

Validation of

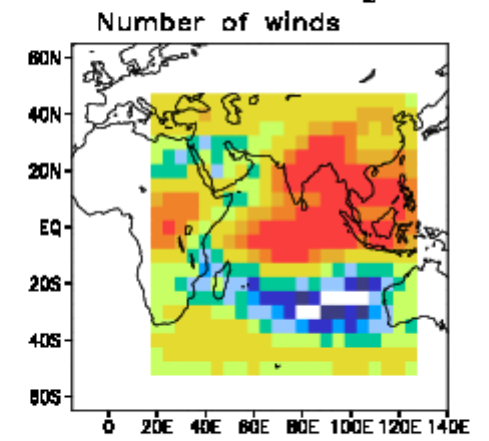
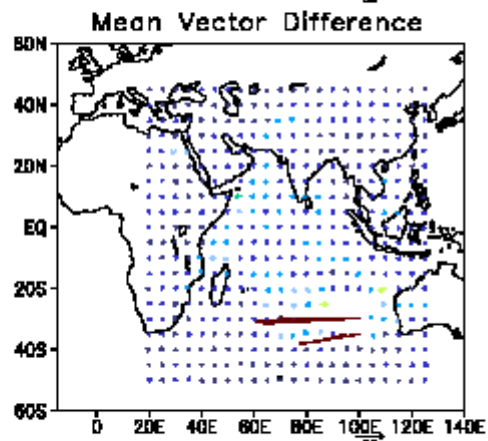
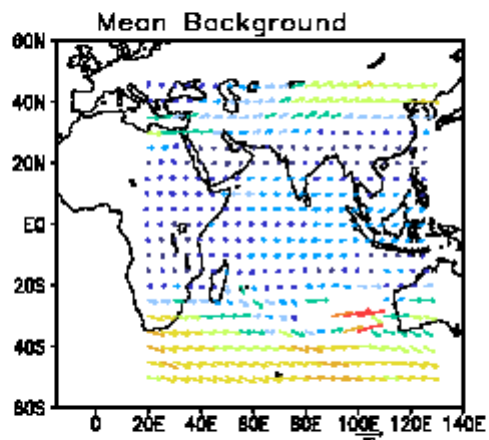
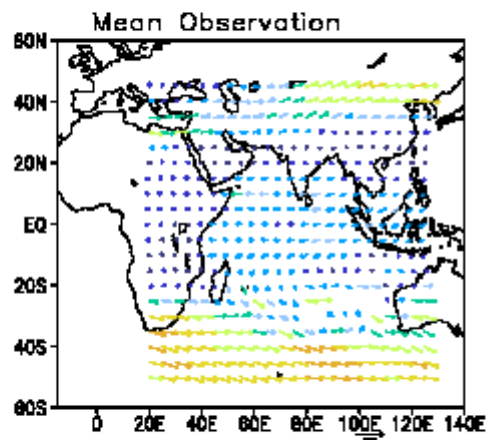
INSAT-3DR

Atmospheric Motion Vectors

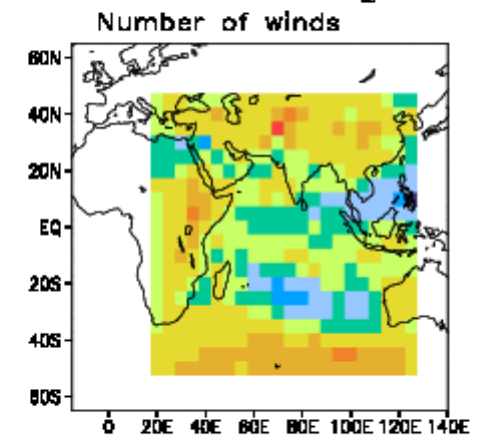
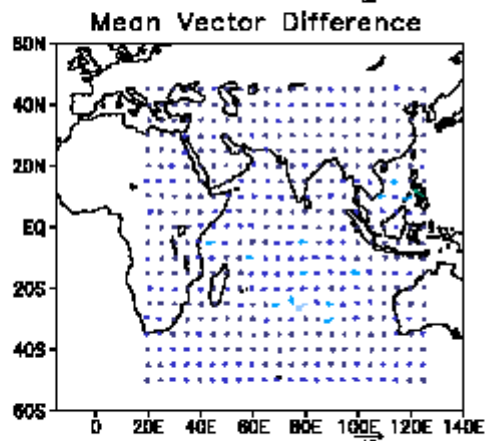
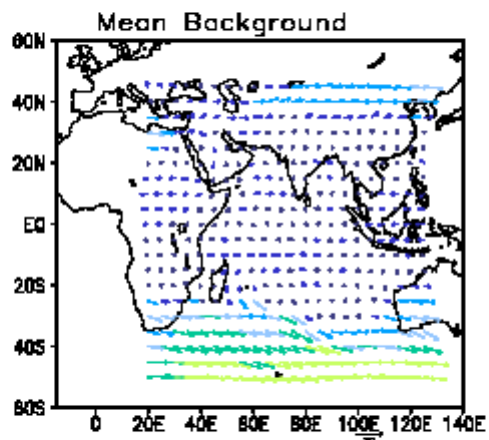
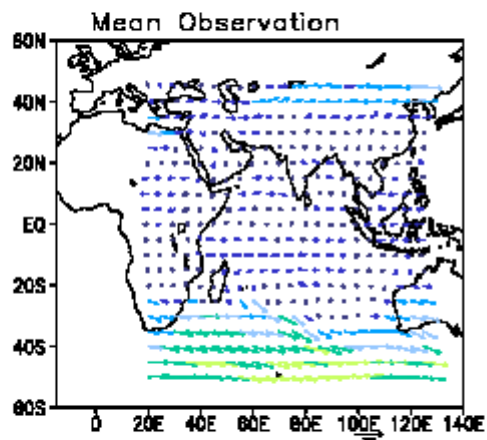
September 2024

Validation Against
NCMRWF NGFS First Guess

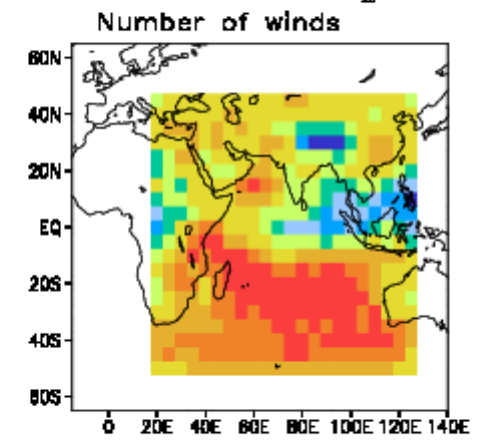
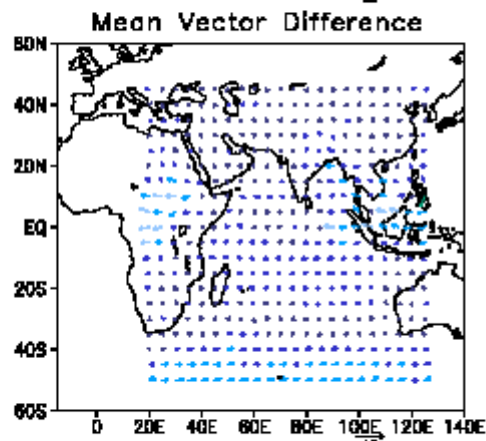
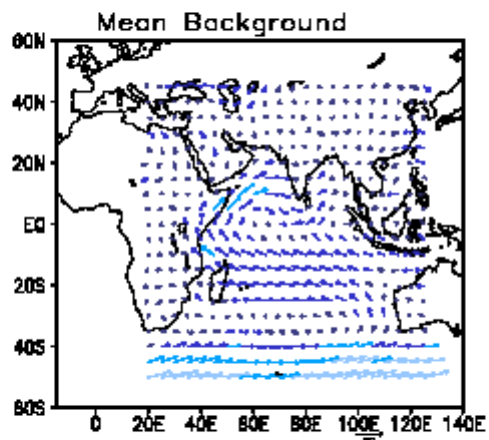
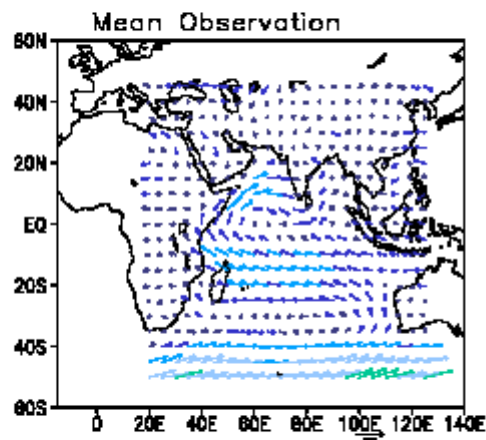
INSAT-3DR IR(10.8), High Level, Above 400 hPa, September 2024



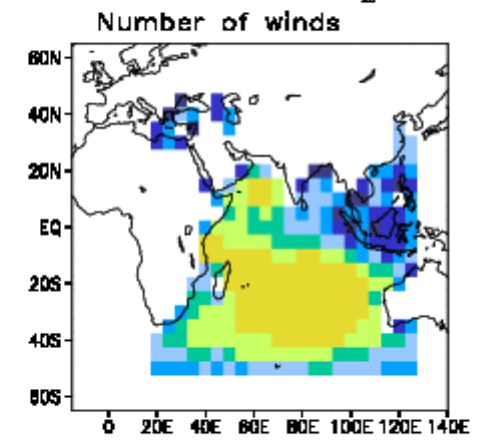
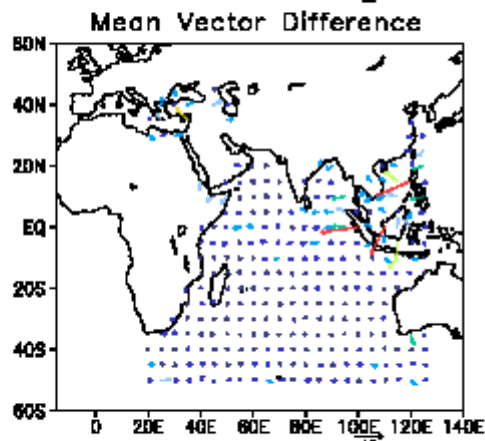
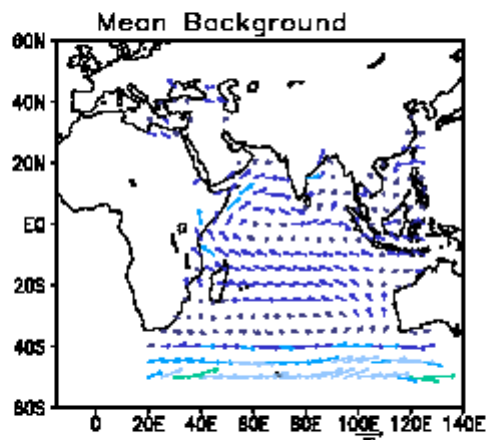
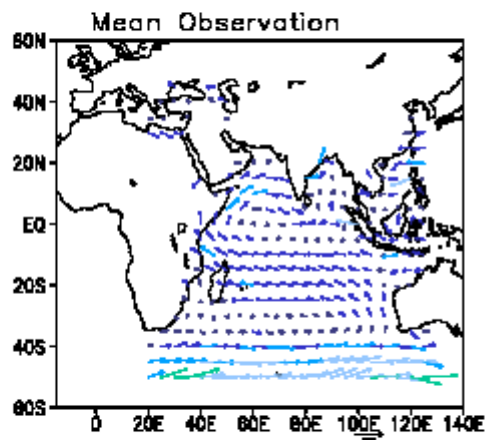
INSAT-3DR IR(10.8), Mid Level, 700 – 401 hPa, September 2024



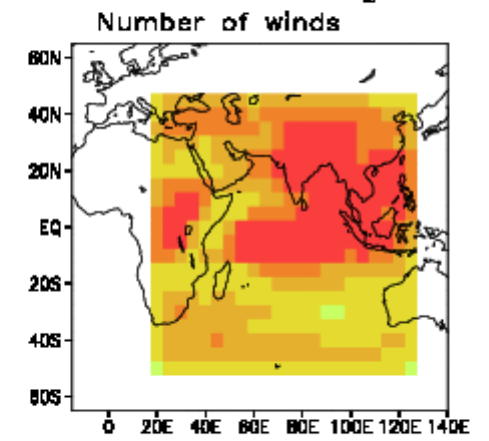
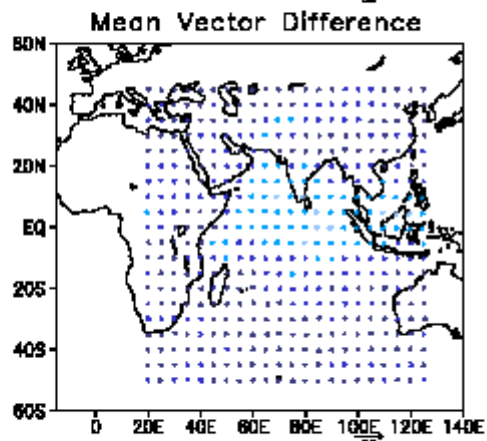
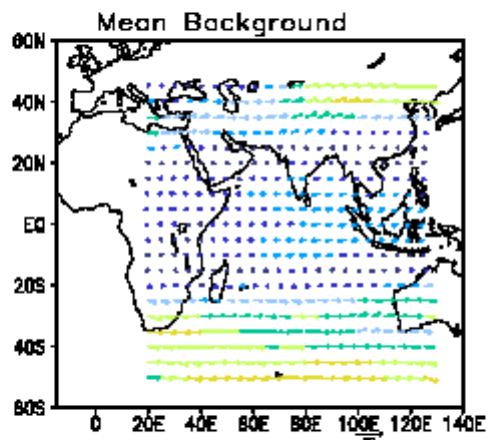
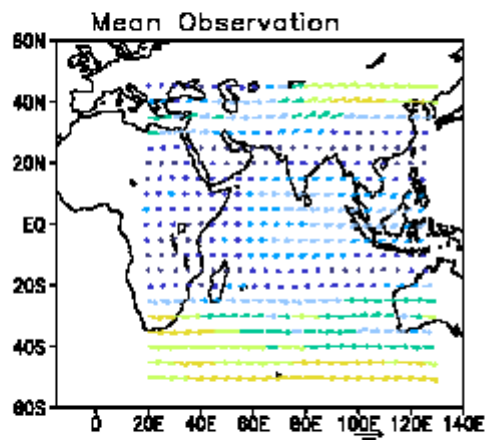
INSAT-3DR IR(10.8), Low Level, Below 700 hPa, September 2024



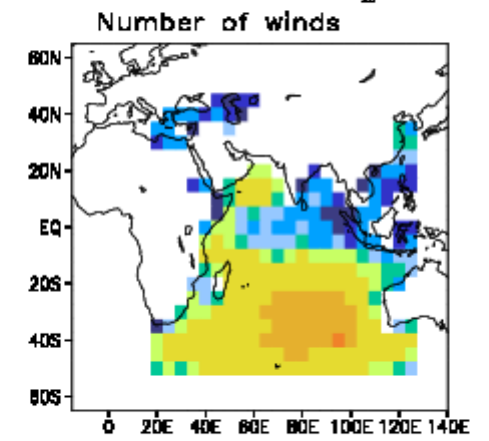
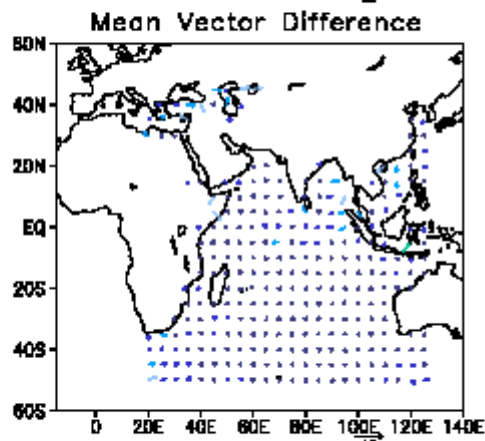
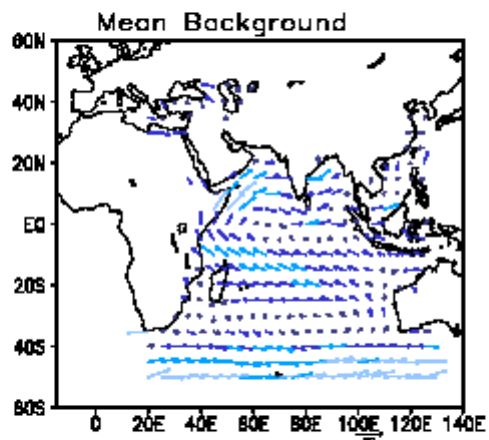
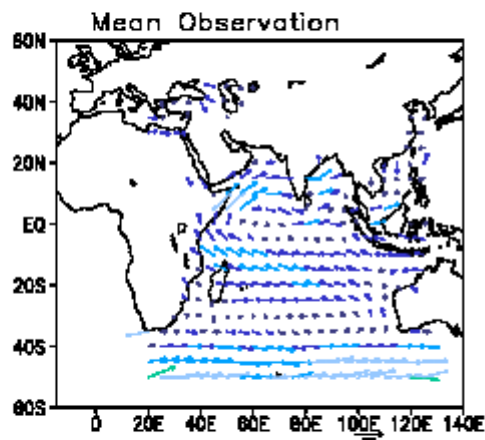
INSAT-3DR IR(3.8), Low Level, Below 700 hPa, September 2024



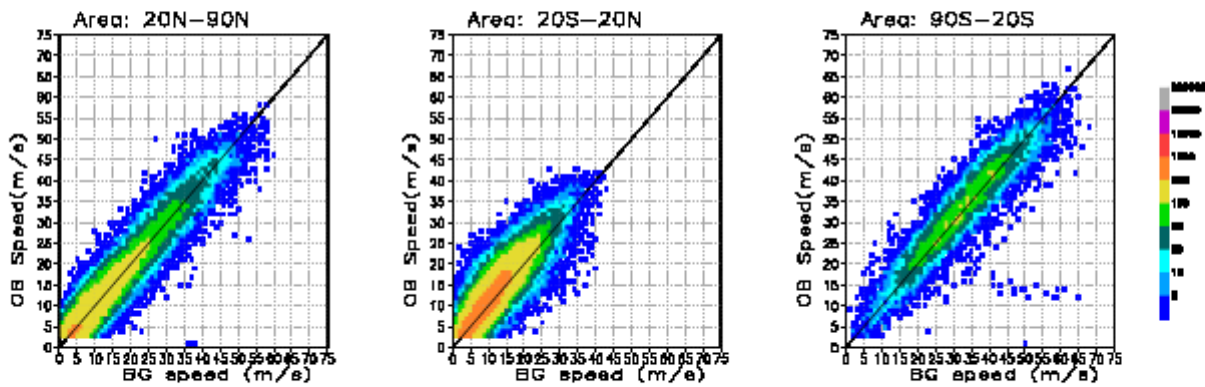
INSAT-3DR WV, High Level, Above 400 hPa, September 2024



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



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

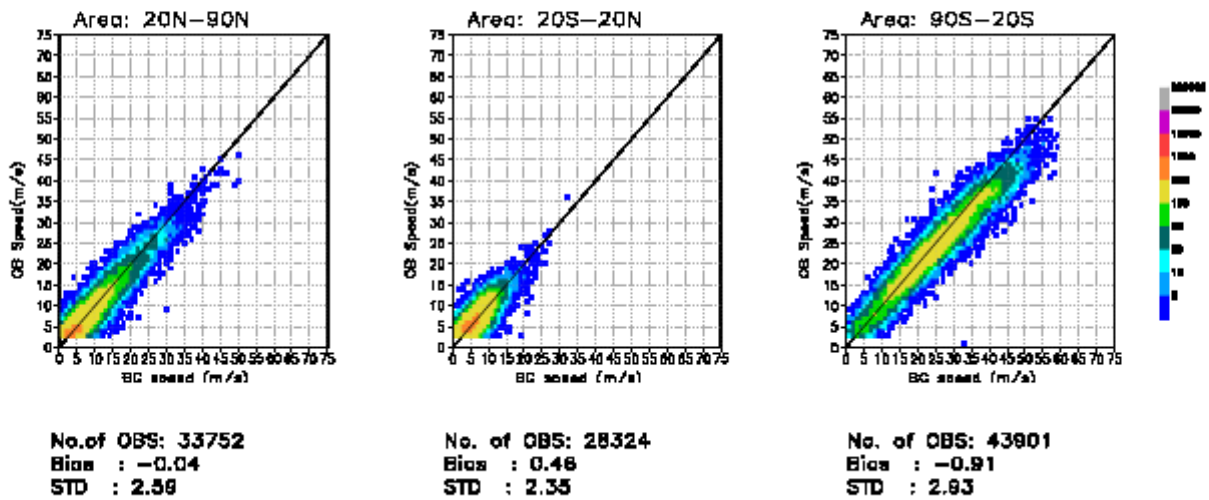


No. of OBS: 62598
Bias : 0.40
STD : 3.49

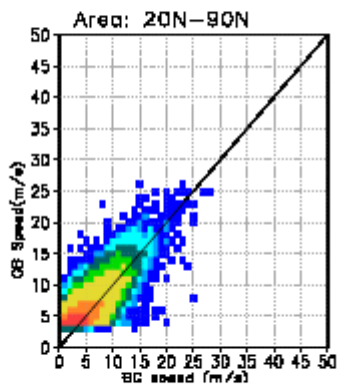
No. of OBS: 114267
Bias : 1.48
STD : 3.51

No. of OBS: 23322
Bias : 0.72
STD : 3.73

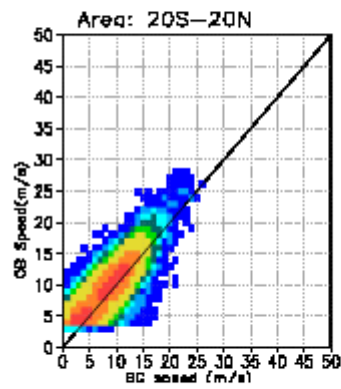
INSAT-3DR IR(10.8), September 2024, Mid Level, 700 – 401 hPa



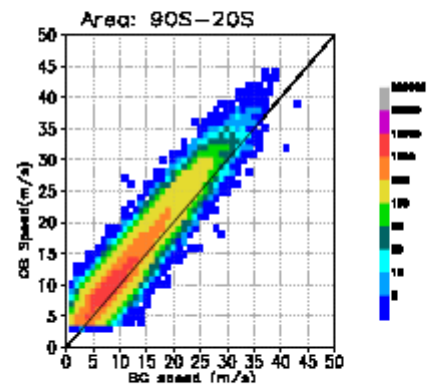
INSAT-3DR IR(10.8), September 2024, Low Level, Below 700 hPa



No. of OBS: 45018
Bias : 1.12
STD : 2.41

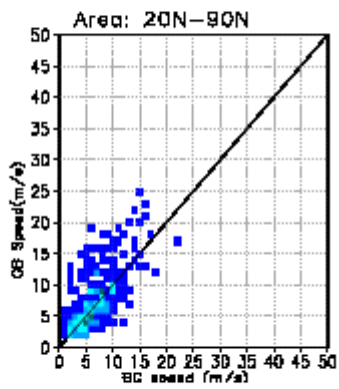


No. of OBS: 78519
Bias : 1.18
STD : 2.25

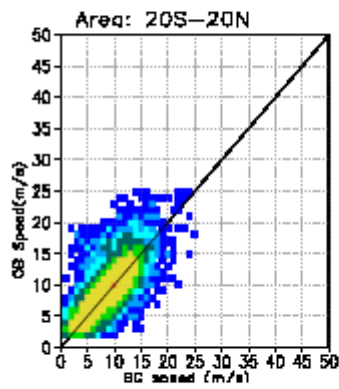


No. of OBS: 114443
Bias : 1.80
STD : 2.20

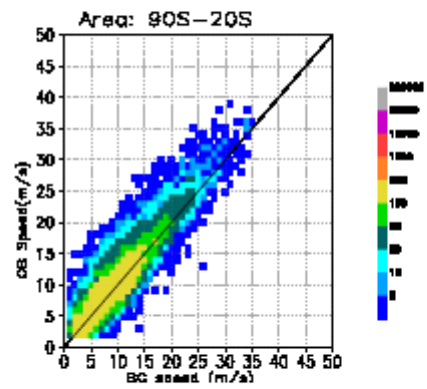
INSAT-3DR IR(3.8), September 2024, Low Level, Below 700 hPa



No. of OBS: 625
Bias : 0.60
STD : 3.15

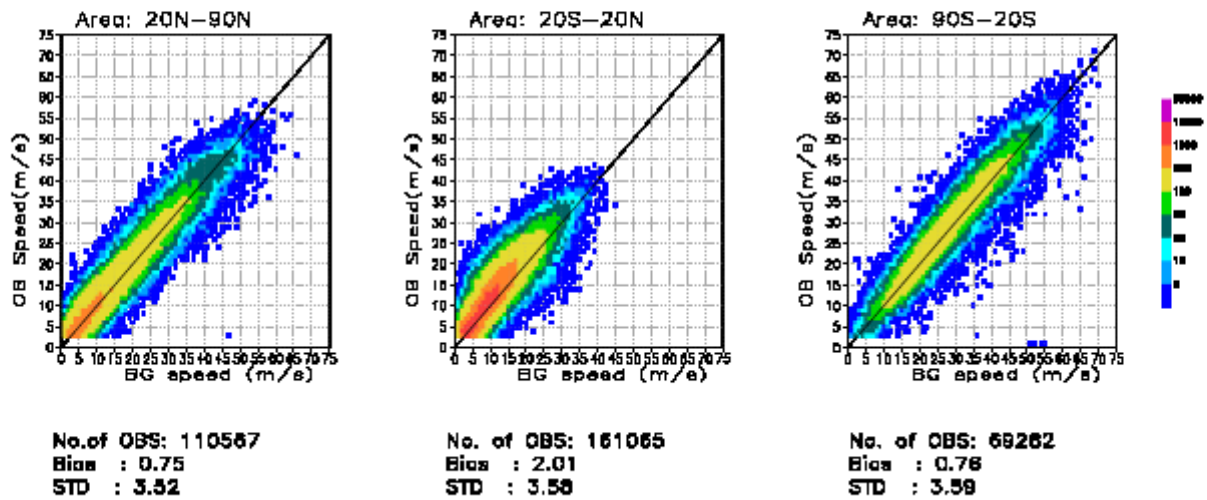


No. of OBS: 21367
Bias : 0.35
STD : 2.65

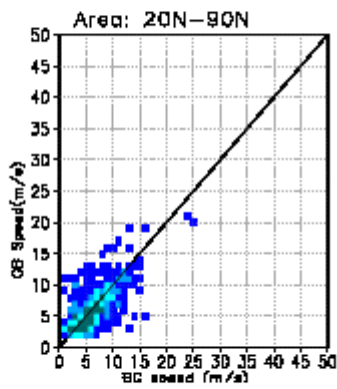


No. of OBS: 26463
Bias : 0.76
STD : 2.52

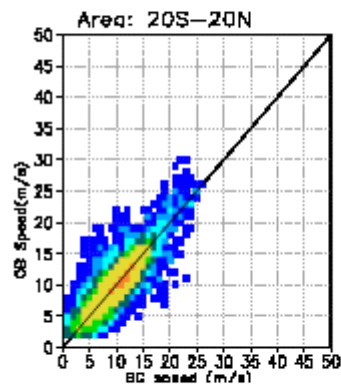
INSAT-3DR WV, September 2024, High Level, Above 400 hPa



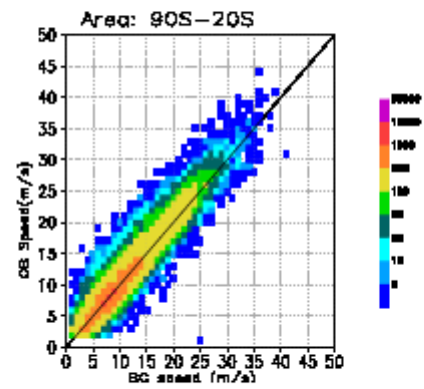
INSAT-3dr VIS, September 2024, Low Level, Below 700 hPa



No. of OBS: 1023
Bias : -0.19
STD : 2.51

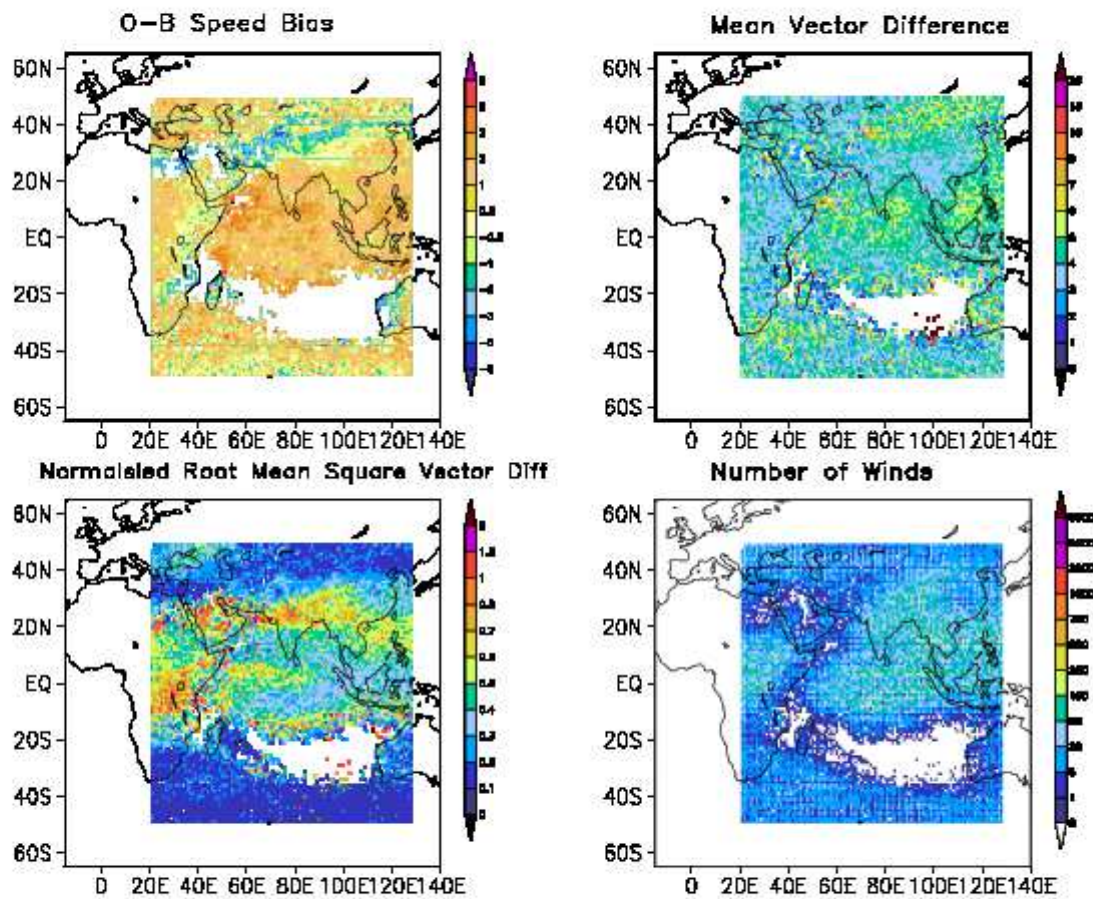


No. of OBS: 23475
Bias : 0.10
STD : 2.00

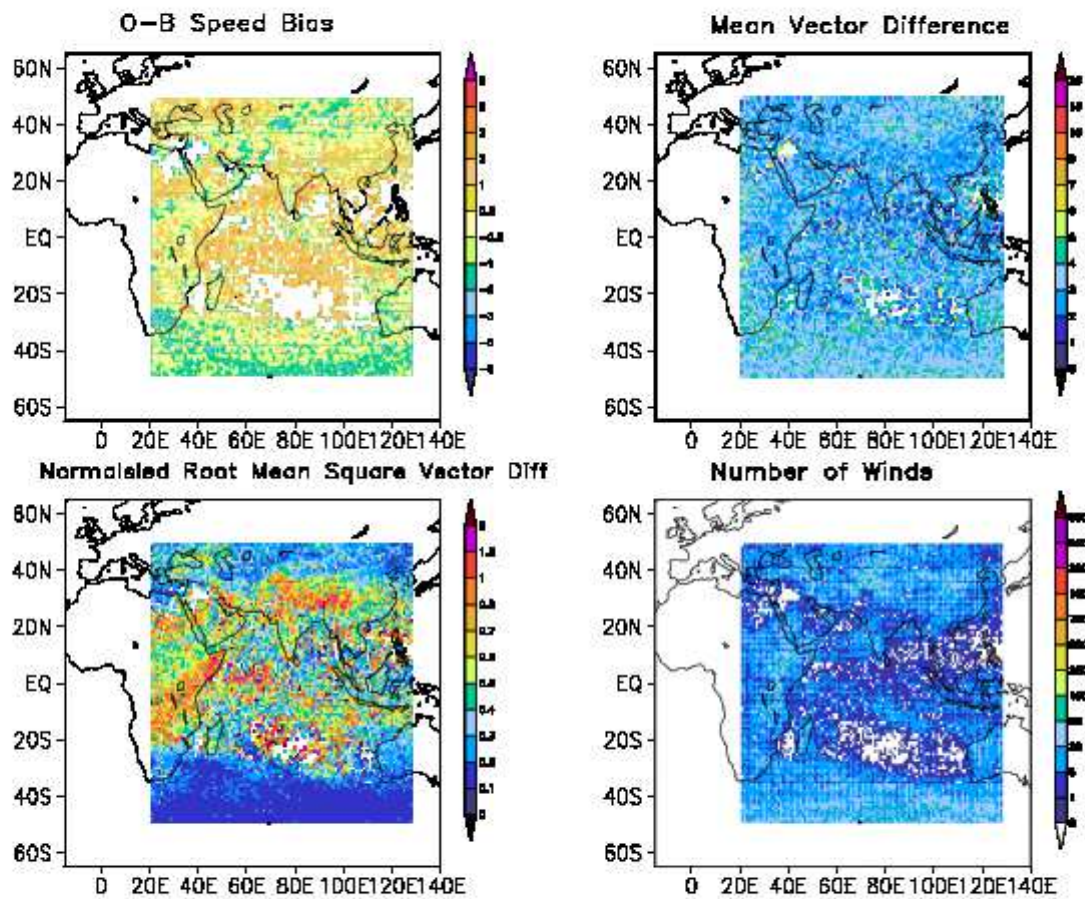


No. of OBS: 64085
Bias : 0.44
STD : 2.18

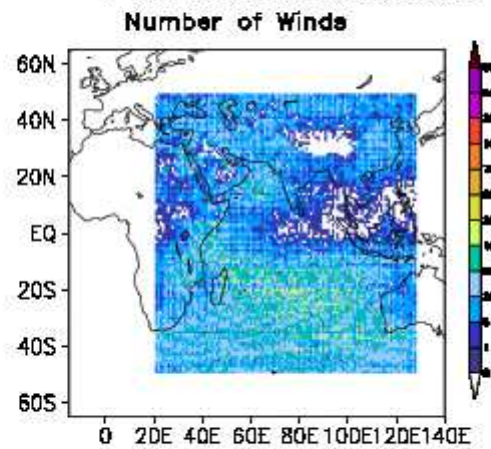
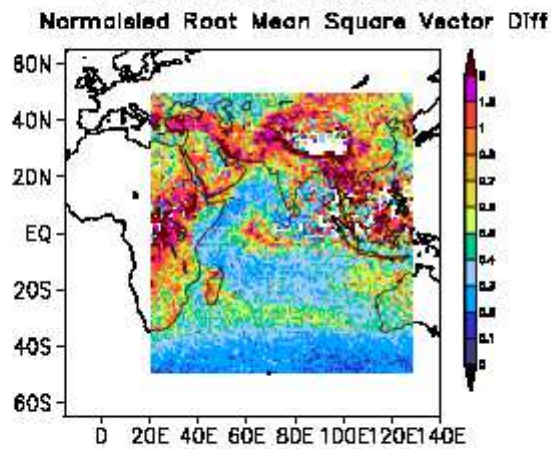
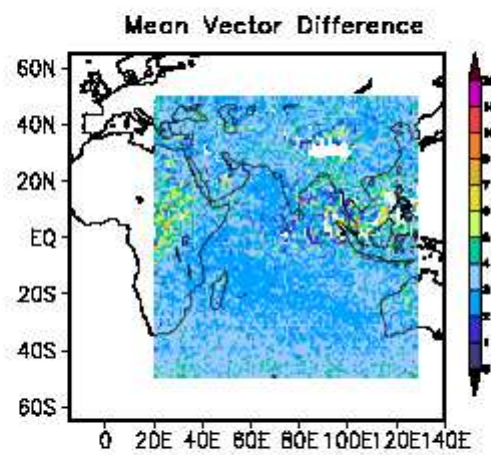
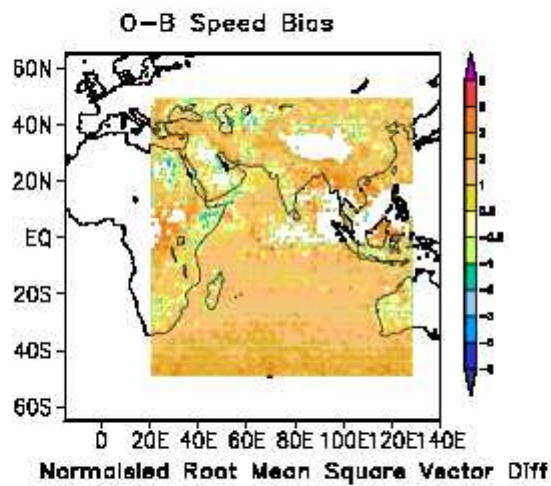
INSAT-3DR IR(10.8), High Level, Above 400 hPa, September 2024



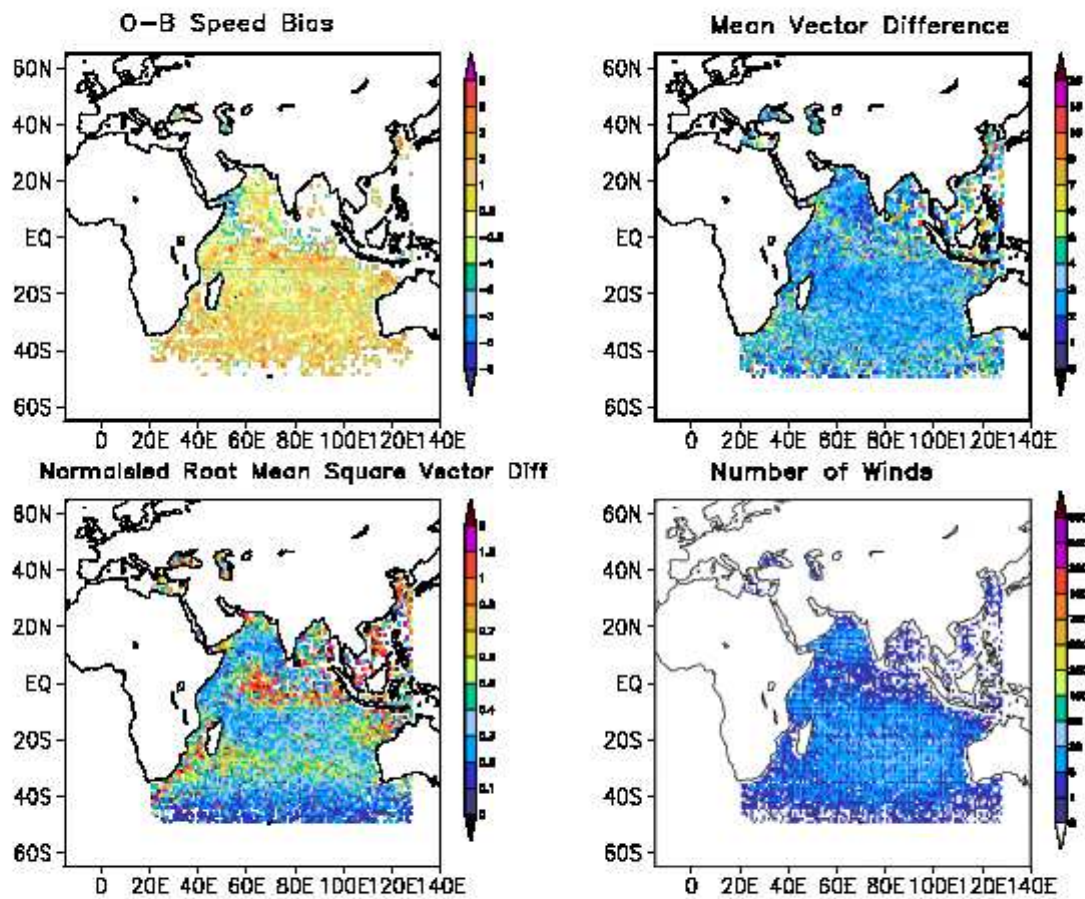
INSAT-3DR IR(10.8), Mid Level, 700 - 401 hPa, September 2024



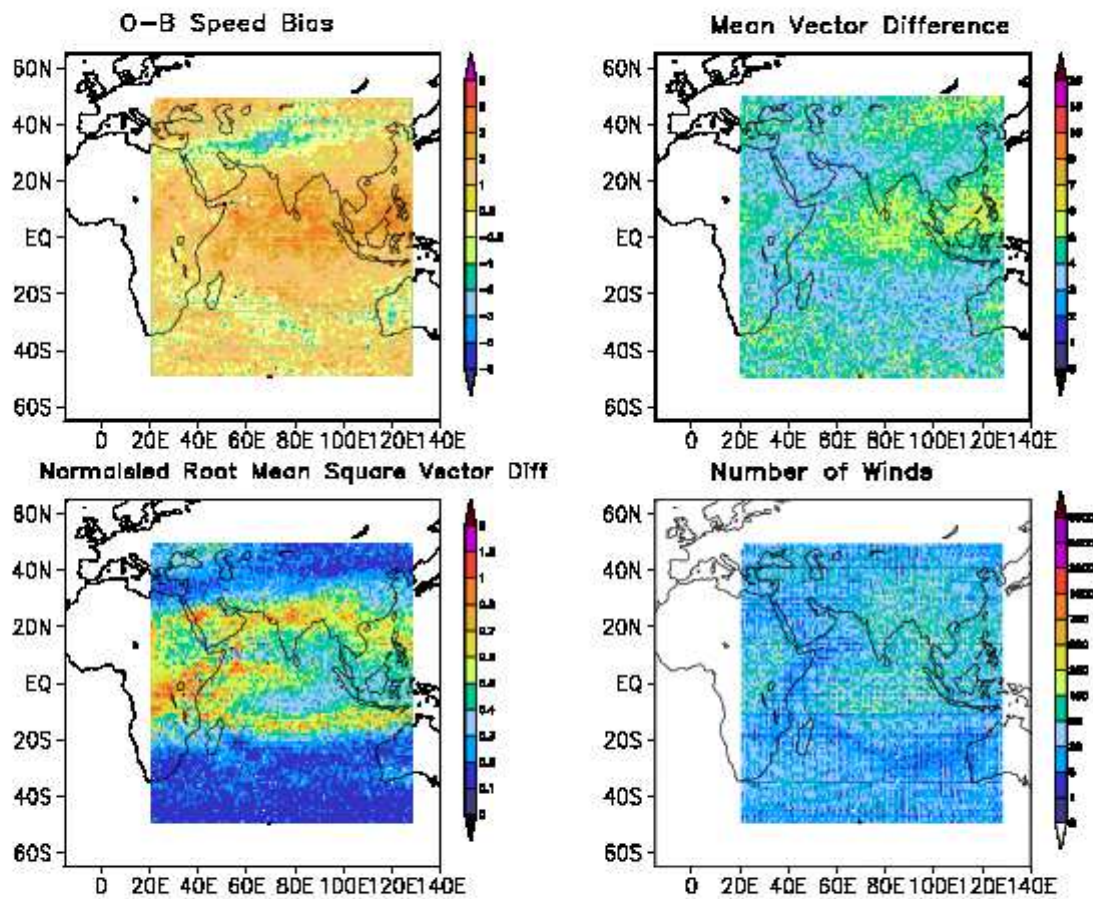
INSAT-3DR IR(10.8), Low Level, Below 700 hPa, September 2024



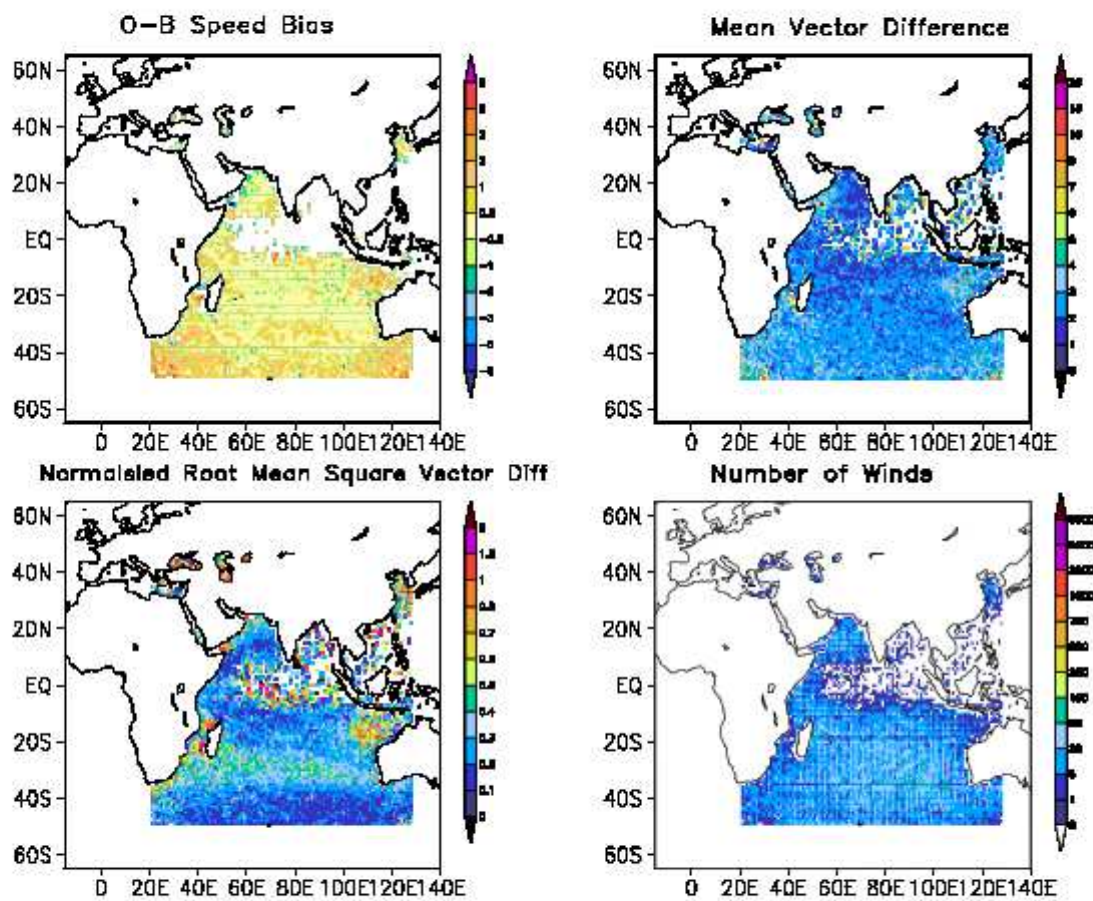
INSAT-3DR IR(3.8), Low Level, Below 700 hPa, September 2024



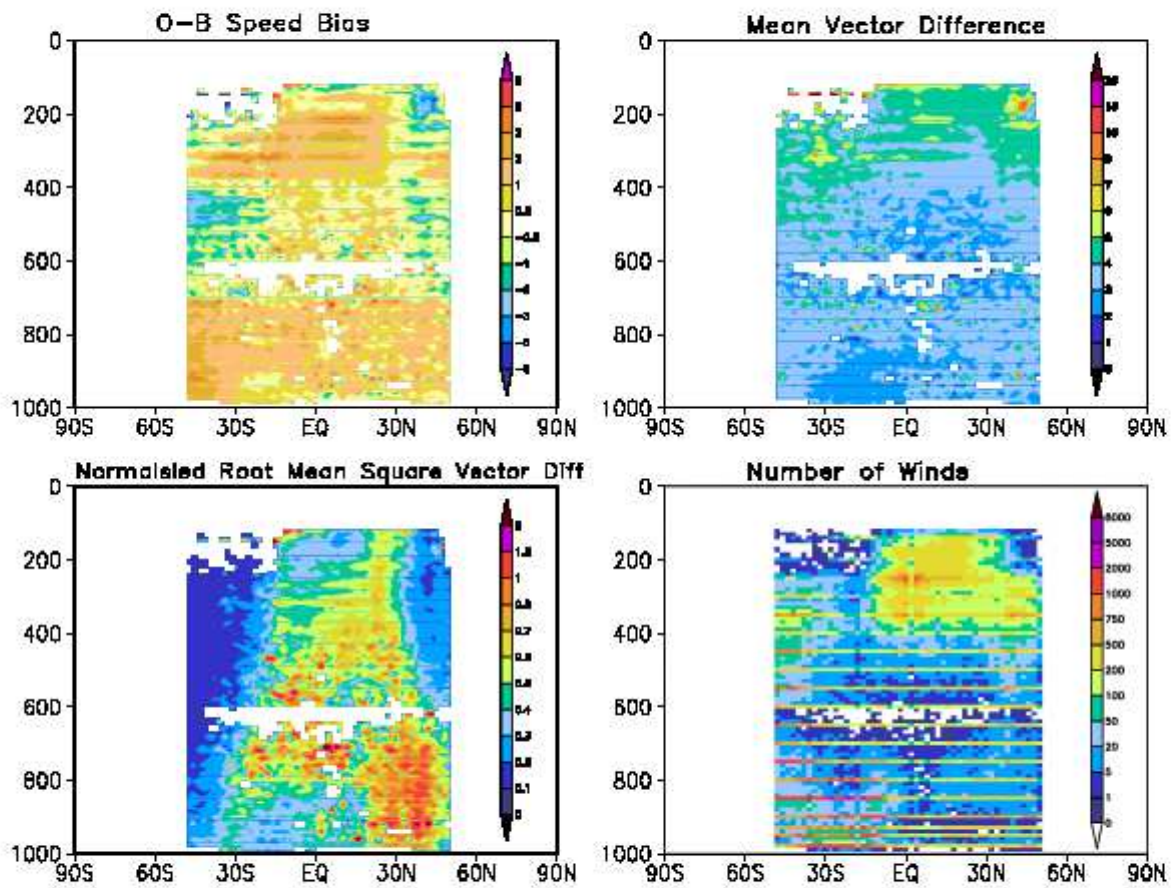
INSAT-3DR WV, High Level, Above 400 hPa, September 2024



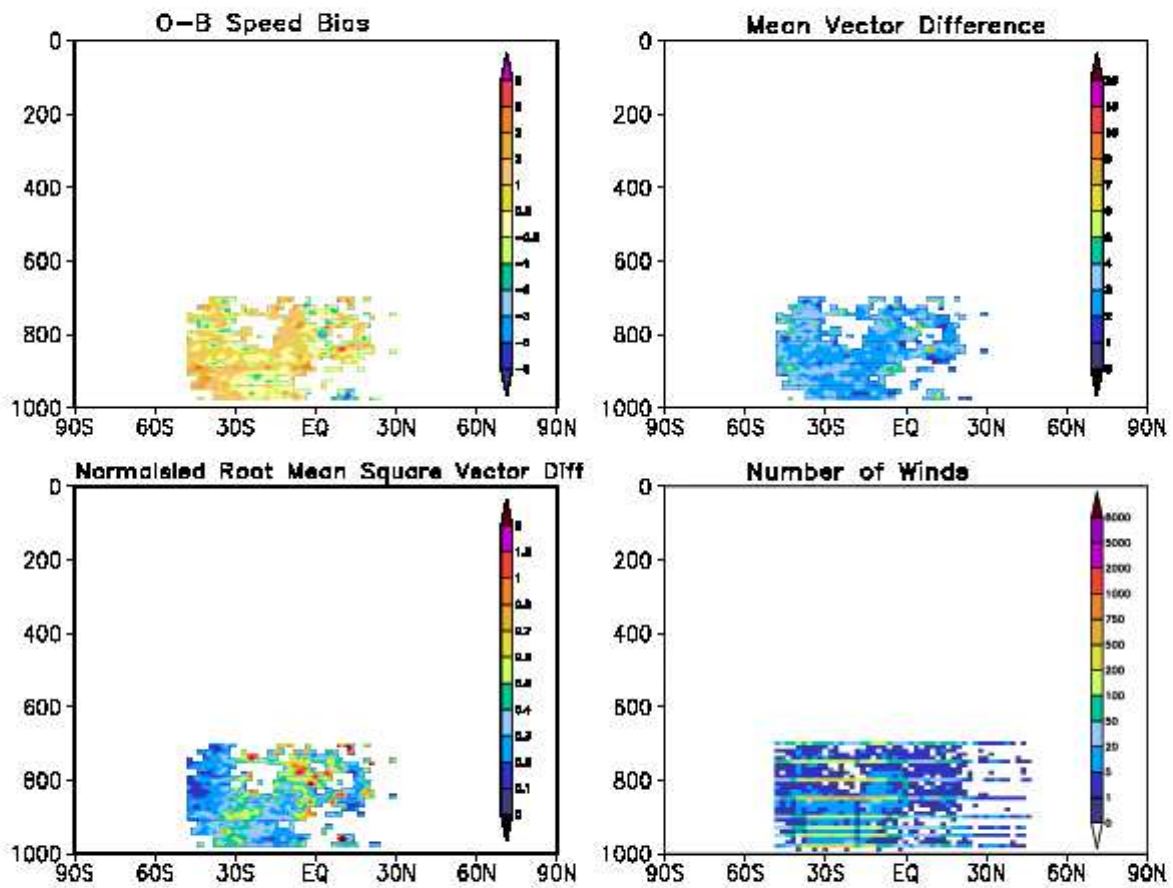
INSAT-3DR VIS, Low Level, Below 700 hPa, September 2024



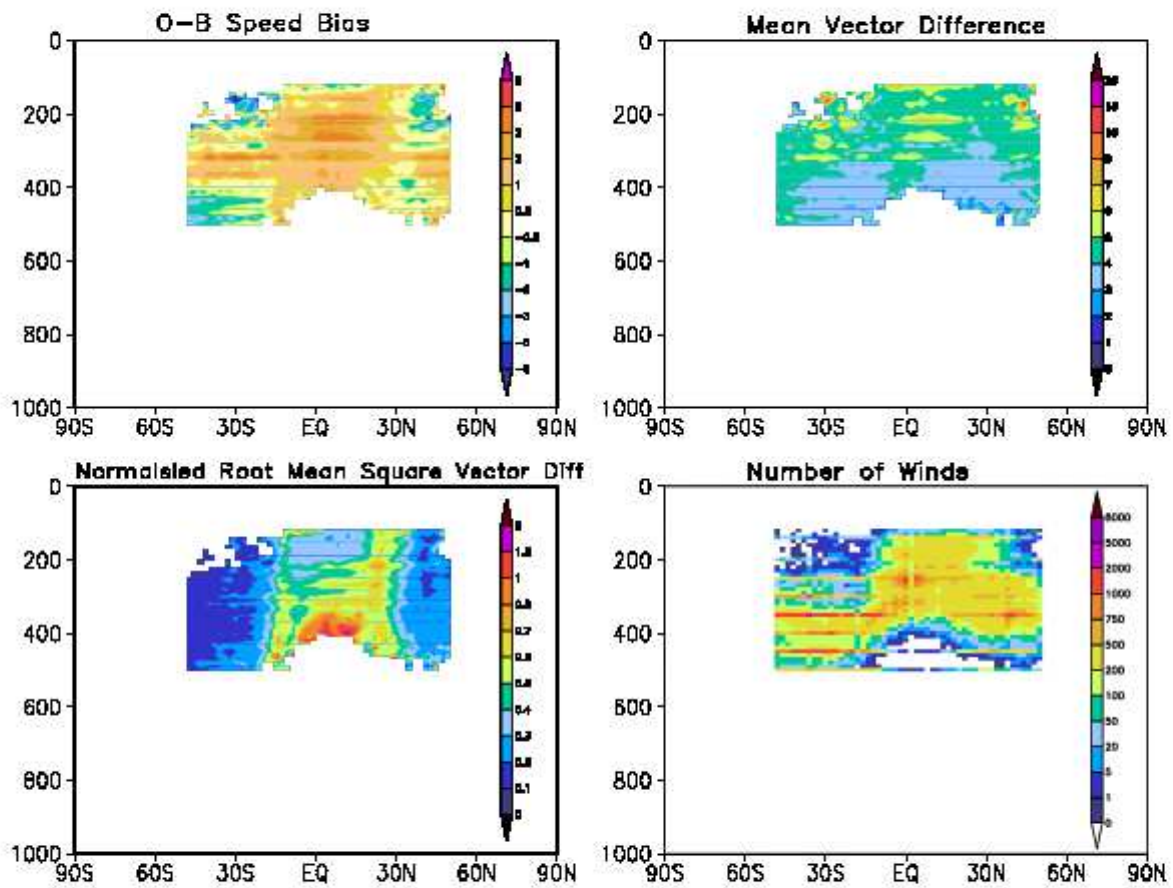
INSAT-3DR IR (10.8), September 2024



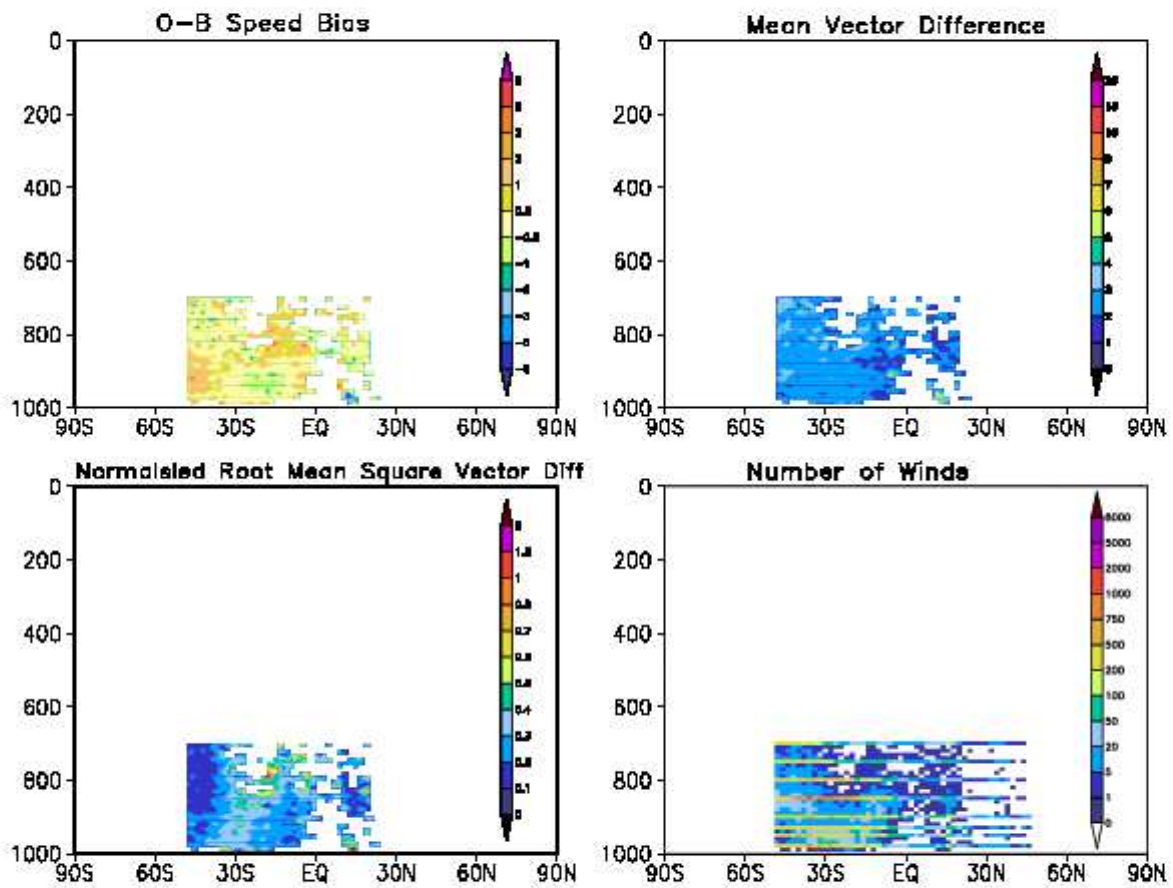
INSAT-3DR IR (3.8), September 2024



INSAT-3DR WV, September 2024



INSAT-3DR VIS, September 2024



Validation against
Insitu Observations

INSAT-3DR SATELLITE AMVS
 (Comparison against Insitu Observations)
 Reporting Period: 01 09 2024 - 30 09 2024

NORTHERN HEMISPHERE

	Mean AMV WS	Mean INSITU WS	Speed Bias	RMSVD	Number of Collocations
Hig Lev IR:	19.33	15.50	3.83	11.19	4
Mid Lev IR:	6.45	3.83	2.62	4.00	6
Low Lev IR:	4.50	7.98	-3.48	3.95	1
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:	0.00	0.00	0.00	0.00	0
Mid Lev IR:	0.00	0.00	0.00	0.00	0
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

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:	0.00	0.00	0.00	0.00	0
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