

Reflectivity measurement - before and after snow-cleaning

Equipment:	uscan reflectometer		
Mirror:	WHT Primary mirror		
Person:	Tibor Agocs, Neil O'Mahony		
Date:	04/10/2007		
Lambda (micron):	0.67		
Incident angle (degree):	25		
BW (Bandwidth) limits:	1	0.1	

Primary mirror BEFORE snow cleaning

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
2	9.20E-03	3.92E-03	0.848	70.6	09:57:50	10/04/2007
3	9.27E-03	3.92E-03	0.853	70.7	09:57:55	10/04/2007
4	9.38E-03	3.93E-03	0.853	71.2	09:58:00	10/04/2007
5	5.61E-03	2.76E-03	0.864	54.1	09:58:10	10/04/2007
6	5.63E-03	2.75E-03	0.865	54.2	09:58:15	10/04/2007
7	5.62E-03	2.75E-03	0.866	54.1	09:58:19	10/04/2007
11	6.48E-03	3.14E-03	0.859	58.4	09:58:47	10/04/2007
12	6.67E-03	3.28E-03	0.859	59.2	09:58:51	10/04/2007
13	6.65E-03	3.19E-03	0.858	59.2	09:58:56	10/04/2007
14	6.42E-03	2.98E-03	0.853	58.4	09:59:10	10/04/2007
15	6.32E-03	2.95E-03	0.846	58.2	09:59:14	10/04/2007
16	6.46E-03	3.01E-03	0.83	59.4	09:59:19	10/04/2007
17	9.16E-03	5.24E-03	0.782	72.2	09:59:25	10/04/2007
18	7.87E-03	4.07E-03	0.771	67.7	09:59:29	10/04/2007
19	6.80E-03	3.81E-03	0.714	65.2	09:59:34	10/04/2007
20	8.31E-03	4.59E-03	0.866	65.4	09:59:42	10/04/2007
21	8.38E-03	4.49E-03	0.864	65.9	09:59:46	10/04/2007
22	7.83E-03	4.11E-03	0.888	62.8	09:59:51	10/04/2007
23	6.62E-03	2.96E-03	0.848	59.7	10:00:10	10/04/2007
24	6.65E-03	2.98E-03	0.846	59.9	10:00:14	10/04/2007
25	6.89E-03	3.11E-03	0.801	62.6	10:00:19	10/04/2007
26	6.42E-03	3.09E-03	0.855	58.2	10:00:33	10/04/2007
27	6.49E-03	3.08E-03	0.855	58.6	10:00:38	10/04/2007
average	7.180E-03	3.482E-03	0.841	61.996		
standard dev	1.222E-03	6.859E-04	0.039	5.612		

Primary mirror AFTER snow cleaning

No#	BSDF - 0°,0° detector position	BSDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
28	3.45E-03	9.76E-04	0.873	44.7	10:23:43	10/04/2007
29	3.44E-03	9.82E-04	0.868	44.7	10:23:47	10/04/2007
30	3.44E-03	9.88E-04	0.868	44.7	10:23:52	10/04/2007
31	3.88E-03	1.17E-03	0.875	47	10:24:00	10/04/2007
32	3.83E-03	1.08E-03	0.876	47	10:24:05	10/04/2007
33	3.86E-03	1.09E-03	0.875	47.3	10:24:10	10/04/2007
34	1.30E-02	4.79E-03	0.845	85.3	10:24:17	10/04/2007
35	1.30E-02	4.80E-03	0.844	85.1	10:24:22	10/04/2007
36	1.30E-02	4.82E-03	0.846	84.9	10:24:27	10/04/2007
37	2.93E-03	6.77E-04	0.879	42.8	10:24:40	10/04/2007

38	3.01E-03	7.15E-04	0.881	43	10:24:45	10/04/2007
39	2.89E-03	6.96E-04	0.875	42.1	10:24:49	10/04/2007
40	2.88E-03	7.87E-04	0.885	40.9	10:24:57	10/04/2007
41	2.87E-03	7.76E-04	0.913	40.2	10:25:02	10/04/2007
42	2.88E-03	7.83E-04	0.918	40.2	10:25:07	10/04/2007
43	3.67E-03	1.03E-03	0.889	45.8	10:25:17	10/04/2007
44	3.67E-03	9.91E-04	0.904	45.7	10:25:22	10/04/2007
45	3.66E-03	1.01E-03	0.894	45.7	10:25:26	10/04/2007
46	2.60E-03	6.95E-04	0.874	39.2	10:25:38	10/04/2007
47	2.60E-03	6.99E-04	0.865	39.4	10:25:42	10/04/2007
average	4.725E-03	1.478E-03	0.877	49.785		
standard dev	3.584E-03	1.442E-03	0.020	15.435		

Water stains

No#	BPDF - 0°,0° detector position	BPDF - 50°,180° detector position	reflectivity	rms (Ångstrom)	time	date
8	3.32E-02	1.46E-02	0.762	141.1	09:58:29	10/04/2007
9	3.30E-02	1.46E-02	0.757	141.2	09:58:33	10/04/2007
10	3.30E-02	1.46E-02	0.757	141	09:58:38	10/04/2007
average	3.305E-02	1.460E-02	0.759	141.100		
standard dev	1.007E-04	1.732E-05	0.003	0.100		

Notes:

RMS - Root Mean Square surface roughness in Angstrom,
BPDF - Bidirectional scatter distribution function, it is equal to the scattered power per unit solid angle