

Measurements on WHT Primary before and after CO2 cleaning by NOM w/GTC
Always pushing SMS sensor head down, at least 3 double measurements per port hole

Lambda	0.67 micron		
Incident Angle	25 deg		<--SMS Summary characteristics
BW Limits	1	0.01	

datum #	Scattering at angles Θ, Φ			Reflectivity	user comment	Roughness RMS(Å)	TIME	DATE
	Θ (Zenith)	0	50					
1	location 1	4.85E-03	2.27E-03	0.848		50.9	10:05:07	06-25-1913
2		4.85E-03	2.28E-03	0.848		50.9	10:05:12	06-25-1913
3	2	5.22E-03	2.18E-03	0.843		53.4	10:05:23	06-25-1913
4		5.25E-03	2.19E-03	0.836		53.8	10:05:28	06-25-1913
5	3	4.22E-03	1.78E-03	0.857		47.6	10:05:42	06-25-1913
6		4.21E-03	1.78E-03	0.855		47.6	10:05:48	06-25-1913
7	4	4.58E-03	2.28E-03	0.85		49.3	10:06:36	06-25-1913
8		4.60E-03	2.27E-03	0.853		49.3	10:06:40	06-25-1913
9	5	7.55E-03	2.72E-03	0.847		65	10:06:51	06-25-1913
10		7.55E-03	2.72E-03	0.847		65	10:06:58	06-25-1913
11	6	6.06E-03	2.39E-03	0.852		57.5	10:07:35	06-25-1913
12		6.06E-03	2.38E-03	0.851		57.6	10:07:40	06-25-1913
13	7	8.54E-03	5.87E-03	0.83	low	67.4	10:07:49	06-25-1913
14		8.59E-03	5.91E-03	0.831		67.6	10:07:54	06-25-1913
15	8	5.50E-03	2.16E-03	0.856	near	54.7	10:08:01	06-25-1913
16		5.51E-03	2.15E-03	0.856		54.8	10:08:06	06-25-1913
17	9	5.81E-03	2.33E-03	0.848		56.4	10:08:48	06-25-1913
18		5.83E-03	2.34E-03	0.846		56.5	10:08:53	06-25-1913
19	10	5.91E-03	2.68E-03	0.839		56.6	10:09:02	06-25-1913
20		5.91E-03	2.68E-03	0.844		56.5	10:09:06	06-25-1913
21	11	6.57E-03	2.98E-03	0.848	solo	59.4	10:09:13	06-25-1913
averages		5.58E-03	2.35E-03	0.849		54.9		

22	Ref	4.57E-03	1.89E-03	0.938		47.4	10:13:39	06-25-1913
23		4.58E-03	1.89E-03	0.937		47.5	10:13:45	06-25-1913
24		5.95E-03	2.05E-03	0.938		55.1	10:13:51	06-25-1913
25		3.02E-03	2.82E-03	0.943		37.7	14:47:16	06-25-1913
26		3.03E-03	2.82E-03	0.942		37.7	14:47:21	06-25-1913
27		3.98E-03	3.43E-03	0.937		43.3	14:47:28	06-25-1913

Reference values are $\geq 94\%$ which is normal - head not contaminated, readings reliable

Measurements at Primary mirror cover port-holes after CO2 cleaning

28	location 1	6.97E-03	1.34E-03	0.85		70.6	14:52:34	06-25-1913
29		6.97E-03	1.34E-03	0.847		70.7	14:52:38	06-25-1913
30	2	2.18E-03	3.95E-04	0.866		39.9	14:52:47	06-25-1913

31		2.18E-03	3.95E-04	0.866		39.9	14:52:52	06-25-1913
32	3	3.35E-03	8.45E-04	0.859		45.4	14:53:01	06-25-1913
33		3.36E-03	8.45E-04	0.859		45.5	14:53:05	06-25-1913
34	4	3.32E-03	6.34E-04	0.859		48.5	14:53:47	06-25-1913
35		3.32E-03	6.37E-04	0.857		48.6	14:53:52	06-25-1913
36	5	4.10E-03	8.03E-04	0.85		53.8	14:54:02	06-25-1913
37		4.10E-03	8.02E-04	0.848		53.9	14:54:07	06-25-1913
38	6	4.33E-03	9.23E-04	0.856		53.8	14:54:18	06-25-1913
39		4.33E-03	9.23E-04	0.857		53.8	14:54:23	06-25-1913
40		1.97E-08	2.25E-08	0.001	null	3	14:54:31	06-25-1913
41	7	3.39E-03	7.48E-04	0.861		47.1	14:56:07	06-25-1913
42		3.39E-03	7.46E-04	0.86		47.1	14:56:12	06-25-1913
43	8	3.82E-03	6.58E-04	0.86		53.8	14:56:21	06-25-1913
44		3.81E-03	6.55E-04	0.86		53.8	14:56:25	06-25-1913
45	9	2.69E-03	5.00E-04	0.861		44	14:56:33	06-25-1913
46		2.70E-03	5.02E-04	0.862		44	14:56:38	06-25-1913
47	10	3.98E-03	9.28E-04	0.848		50.7	14:57:42	06-25-1913
48		3.98E-03	9.29E-04	0.849		50.6	14:57:46	06-25-1913
49	11	4.82E-03	1.01E-03	0.85		57.2	14:57:56	06-25-1913
50		4.82E-03	1.01E-03	0.85		57.2	14:58:01	06-25-1913
51	12	3.56E-03	6.81E-04	0.846		50.6	14:58:10	06-25-1913
52		3.56E-03	6.80E-04	0.844		50.7	14:58:14	06-25-1913
53	13	4.97E-03	9.44E-04	0.851		59.8	14:58:32	06-25-1913
54		4.97E-03	9.43E-04	0.85		59.8	14:58:36	06-25-1913
55	14	5.80E-03	9.86E-04	0.838	solo	67.5	14:58:46	06-25-1913
averages		3.96E-03	8.01E-04	0.855		52.0		

56 Ref	1.61E-03	1.08E-03	0.938	27.5	15:05:09	06-25-1913
57	1.61E-03	1.08E-03	0.939	27.5	15:05:14	06-25-1913
58	4.57E-03	1.55E-03	0.945	48.2	15:05:20	06-25-1913

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Improvements from cleaning:

- 2.93 factor improvement in high angle scattering
- 1.41 factor improvement in back scattering
- 0.50% increase in % reflectivity