INSAT-3D AMVs: November 2017
AMVs vs Radiosonde (0000 & 1200 UTC)

Northern hemisphere	No of Collocation	MVD	RMSVD	SD	Mean Speed Dif (ABS)	Mean Dir Dif (ABS)	Bias	Mean Speed AMV	Mean Speed RS
Low level IRW	2679	3.7	4.2	1.9	2.5	20.1	-0.2	7.4	7.6
Mid level IRW	2906	4.4	5.0	2.3	2.8	14.5	-0.9	13.8	14.6
High level IRW	2773	4.8	5.4	2.5	3.2	9.8	0.2	21.4	21.3
High level WVW	7115	5.1	5.7	2.6	3.4	9.7	0.6	22.5	21.9

Tropics	No of Collocation	MVD	RMSVD	SD	Mean Speed Dif (ABS)	Mean Dir Dif (ABS)	Bias	Mean Speed AMV	Mean Speed RS
Low level IRW	365	3.4	3.6	1.1	2.1	23.8	0.0	6.2	6.2
Mid level IRW	344	3.7	3.9	1.0	2.5	20.5	-0.7	6.6	7.3
High level IRW	11119	3.8	4.4	2.1	2.6	17.0	0.1	8.9	8.8
High level WVW	12155	4.2	4.7	2.2	2.8	17.7	0.7	9.8	9.2

Southern hemisphere	No of Collocation	MVD	RMSVD	SD	Mean Speed Dif (ABS)	Mean Dir Dif (ABS)	Bias	Mean Speed AMV	Mean Speed RS
Low level IRW	147	4.5	4.7	1.4	2.8	20.2	0.6	9.6	9.0
Mid level IRW	30	4.9	5.0	0.7	3.1	13.6	1.7	14.8	13.1
High level IRW	108	4.6	4.9	1.2	2.9	10.8	1.6	21.4	19.8
High level WVW	284	5.0	5.4	1.8	3.5	9.2	-0.8	20.3	21.1

Global	No of Collocation	MVD	RMSVD	SD	Mean Speed Dif (ABS)	Mean Dir Dif (ABS)	Bias	Mean Speed AMV	Mean Speed RS
Low level IRW	3191	3.8	4.3	2.0	2.5	20.5	-0.1	7.4	7.5
Mid level IRW	3280	4.3	4.9	2.3	2.8	15.1	-0.7	13.0	13.7
High level IRW	14000	4.0	4.6	2.3	2.7	15.4	0.1	11.6	11.5
High level WVW	19554	4.5	5.1	2.5	3.0	14.6	0.6	14.5	14.0

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, Mean Speed Dif, Mean Speed AMV, Mean Speed RS are in ms^{-1}, Mean Dir Dif is in degree.

Collocation Criteria:

- All AMVs within 150km of each radiosonde location and pressure difference ±20hPa are considered for validation.
- Collocation pairs with speed difference greater than 30ms^{-1} and direction difference greater than 60° are screened out.
- Quality indicator is not used as a criteria for collocation.