

CO2 cleaning of INT M1, 28th July 2017 following episodes of calima. Previous CO2 on 30 June.

Some measurements may be affected by accidental movement of the instrument, which must be held horizontally during measurements.

Anomalously low measurements are identified from the graph and confirmed by comparing subsequent values. Omitted from statistics.

Maxima and minima highlighted in green & orange respectively, are valid and included.

				Tempr. °C	Reflectivity (%R) wavelength of band (nm)							"Dust Indices" (DI)						
Measurements before cleaning					365	404	464	522	624	760	970	365	404	464	522	624	760	970
1135	28/07/2017	09:46	3 INTM1 all	21.8	83.7	83.6	86.6	87.2	86.6	84.4	90.4	9.0	7.9	7.5	5.7	6.5	5.3	5.7
1136	28/07/2017	09:47	3 INTM1 all	21.9	87.4	86.5	86.5	86.9	86.5	84.1	90.3	9.3	9.0	9.0	6.4	7.0	6.0	5.8
1137	28/07/2017	09:48	3 INTM1 all	22.1	87.6	86.6	86.8	86.9	86.4	84.0	89.6	8.9	8.2	8.0	6.7	7.1	6.4	6.9
1138	28/07/2017	09:49	3 INTM1 all	22.4	87.2	85.5	86.8	84.7	86.5	82.5	87.5	8.7	9.2	7.6	9.5	6.9	8.4	10.0
1139	28/07/2017	09:50	3 INTM1 all	22.8	86.9	86.0	85.9	86.7	85.7	83.5	89.6	9.1	8.8	9.1	6.3	8.1	6.8	7.0
1140	28/07/2017	09:51	3 INTM1 all	23	88.1	87.1	87.1	87.1	86.6	84.1	89.6	6.8	6.4	7.0	5.5	6.5	5.7	6.6
1141	28/07/2017	09:52	3 INTM1 all	23.5	88.3	87.3	87.0	87.4	85.8	83.8	89.2	6.8	6.2	6.6	5.2	7.3	6.0	6.9
1142	28/07/2017	09:53	3 INTM1 all	23.8	88.6	87.3	87.0	87.1	86.5	83.5	89.4	6.6	6.5	7.6	5.8	6.6	6.9	6.9
averages					87.2	86.2	86.7	86.8	86.3	83.7	89.5	8.2	7.8	7.8	6.4	7.0	6.4	7.0

Measurements after cleaning					365	404	464	522	624	760	970							
1143	28/07/2017	11:33	3 INTM1 all	22.7	89.1	88.4	88.5	88.9	88.3	86.0	92.4	6.8	5.9	5.1	3.6	3.8	2.7	3.0
1144	28/07/2017	11:35	3 INTM1 all	22.8	89.0	88.2	88.0	88.7	87.7	85.8	92.0	6.9	6.3	6.3	4.2	5.6	3.5	3.5
1145	28/07/2017	11:35	3 INTM1 all	23	89.2	88.0	87.8	88.1	87.3	84.9	90.9	7.5	6.9	6.8	5.2	6.0	5.2	5.3
1146	28/07/2017	11:36	3 INTM1 all	23.3	88.7	87.5	87.3	87.6	86.9	84.4	90.3	7.6	7.1	7.6	5.6	6.7	5.7	5.8
1147	28/07/2017	11:38	3 INTM1 all	23.7	90.0	88.9	88.7	88.9	88.4	85.7	91.8	5.4	4.7	4.2	4.4	3.6	3.8	3.5
1148	28/07/2017	11:39	3 INTM1 all	24	88.6	87.4	87.4	87.3	86.7	84.2	89.7	7.4	7.4	7.4	6.0	7.2	6.3	7.0
1149	28/07/2017	11:39	3 INTM1 all	24.4	88.9	87.7	87.6	88.0	87.6	85.0	91.3	7.2	6.9	7.0	5.2	5.3	4.7	4.6
1150	28/07/2017	11:40	3 INTM1 all	24.8	87.9	86.9	86.7	87.1	86.4	83.9	89.8	8.0	7.6	7.9	6.2	7.5	6.4	6.7
averages					88.9	87.9	87.8	88.1	87.4	85.0	91.0	7.1	6.6	6.5	5.1	5.7	4.8	4.9

		increase in %R							decrease in dust (scattering)						
change from cleaning		365	404	464	522	624	760	970	365	404	464	522	624	760	970
wavebands		1.7	1.6	1.0	1.3	1.1	1.3	1.6	-1.1	-1.2	-1.3	-1.3	-1.3	-1.7	-2.1
average change across wavebands		1.4 %													

Conclusion: small improvement in reflectivity and scattering, similar to those found on WHT primary mirror 3 days later

