

Cases used for the analysis

N.	Date	Time [UTC]	Cloud top height [m]	Cloud top temperature [°C]	Source of temperature	Polarizability ratio	Distance from the cloud top [m]
1.	12 Oct 2014	15:16	5200	-14.9	MWR	0.62±0.09	150
2.	15 Oct 2014	19:34	3500	-5.9	MWR	1.53±0.21	260
3.	15 Oct 2014	23:10	5150	-16.9	RS	0.54±0.11	400
4.	18 Oct 2014	01:23	5000	-7.8	RS	1.07±0.1	800
5.	18 Oct 2014	02:40	4500	-6.5	RS	1.57±0.2	100
6.	20 Oct 2014	16:40	5300	-16.4	MWR	0.48±0.13	380
7.	20 Oct 2014	17:22	6300	-23.9	MWR	0.77±0.06	470
8.	20 Oct 2014	18:16	3600	-6.1	MWR	1.5±0.16	240
9.	21 Oct 2014	09:16	3300	-4.5	GDAS1	1.55±0.15	150
10.	22 Oct 2014	02:37	3200	-13.2	GDAS1	0.41±0.07	300
11.	22 Oct 2014	02:52	3200	-13.2	GDAS1	0.81±0.12	550
12.	22 Oct 2014	12:16	2200	-4.5	GDAS1	1.73±0.17	50
13.	29 Oct 2014	22:37	4300	-8.8	RS	0.87±0.08	200
14.	1 Nov 2014	17:46	5200	-14.3	GDAS1	0.48±0.1	90
15.	2 Nov 2014	17:04	5200	-16.8	RS	0.57±0.09	720
16.	7 Nov 2014	20:49	2300	-4.2	GDAS1	1.57±0.17	120
17.	9 Nov 2014	05:57	4100	-14.6	GDAS1	0.53±0.08	80
18.	9 Nov 2014	21:34	2600	-3.4	RS	1.54±0.13	20
19.	10 Nov 2014	02:27	4500	-13.5	RS	0.53±0.1	480
20.	10 Nov 2014	02:54	5500	-20	RS	0.92±0.08	450
21.	10 Nov 2014	05:39	2300	-4.3	GDAS1	1.51±0.17	120
22.	18 Nov 2014	08:24	2300	-3.6	GDAS1	1.73±0.19	60

Note: MWR – microwave radiometer, RS – radiosonde, GDAS1 – global data assimilation system