

CT7 Reflectivity measurements on WHT M1 before and after CO2 cleaning on Friday 23 September 2016
 N48 CO2 used only, to avoid sticky snowflakes. Humidity < 20%, temperature ~10 degC.
 Cleaning, measurements and analysis by Neil O'Mahony

Before Cleaning - Telescope at AP3, measured at 3 locations at bottom end

811	23/09/2016 10:42	0	23.8	90.9	89.2	88.7	88.7	87.7	85.1	91.0	4.7	4.7	5.2	4.4	5.4	5.0	5.6
812	23/09/2016 10:43	1	23.7	91.2	89.6	89.1	89.2	88.2	85.6	91.5	3.8	3.8	4.2	3.4	4.3	3.9	4.3
813	23/09/2016 10:45	1	23.6	91.4	89.7	89.2	89.1	88.3	85.6	91.4	3.5	3.5	3.9	3.3	4.0	3.8	4.1
average				91.2	89.5	89.0	89.0	88.1	85.4	91.3	4.0	4.0	4.4	3.7	4.6	4.2	4.7
Last (16/8/2016)				92.2	90.6	90.1	90.2	89.2	86.6	92.5	3.1	2.9	3.0	2.4	2.7	2.3	2.4
worst last (16.8)				91.6	90.0	89.5	89.5	88.7	86.0	91.7	3.3	3.2	3.4	2.9	3.3	3.0	3.4
Avg change in 5 weeks				1.0	1.1	1.1	1.2	1.1	1.1	1.2	-0.9	-1.1	-1.4	-1.3	-1.9	-2.0	-2.3
minimum change				0.2	0.3	0.3	0.4	0.4	0.4	0.3	-0.2	-0.3	-0.5	-0.4	-0.7	-0.8	-0.7

After Cleaning - Telescope at Zenith

814	23/09/2016 15:13	1	24.4	91.5	89.8	89.3	89.3	88.4	85.8	91.8	3.7	3.7	4.2	3.4	4.3	4.0	4.2
815	23/09/2016 15:14	1	24.6	92.1	90.4	90.1	90.0	89.2	86.6	92.6	3.1	3.0	3.0	2.6	2.8	2.3	2.6
816	23/09/2016 15:15	1	24.8	91.9	90.3	89.8	89.8	88.9	86.4	92.2	3.6	3.4	3.5	2.9	3.4	2.9	3.4
817	23/09/2016 15:16	1	25	92.5	90.9	90.4	90.4	89.6	86.9	93.1	2.7	2.5	2.5	2	2	1.6	1.8
818	23/09/2016 15:17	1	25.1	92.3	90.7	90.2	90.3	89.4	86.8	92.9	3.1	2.9	3	2.2	2.5	2.1	2.1
819	23/09/2016 15:18	1	25.3	92.5	90.8	90.3	90.4	89.5	86.8	93.1	2.7	2.6	2.7	2	2.2	1.9	1.7
				92.1	90.5	90.0	90.0	89.2	86.6	92.6	3.2	3.0	3.2	2.5	2.9	2.5	2.6
improv.t from cleaning				1.0	1.0	1.0	1.0	1.1	1.1	1.3	-0.9	-1.0	-1.3	-1.2	-1.7	-1.8	-2.0
aluminisation				93.07	91.35	90.90	90.95	90.00	87.23	93.26							
shortfall				0.94	0.86	0.88	0.91	0.83	0.68	0.64							
Change since 16/8				0.1	0.1	0.0	0.1	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2

Measured again after weekend (no calima) - just to obtain larger sample

820	27/09/2016 10:23	1	22.8	92	90.3	89.9	89.8	89	86.4	92.2	3.2	3	3.2	2.8	3	2.6	3.1
821	27/09/2016 10:24	1	22.8	92.1	90.6	90.2	90.1	89.3	86.6	92.5	3.1	2.8	2.8	2.4	2.5	2.2	2.6
822	27/09/2016 10:25	1	22.7	92	90.3	89.8	89.8	89	86.3	92.3	3.3	3.2	3.4	2.8	3.1	2.8	3
823	27/09/2016 10:27	1	22.6	91.6	90	89.4	89.5	88.5	85.9	92	4	3.9	4.2	3.3	4.2	3.5	3.8
824	27/09/2016 10:28	1	22.6	92.3	90.7	90.3	90.3	89.4	86.7	92.7	3.1	2.7	2.7	2.1	2.4	1.9	2.1
825	27/09/2016 10:29	1	22.7	92	90.4	89.9	90	89.1	86.4	92.3	3.1	3.1	3.2	2.6	2.9	2.5	2.7
826	27/09/2016 10:30	1	22.6	91.6	90.1	89.7	89.8	88.8	86.3	92.1	3.8	3.5	3.6	2.8	3.4	2.7	3.1
827	27/09/2016 10:31	1	22.6	92.2	90.7	90.2	90.3	89.3	86.8	92.7	2.8	2.6	2.6	1.9	2.2	1.7	1.8
828	27/09/2016 10:32	1	22.6	92.4	90.8	90.3	90.4	89.5	86.8	92.7	2.7	2.5	2.5	1.9	2	1.7	1.8
829	27/09/2016 10:33	1	22.6	91.8	90.1	89.7	89.6	88.9	86	91.9	3.3	3.2	3.4	2.8	3.1	3	3
830	27/09/2016 10:34	1	22.6	92.1	90.5	90	90.2	89	86.5	92.3	3.3	3.1	3.3	2.4	3.1	2.3	2.5
831	27/09/2016 10:34	1	22.6	92	90.5	90	90.2	89.2	86.6	92.3	3.2	3	3	2.3	2.7	2	2.3
832	27/09/2016 10:36	1	22.6	92.2	90.6	90.2	90.2	89.3	86.5	92.4	2.9	2.8	2.8	2.3	2.5	2.2	2.4
833	27/09/2016 10:37	1	22.6	92.2	90.6	90.1	90.2	89.3	86.5	92.3	3.1	2.9	2.9	2.3	2.6	2.2	2.4
834	27/09/2016 10:37	1	22.6	91.6	90.1	89.7	89.8	88.7	86.1	91.8	3.5	3.4	3.5	3.3	3.5	3	3.4
835	27/09/2016 10:40	1	22.5	92.2	90.7	90.1	90.3	89.3	86.6	92.6	3	2.8	2.9	2.3	2.4	2	2
				92.0	90.4	90.0	90.0	89.1	86.4	92.3	3.2	3.0	3.1	2.5	2.8	2.4	2.6
min				91.6	90	89.4	89.5	88.5	85.9	91.8							
change since 23/9				-0.1	0.0	0.0	0.0	-0.1	-0.1	-0.3	0.1	0.0	0.0	0.0	0.0	-0.1	0.0
global range				1.0	1.1	1.1	1.1	1.2	1.1	1.3	1.3	1.4	1.7	1.5	2.3	2.4	2.5