

To assess the state of the mirror we will compare current measurements with recent ones from a freshly aluminised mirror (NOT M1) and with measurements following WHT M1 washing (04/14)
 Highlit wavebands have given measurements 2-3.5 % low w.r.t. Schott reference

	wavelength of band (nm)						
Reference values:	365	404	464	522	624	760	970
NOT M1 after aluminisation 12/6/14	93	89.3	92.6	91.4	89.7	88.8	92.1
WHT M1 after wash 14/4/14	90.0	88.2	92.0	91.5	88.7	87.6	91.9
Calibr. targets used during wash meas.	84.4	83.0	90.9	92.3	89.4	84.4	86.8
targets used for today;s meas.	85.2	83.0	90.5	91.3	89.7	85.2	87.4
change in targets	0.77	-0.01	-0.46	-1.02	0.28	0.72	0.56

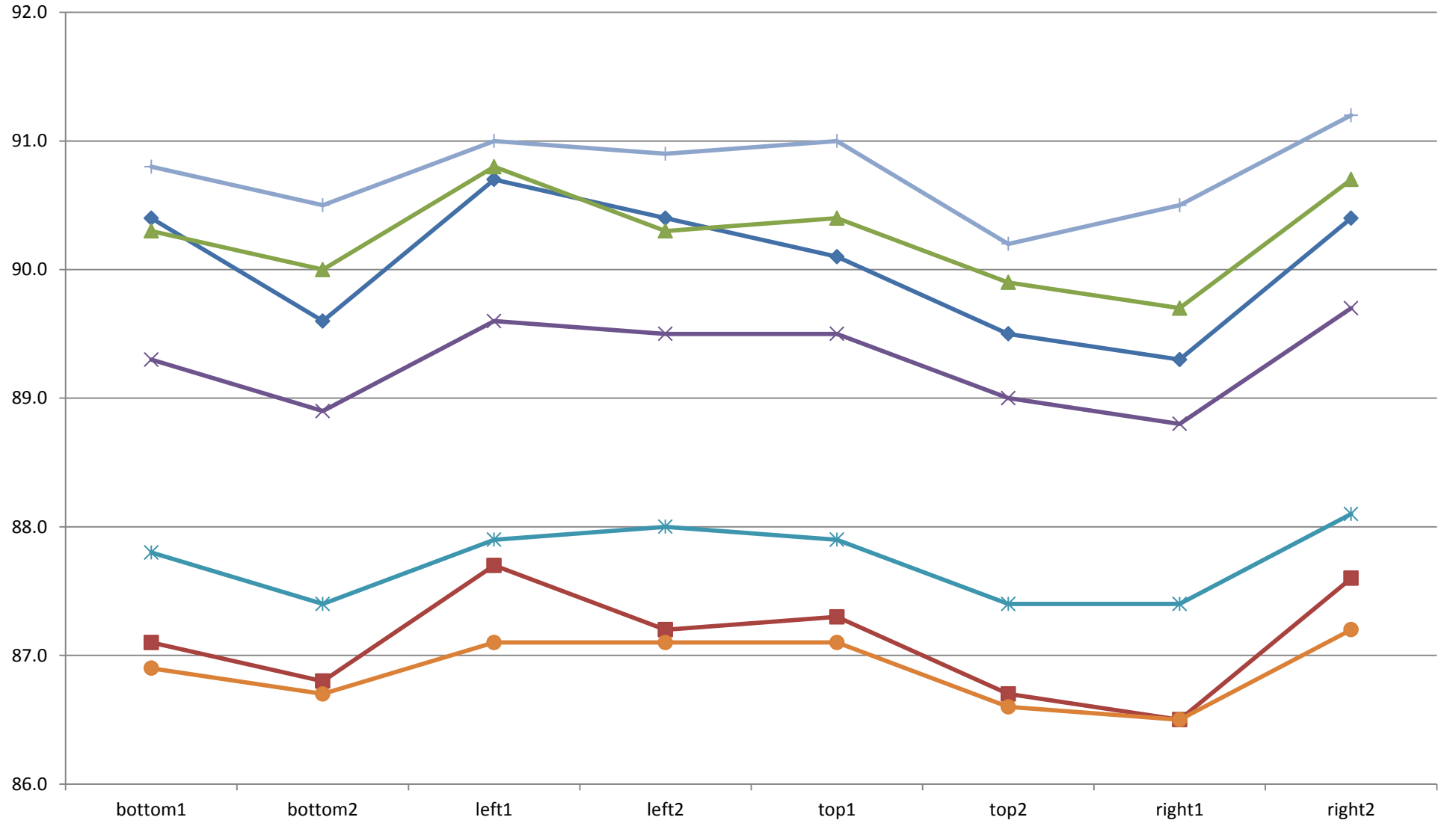
		Temp. °C	wavelength of band (nm)							mean over 7 bands
			365	404	464	522	624	760	970	
211	18/06/2014 10:18 0 bottom1	21.3	90.4	87.1	90.3	89.3	87.8	86.9	90.8	88.9
212	18/06/2014 10:18 0 bottom2	21.3	89.6	86.8	90.0	88.9	87.4	86.7	90.5	88.6
213	18/06/2014 10:19 0 left1	21.4	90.7	87.7	90.8	89.6	87.9	87.1	91.0	89.3
214	18/06/2014 10:19 0 left2	21.4	90.4	87.2	90.3	89.5	88.0	87.1	90.9	89.1
215	18/06/2014 10:20 0 top1	21.4	90.1	87.3	90.4	89.5	87.9	87.1	91.0	89.0
216	18/06/2014 10:21 0 top2	21.5	89.5	86.7	89.9	89.0	87.4	86.6	90.2	88.5
217	18/06/2014 10:21 0 right1	21.5	89.3	86.5	89.7	88.8	87.4	86.5	90.5	88.4
218	18/06/2014 10:21 0 right2	21.6	90.4	87.6	90.7	89.7	88.1	87.2	91.2	89.3
average per waveband			90.1	87.1	90.3	89.3	87.7	86.9	90.8	
std dev per waveband			0.52	0.43	0.38	0.34	0.29	0.27	0.33	
maximum			90.7	87.7	90.8	89.7	88.1	87.2	91.2	
minimum			89.3	86.5	89.7	88.8	87.4	86.5	90.2	
shortfall (WHT M1 - fresh Alum.)			3.0	2.2	2.3	2.1	1.9	1.9	1.4	
change since wash			0.0	-1.1	-1.7	-2.2	-1.0	-0.7	-1.1	

Conclusions: reflectivity has decreased by about 1% since washing
 changes since washing could be in part due to difference in calibration

dust indices	wavelength of band (nm)						
	365	404	464	522	624	760	970
	7.9	5.2	5.2	5.7	4.9	4.7	12.9
	8.1	5.4	5.4	5.5	5.2	4.8	11.1
	7.4	4.8	4.9	5.1	4.9	4.6	10.5
	7.9	5.4	5.3	5.4	5	4.8	10.8
	7.7	5.2	5.2	5.4	5	4.7	10.7
	8.8	6	6.1	6.2	5.4	5.4	12.6
	8.9	6.2	6.2	6.6	5.6	5.3	12.1
	7.6	5	5.1	5.3	5	4.8	11.2

WHT M1 %R variation with location, by waveband

365 404 464 522 624 760 970



WHT M1 Reflectivity vs waveband at 8 locations

