

**Table S1:** Days of TCCON measurements averaged in the monthly means shown in Figure 2 and Figure 5

<b>Year</b>	<b>Jan.</b>	<b>Feb.</b>	<b>Mar.</b>	<b>Apr.</b>	<b>May</b>	<b>Jun.</b>	<b>Jul.</b>	<b>Aug.</b>	<b>Sep.</b>	<b>Oct.</b>	<b>Nov.</b>	<b>Dec.</b>
<b>2006</b>												
Bi:	0	0	0	0	0	0	0	0	0	0	0	0
Br:	2	2	4	7	6	9	9	2	10	3	0	0
Oc:	0	0	0	0	0	0	0	0	0	0	0	0
Pa:	13	21	9	24	27	14	30	29	24	19	17	7
<b>2007</b>												
Bi:	0	0	0	0	0	0	0	0	0	0	0	0
Br:	4	1	8	9	6	1	4	4	4	5	5	1
Oc:	0	0	0	0	0	0	0	0	0	0	0	0
Pa:	5	0	8	14	12	16	27	22	16	0	0	0
<b>2008</b>												
Bi:	0	0	0	0	0	0	0	0	0	0	0	0
Br:	2	4	3	10	8	6	6	0	13	9	4	3
Oc:	0	0	0	0	0	0	26	30	25	27	26	12
Pa:	0	0	0	0	25	22	10	28	25	23	14	10
<b>2009</b>												
Bi:	0	0	5	26	18	17	23	13	5	4	5	3
Br:	5	2	7	11	12	6	5	5	5	6	1	1
Oc:	26	25	22	24	28	29	25	30	27	20	26	22
Pa:	2	7	15	20	27	24	19	28	18	17	21	15
<b>2010</b>												
Bi:	10	5	22	12	12	21	17	2	0	13	0	4
Br:	2	3	8	10	3	9	7	1	2	2	1	2
Oc:	20	17	26	24	25	28	29	30	27	30	26	27
Pa:	18	14	20	23	1	0	0	11	22	25	15	17