

Reflectivity Report for WHT Primary Mirror, 18/12/2017, from measurements before and after CO2 cleaning. Mirror was very dusty: scattering 15%  
 Blew off loose dust with dry air supply nozzle before using CO2, intended to avoid clumping of dust with Aligal2.

Could not reach top of mirror but visibly effective on bottom half.

N48 bottle finished on right side of mirror. New bottle on left.

Humidity < 20%, dome open.

Conclusion: Successful removal of most of the dust, with scattering returning to levels measured in August.

			Tempr. °C	wavelength of band (nm)							"Dust Indices"						
				365	404	464	522	624	760	970	365	404	464	522	624	760	970
1236	18/12/2017 10:59:50	1 left	15.9	82.8	80.8	80.1	78.4	79.2	76.3	79.9	14.3	15.7	18.3	18.0	19.4	19.2	22.6
1237	18/12/2017 11:00:58	1 top	15.8	83.7	82.3	81.5	81.7	80.8	77.9	83.4	13.8	14.1	16.4	13.9	17.0	16.5	17.5
1238	18/12/2017 11:01:51	1 right	15.8	83.3	81.9	80.2	81.2	79.9	76.5	82.4	13.4	14.1	18.4	14.3	18.4	19.3	18.7
1239	18/12/2017 11:02:45	1 bottom	15.8	83.3	81.8	81.3	81.0	80.3	77.4	82.4	14.3	14.3	16.4	14.5	17.6	17.3	18.6
1240	18/12/2017 11:03:44	1 bottom	15.7	79.9	80.6	80.7	80.4	77.8	76.9	80.9	15.2	15.1	16.9	15.0	19.6	17.7	20.1
1241	18/12/2017 11:05:04	1 left	15.8	83.2	81.9	81.4	81.4	80.4	77.7	82.7	13.6	14.4	16.2	14.1	17.4	16.8	18.1
1242	18/12/2017 11:06:11	1 top	15.8	83.7	82.2	81.6	81.4	80.6	77.8	82.7	13.6	14.3	16.2	14.3	17.3	16.5	18.2
1243	18/12/2017 11:07:22	1 right	15.8	83.5	82.1	81.5	81.4	80.3	77.7	82.5	13.4	13.6	15.7	13.6	17.4	16.3	18
1244	18/12/2017 11:08:53	1 bottom	15.9	83.1	81.6	81.1	80.8	79.9	77.2	81.9	13.9	14.4	16.4	14.6	18.1	17.1	18.9
<b>global average</b>				82.9	81.7	81.0	80.9	79.9	77.3	82.1	13.9	14.4	16.8	14.7	18.0	17.4	19.0

After CO2

1245	18/12/2017 13:06:41	1 invalid	9.1	4.1	6.5	13.4	5.1	15.9	18.9	3.2	30.4	36.5	42.0	27.8	25.9	21.5	22.2
1246	18/12/2017 13:07:42	1 left	9.4	88.5	87.6	87.3	87.4	86.4	84.3	90.1	9.7	8.8	8.9	7.2	8.3	6.6	7.1
1247	18/12/2017 13:08:39	1 top	9.6	89.0	87.6	87.3	87.5	86.7	84.3	90.3	9.3	9.1	9.3	7.2	8.1	6.8	6.7
1248	18/12/2017 13:09:39	1 right	9.9	88.4	86.9	86.6	86.5	86.2	83.3	89.3	10.0	10.0	10.2	8.6	9.1	8.4	8.4
1249	18/12/2017 13:11:19	1 bottom	10.4	89.6	88.3	87.9	88.1	87.4	84.9	91	8.4	7.9	8.0	6.4	6.6	5.5	5.4
1250	18/12/2017 13:12:26	1 left	10.8	88.7	87.4	86.9	87.4	86.5	84.0	90.2	9.5	9.4	10.0	7.4	8.8	7.5	7.1
1251	18/12/2017 13:13:20	1 left	11.1	89.3	87.9	87.5	87.8	86.9	84.5	90.5	8.6	8.4	8.4	6.6	7.3	6.0	6
1252	18/12/2017 13:14:20	1 left	11.5	88.9	87.5	87.1	87.3	86.6	84.0	90.1	9.3	9.1	9.4	7.3	8.3	6.9	6.9
1253	18/12/2017 13:15:28	1 top	11.9	88.5	87.0	86.4	86.8	86.1	83.3	89.6	9.9	9.9	10.5	8.1	9.2	8.3	7.7

1254	18/12/2017 13:16:18	1 top	12.3	88.6	87.4	87.0	87.3	86.3	83.9	89.9	10.0	9.7	10.1	7.8	9.1	7.4	7.5
1255	18/12/2017 13:17:22	1 top	12.7	88.1	87.0	86.5	86.7	86.1	83.2	89.1	10.5	10.0	10.5	8.5	9.3	8.6	8.5
1256	18/12/2017 13:18:23	1 right	13.1	88.0	86.7	86.3	86.4	85.5	83.1	88.5	10.2	10.1	10.6	8.6	10.3	8.8	9.7
1257	18/12/2017 13:19:12	1 right	13.3	88.8	87.5	86.9	87.2	86.6	83.7	89.9	8.9	8.9	9.4	7.4	8.3	7.4	7.2
1258	18/12/2017 13:20:18	1 bottom	13.8	89.1	87.9	87.3	87.7	87.0	84.3	90.8	8.8	8.3	8.8	6.7	7.4	6.2	5.6
1259	18/12/2017 13:21:05	1 bottom	14	86.2	85.0	84.5	84.7	83.7	81.3	86.5	11.8	11.9	13.2	10.8	13.6	12.1	13.4
1260	18/12/2017 13:21:56	1 bottom	14.3	88.6	87.4	87.1	87.2	86.3	83.8	89.8	9.3	8.8	9.2	7.4	8.6	7.3	7.5
<b>global average</b>				<b>88.6</b>	<b>87.3</b>	<b>86.8</b>	<b>87.1</b>	<b>86.3</b>	<b>83.7</b>	<b>89.7</b>	<b>9.6</b>	<b>9.4</b>	<b>9.8</b>	<b>7.7</b>	<b>8.8</b>	<b>7.6</b>	<b>7.6</b>
change				5.6	5.6	5.8	6.2	6.4	6.5	7.6	-4.3	-5.1	-7.0	-7.0	-9.2	-9.8	-11.3
average top				88.6	87.3	86.8	87.1	86.3	83.7	89.7	9.9	9.7	10.1	7.9	8.9	7.8	7.6
average bottom				89.1	87.9	87.4	87.7	86.9	84.3	90.5	8.8	8.3	8.7	6.8	7.5	6.3	6.2
average l+r				88.7	87.4	86.9	87.1	86.4	83.8	89.8	9.5	9.2	9.6	7.6	8.6	7.4	7.5