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## AMV Radi de ( & 1 UTC)

India Regi ( E-1 E 5 S-5 N)	No of Collocation	MVD	RMSVD	SD	Mean Speed Dif (ABS)	Mean Dir Dif (ABS)	Bias	Mean Speed AMV	Mean Speed RS
Low level CMV	68	6.5	7.2	2.6	4.9	27.2	4.5	11.7	7.2
Mid level CMV	292	6.4	7.3	3.2	4.7	19.5	3.5	12.9	9.5
High level CMV	1795	7.0	8.4	4.6	5.4	15.6	-1.5	13.8	15.2
High level WVVV	1355	7.3	8.8	4.8	5.5	15.9	0.9	15.7	14.8

N he hemi he e ( E-1 E N-5 N)	No of Collocation	MVD	RMSVD	SD	Mean Speed Dif (ABS)	Mean Dir Dif (ABS)	Bias	Mean Speed AMV	Mean Speed RS
Low level CMV	56	6.7	7.4	2.8	5.0	25.7	4.5	12.5	8.0
Mid level CMV	138	7.4	8.3	3.4	6.0	16.5	4.2	15.1	10.9
High level CMV	610	6.9	8.1	4.3	5.4	15.5	-1.1	13.6	14.6
High level WVVV	498	8.0	8.0	5.0	6.3	17.9	1.5	15.1	13.5

T ic ( E-1 E S- N)	No of Collocation	MVD	RMSVD	SD	Mean Speed Dif (ABS)	Mean Dir Dif (ABS)	Bias	Mean Speed AMV	Mean Speed RS
Low level CMV	4	5.4	5.5	0.2	3.9	22.8	3.4	9.8	6.4
Mid level CMV	148	5.2	5.7	2.0	3.2	21.8	2.1	10.5	8.3
High level CMV	1180	7.0	8.3	4.5	5.3	15.7	-1.9	13.7	15.5
High level WVVV	845	6.7	8.0	4.2	4.9	14.3	0.4	16.1	15.7

S he hemi he e ( E-1 E 5 S- s)	No of Collocation	MVD	RMSVD	SD	Mean Speed Dif (ABS)	Mean Dir Dif (ABS)	Bias	Mean Speed AMV	Mean Speed RS
Low level CMV	8	7.9	7.9	0.6	6.4	46.9	6.4	9.7	3.4
Mid level CMV	6	4.5	5.0	2.3	2.8	4.7	1.1	34.7	33.5
High level CMV	5	15.1	15.3	2.0	12.9	10.6	-12.9	37.2	50.1
High level WVVV	12	11.3	11.8	2.1	8.8	26.4	-5.1	12.8	17.9

MVD: Mean vector difference

RMSVD: Root mean square vector difference

SD: Standard Deviation

Mean Speed Dif (ABS): Absolute mean wind speed difference

Mean Dir Dif (ABS): Absolute mean wind direction difference

High level: 100-400hPa

Mid level: 401-700hPa

Low level: 701-975hPa

**MVD RMSVD SD Mea S eed Dif Mea S eed AMV Mea S eed RSa e i m<sup>-1</sup> Mea Di Dif i i  
deg ee.**

#### **C ll ca i C i e ia**

- All AMVs within 150km of each radiosonde location and pressure difference  $\pm 20$ hPa are considered for validation.
- Collocation pairs with speed difference greater than  $30\text{ms}^{-1}$  and direction difference greater than  $60^\circ$  are screened out.
- Quality indicator is not used for the current validation.