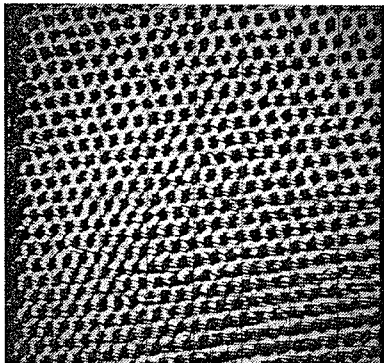


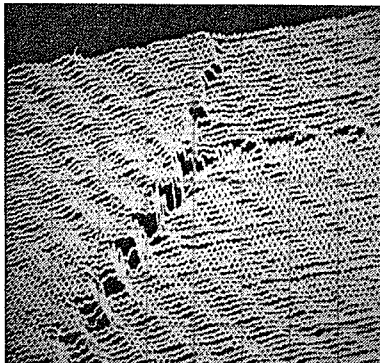
Images Obtained from the *NanoScope*[™] I

#3 in a Series, July 1987, "Twisted Graphite"

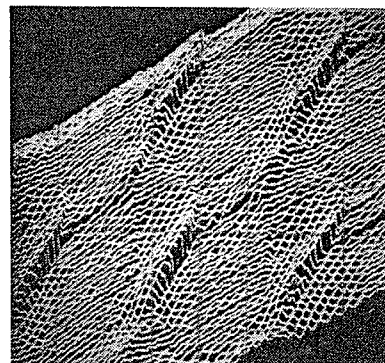
This issue is devoted to some unusual images taken on a sample of freshly cleaved, highly-oriented, pyrolytic graphite (type ZYA) from Union Carbide. A single Pt-Ir Nanotip was used and the sample was in the same orientation for all images. The images demonstrate the power of the NanoScope I[™] in visualizing a complex structure.



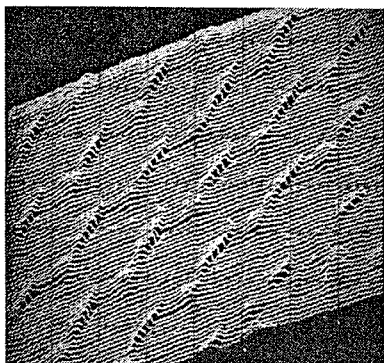
1. A top view showing rows of carbon atoms spaced at 2.5 Å. This is a calibration image and shows the orientation of the graphite structure.



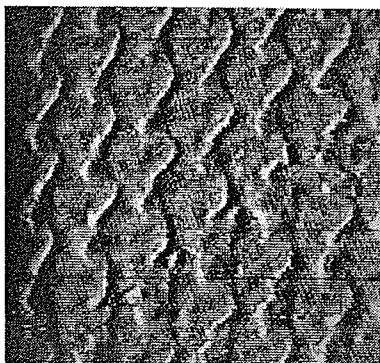
2. A 150 Å line-scan image which shows waves with a period of 14 Å interrupted by steps of variable height, up to 8 Å.



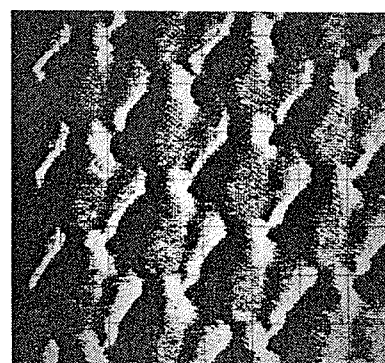
3. This 540 Å scan shows a large periodic structure. Get a magnifier out for this one.



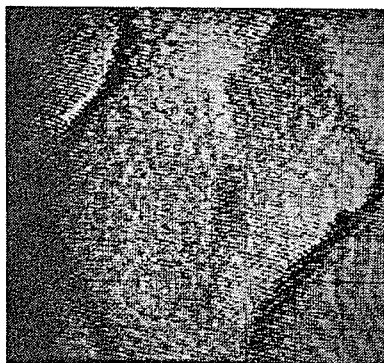
4. A 1140 Å line scan. The positive slope to the left of the steps is now clear. The tilt of the image is due to the tilt of the microscope head.



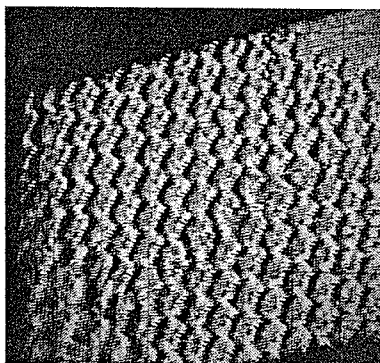
5. A shaded topographical view with a size of 1260 Å. The structure has a twisted appearance and a fault at about 45°.



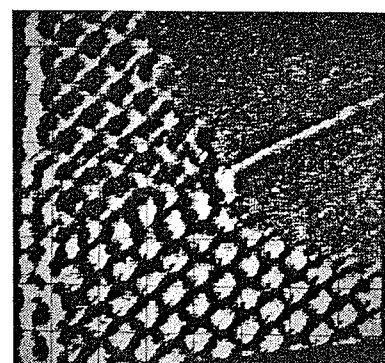
6. A top view with the contrast increased. The Dynamic Shading brings out the detail even on a sloped image.



7. A top view of a unit cell of the structure. The scan size is 300 Å.



8. A 3000 Å scan showing the structure (with a fault) and adjacent normal graphite in the upper right.



9. The edge of the structure showing a change in form above the fault line which traverses the normal graphite.

If you need a tunneling microscope with the capabilities shown here at an outstanding price, call us about obtaining the NanoScope I[™].

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