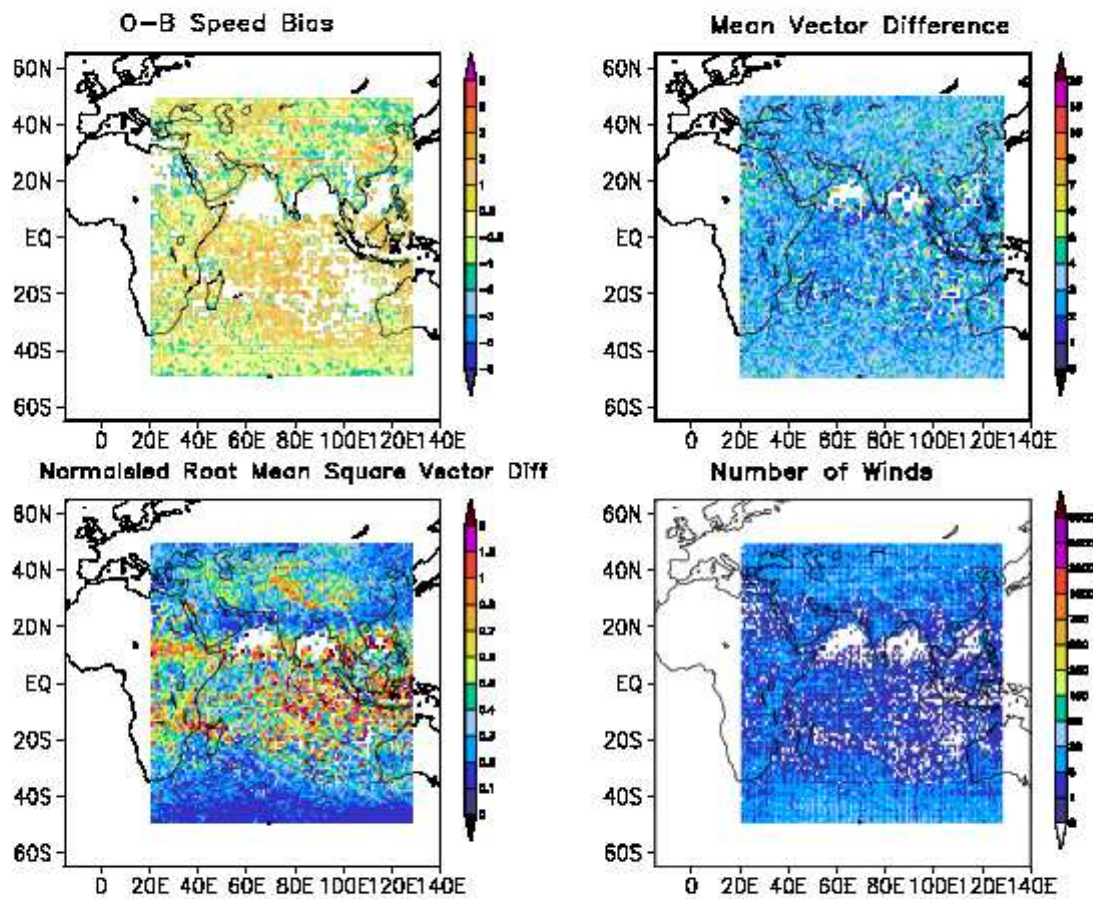
INSAT-3dr VIS, April 2024, Low Level, Below 700 hPa



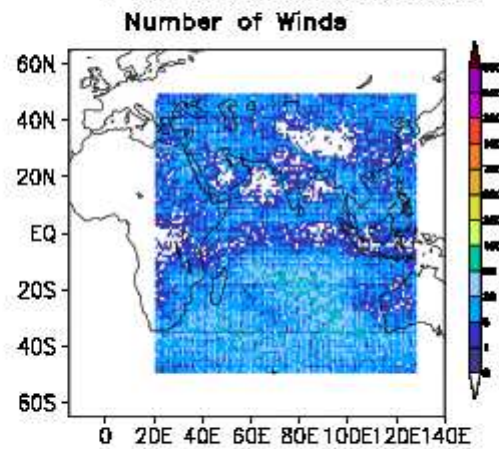
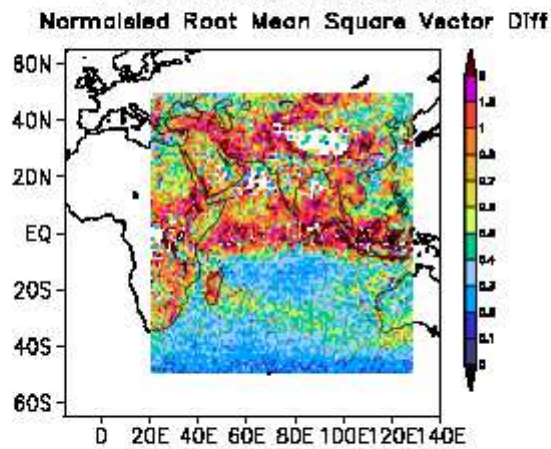
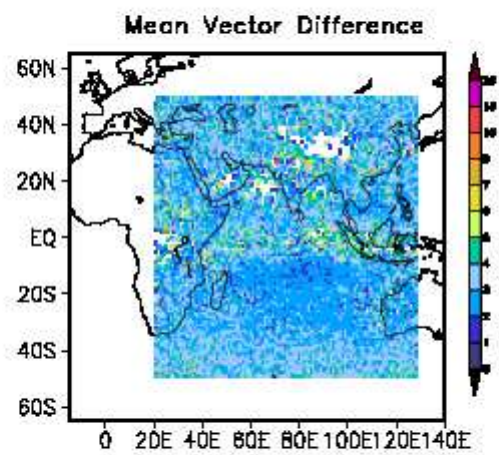
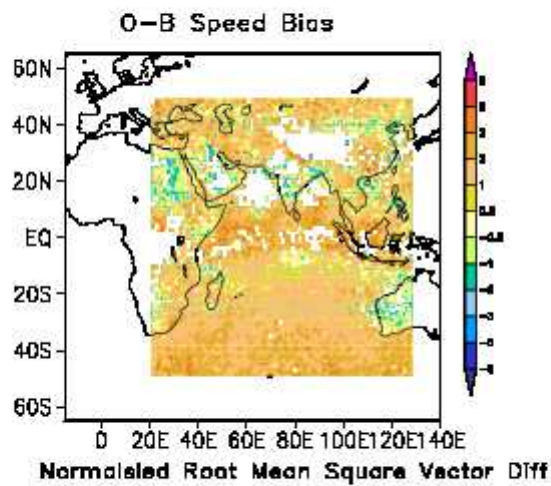
INSAT-3DR IR(10.8), High Level, Above 400 hPa, April 2024



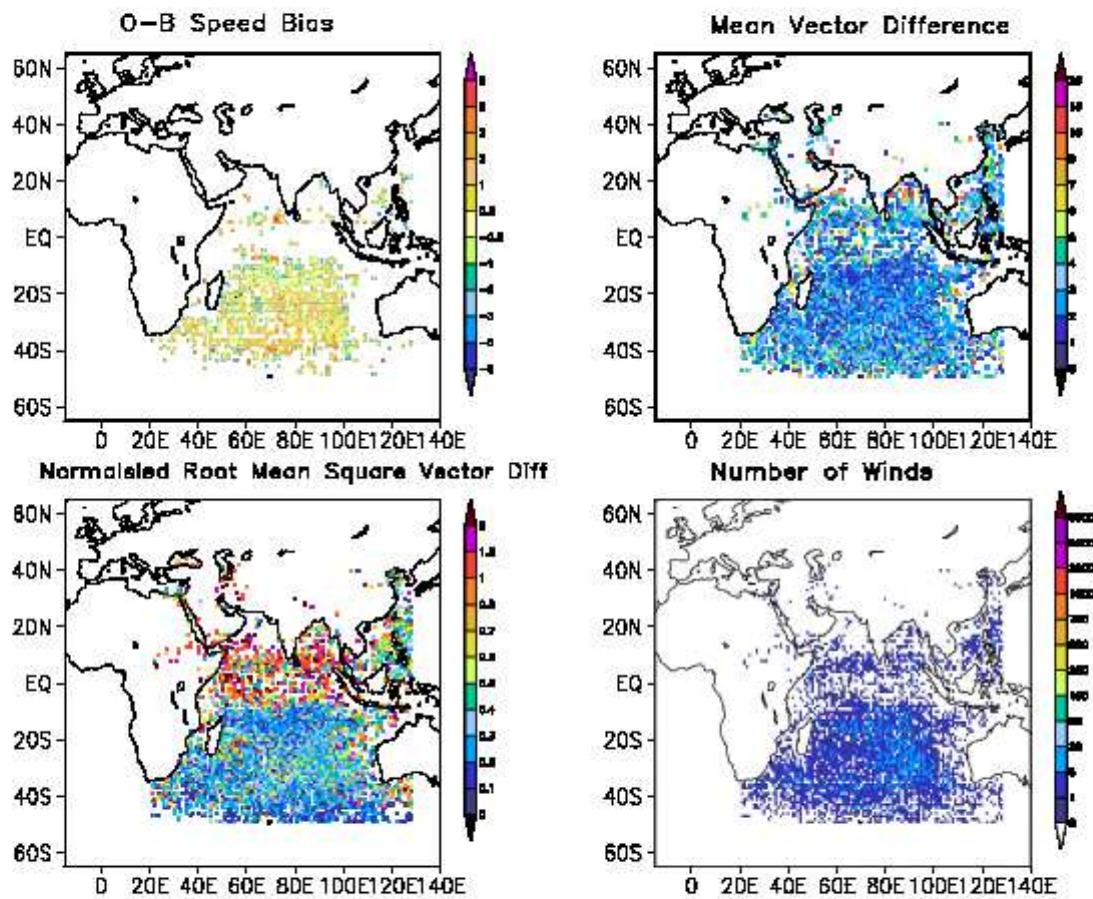
INSAT-3DR IR(10.8), Mid Level, 700 - 401 hPa, April 2024



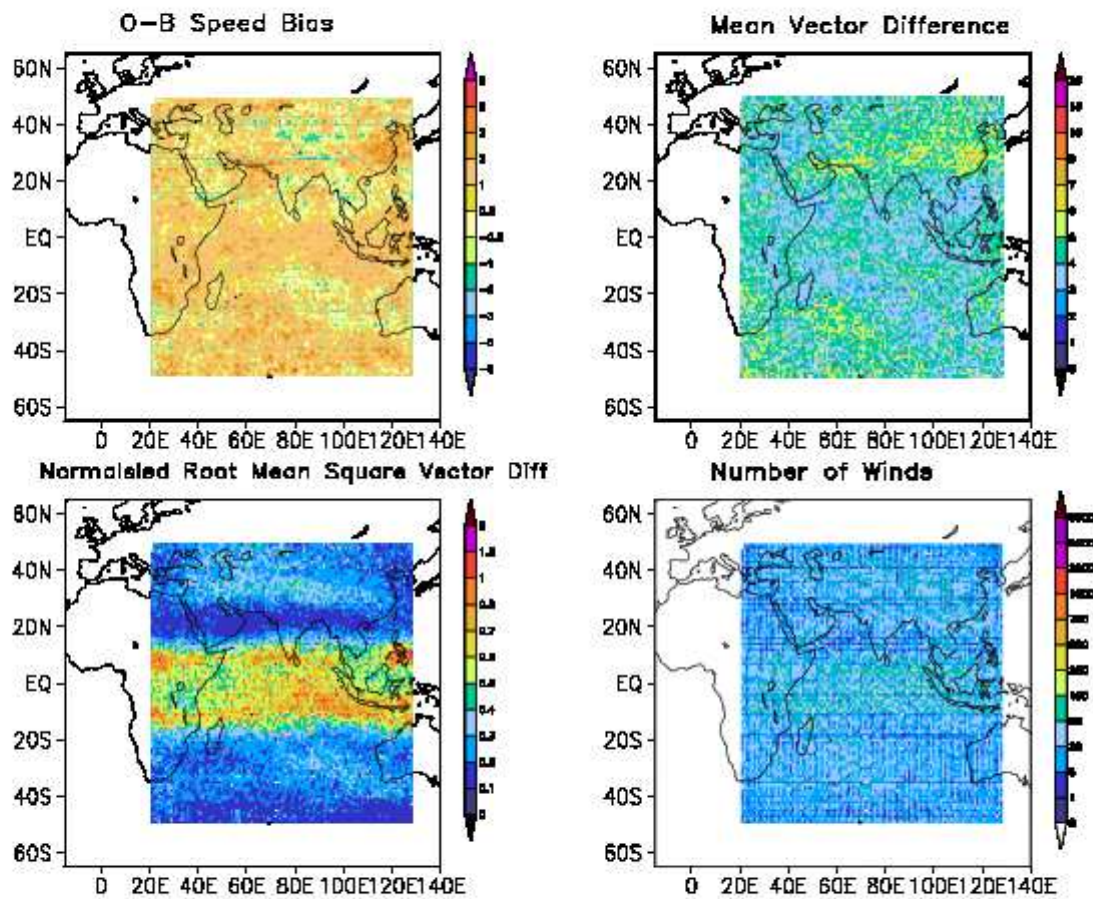
INSAT-3DR IR(10.8), Low Level, Below 700 hPa, April 2024



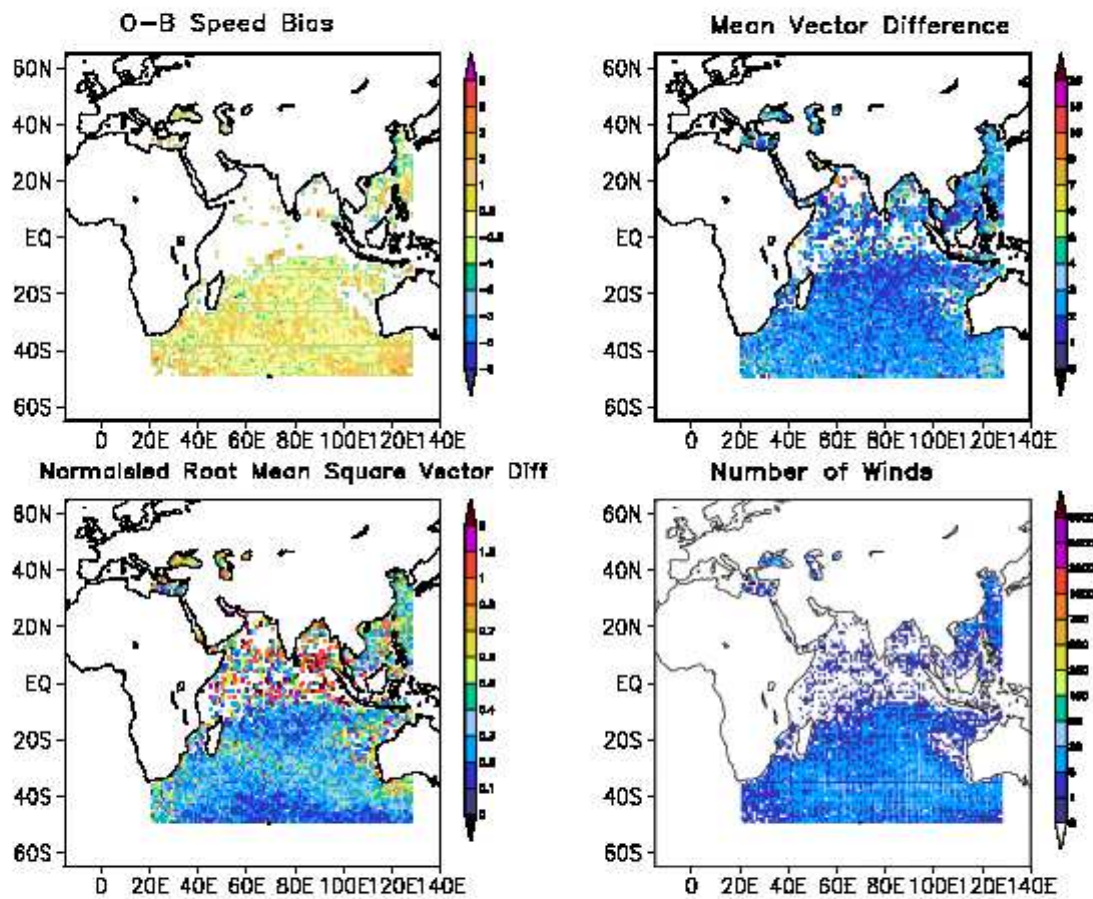
INSAT-3DR IR(3.8), Low Level, Below 700 hPa, April 2024



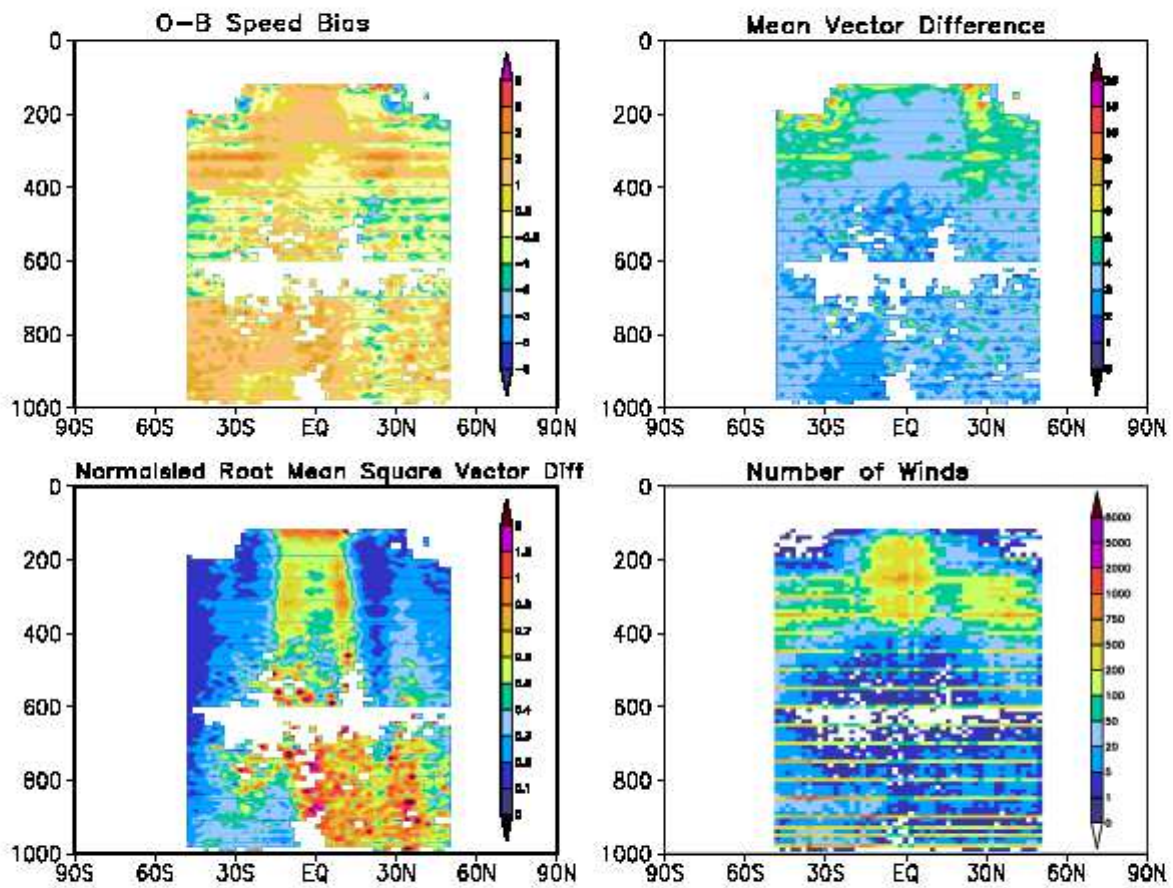
INSAT-3DR WV, High Level, Above 400 hPa, April 2024



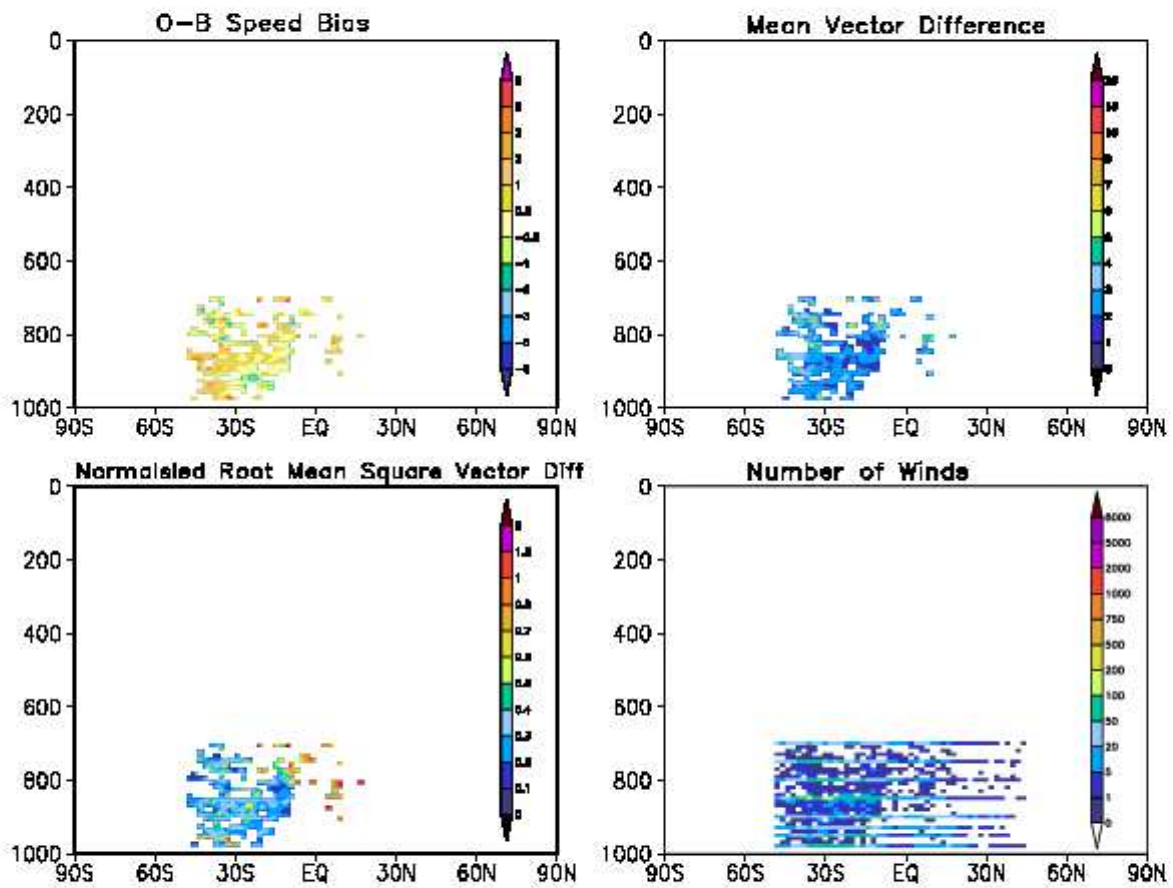
INSAT-3DR VIS, Low Level, Below 700 hPa, April 2024



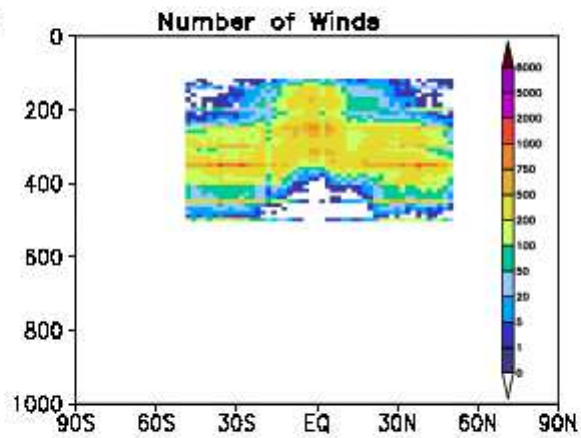
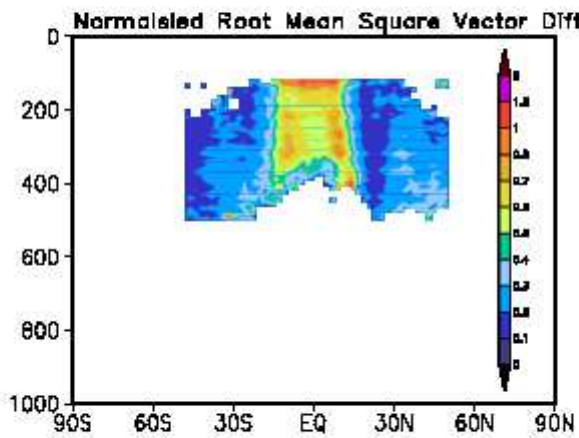
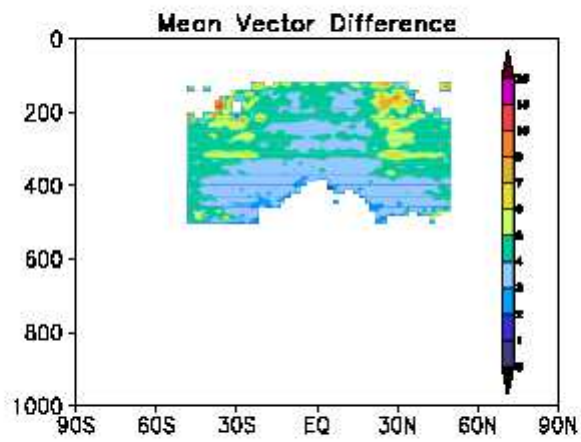
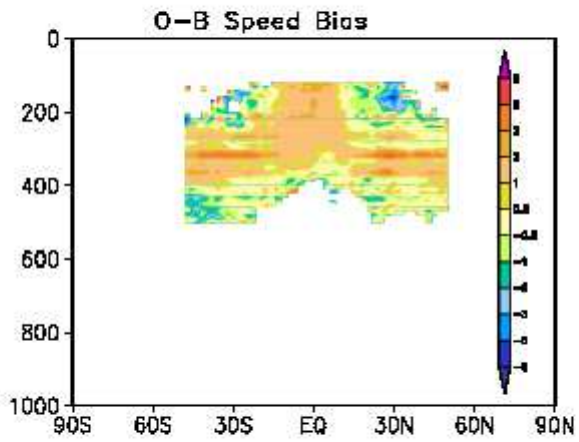
INSAT-3DR IR (10.8), April 2024



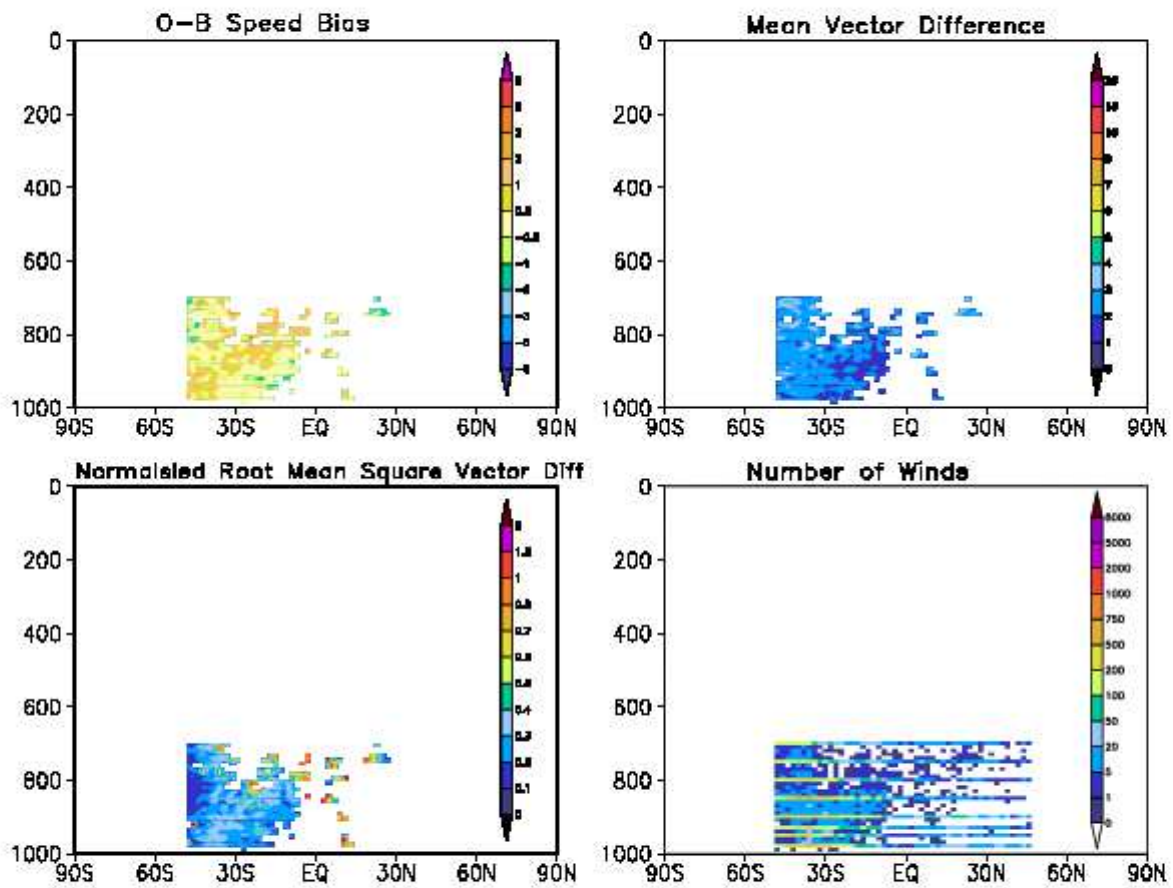
INSAT-3DR IR (3.8), April 2024



INSAT-3DR WV, April 2024



INSAT-3DR VIS, April 2024



Validation against
Insitu Observations

INSAT-3DR SATELLITE AMVS
(Comparison against Insitu Observations)
Reporting Period: 01 04 2024 - 30 04 2024

NORTHERN HEMISPHERE

	Mean AMV WS	Mean INSITU WS	Speed Bias	RMSVD	Number of Collocations
Hig Lev IR:	25.17	28.20	-3.03	7.85	15
Mid Lev IR:	8.65	11.42	-2.77	7.51	6
Low Lev IR:	6.93	6.17	0.76	3.41	7
Hig Lev WV:	0.00	0.00	0.00	0.00	0
Low Lev VIS:	0.00	0.00	0.00	0.00	0

TROPICS

	Mean AMV WS	Mean INSITU WS	Speed Bias	RMSVD	Number of Collocations
Hig Lev IR:	6.50	7.40	-0.90	3.76	25
Mid Lev IR:	2.60	4.10	-1.50	3.05	1
Low Lev IR:	5.12	3.71	1.41	2.79	15
Hig Lev WV:	0.00	0.00	0.00	0.00	0
Low Lev VIS:	0.00	0.00	0.00	0.00	0

SOUTHERN HEMISPHERE

	Mean AMV WS	Mean INSITU WS	Speed Bias	RMSVD	Number of Collocations
Hig Lev IR:	0.00	0.00	0.00	0.00	0
Mid Lev IR:	4.10	2.58	1.52	2.01	1
Low Lev IR:	0.00	0.00	0.00	0.00	0
Hig Lev WV:	0.00	0.00	0.00	0.00	0
Low Lev VIS:	0.00	0.00	0.00	0.00	0

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