Report on the Microscopical Measurements of Surface-Maps of SiC-Samples

- Surface-Maps have been taken by Zygos NewView 8000 metrology instrument from two samples of SiC (backed/sintered from a powder), produced by the company Kyocera, at two different spots close to their respective center.
- As of their respective thickness (5 and 20mm), the two samples are denominated as small (s) and big (b) sample, respectively.
- The analysis of the taken maps were done with Zygos MetroPro software (the presented pictures of the maps were done also with this program).
- The smaller sample seems to have the more isotropic surface with a rms roughness of 4-7nm; the bigger one is more non-isotropic with a roughness ranging from 2-30nm.

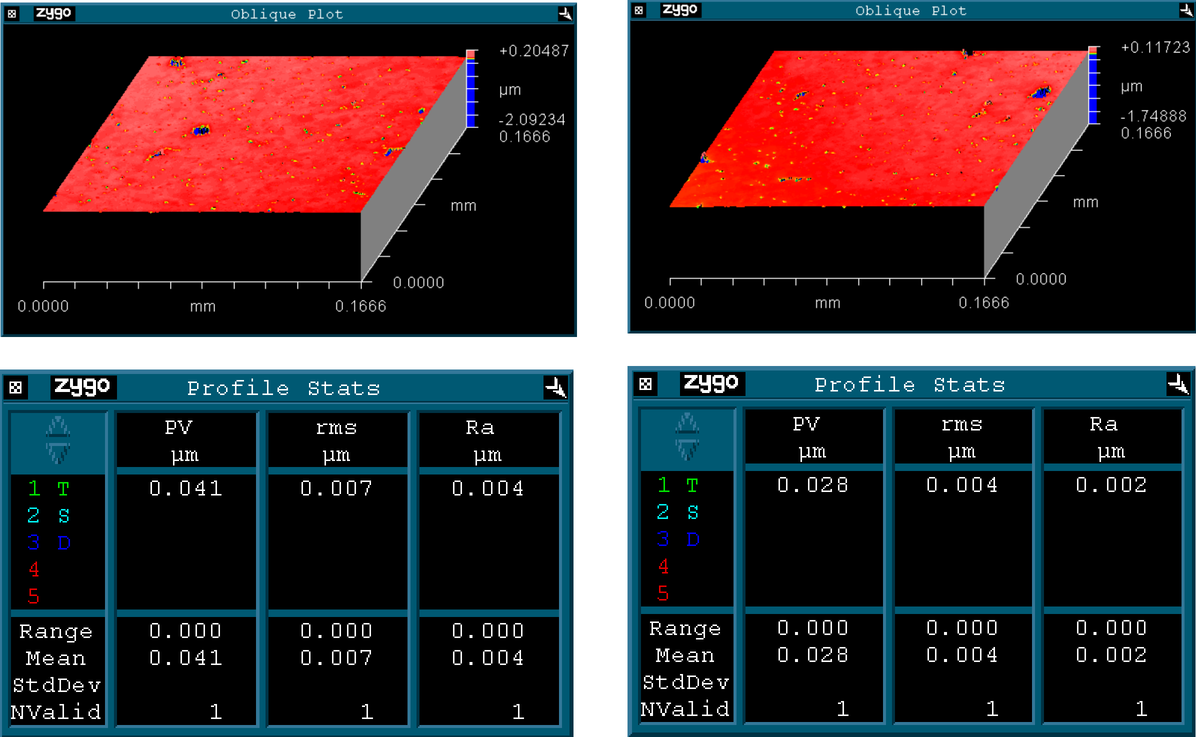
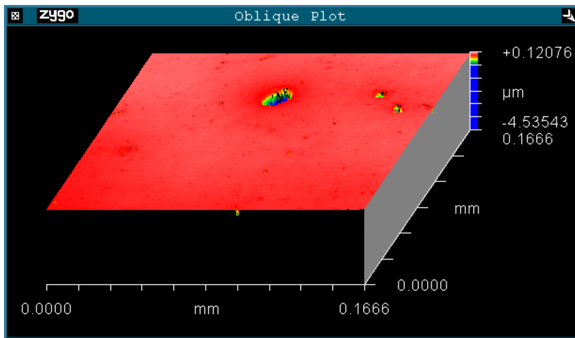
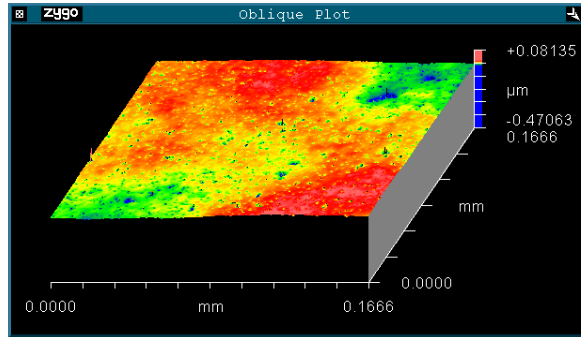


Figure 1: Two maps of the small sample taken at different locations near the center of the sample (left and right on top). Bellow are the respective analysis results when taking the average of the map.





zygo Profile Stats

	PV µm	rms µm	Ra µm
1 T	0.132	0.030	0.018
2 S			
3 D			
4			
5			
Range	0.000	0.000	0.000
Mean	0.132	0.030	0.018
StdDev			
NValid	1	1	1

zygo Profile Stats

	PV µm	rms µm	Ra µm
1 T	0.007	0.002	0.001
2 S			
3 D			
4			
5			
Range	0.000	0.000	0.000
Mean	0.007	0.002	0.001
StdDev			
NValid	1	1	1

Figure 2: Two maps of the bigger sample taken at different locations near the center of the sample (left and right on top). Bellow are the respective analysis results when taking the average of the map.