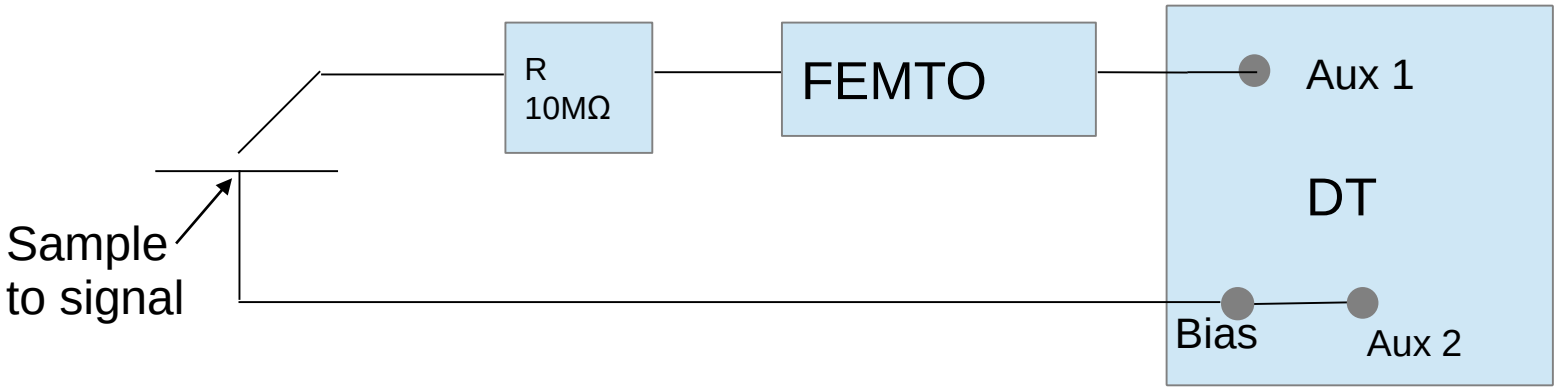
Electrical System set up



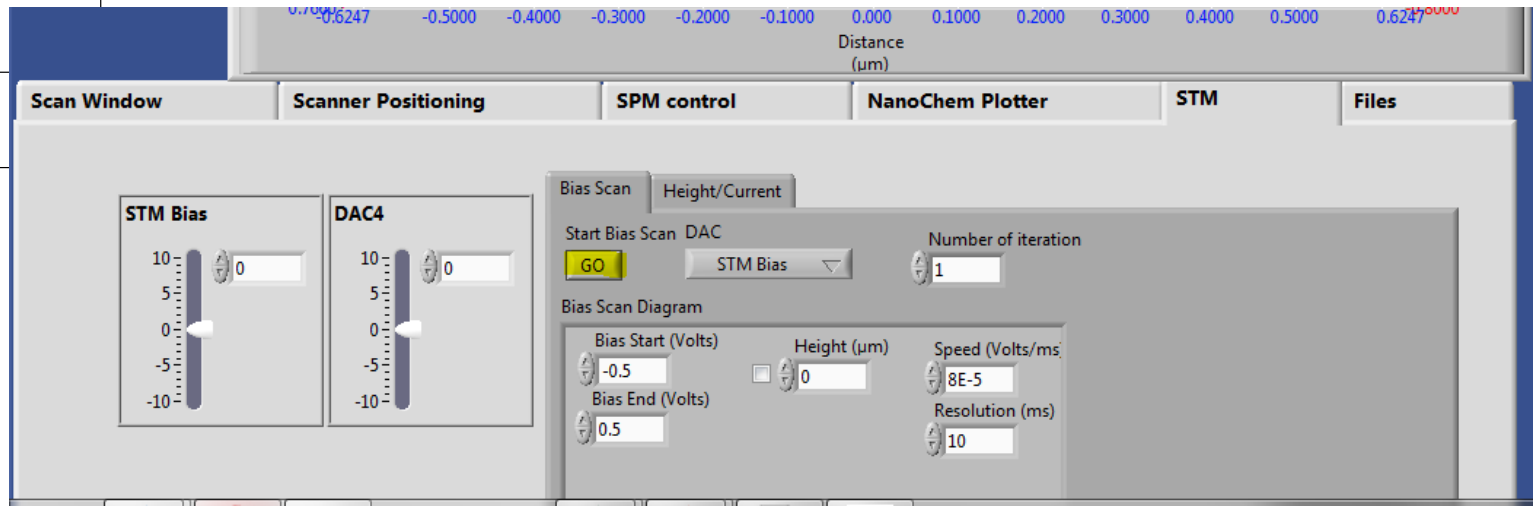
- Bias should be between 0.1-0.5 Volts. Add Bias after in contact.
- Use Phase Feedback with Total gain of 10
- If needed, increase setpoint in the process of scanning.

Written by Yirmi 12.2013

Electric Measurements with MV2000

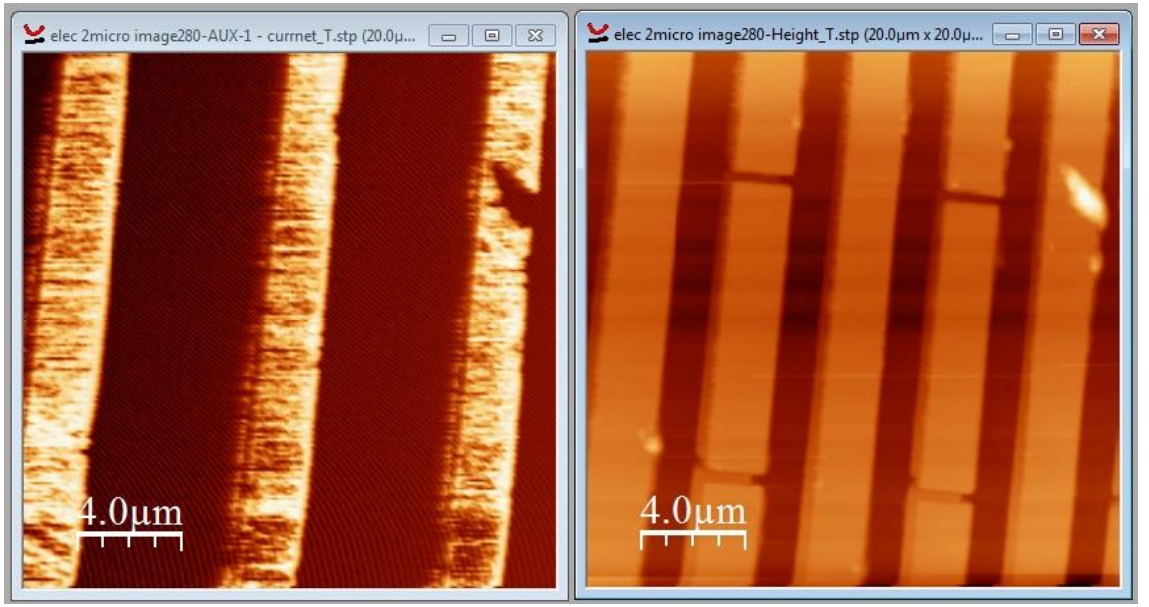
IV parameters in STMBias/current window	
FEMTO remote	10^6
STM Bias Start	-0.5V
STM Bias End	0.5V
speed	8E-5
resolution	10ms
STM bias	0
Osc/gain/peak	1.5/3/8
Pgain/Igain for Hybrid	0.5/0.5

First an IV curve was obtained by using the STM window of the NWS software in STM \ Bias with the parameters in the table.



Electric Measurements with MV2000

Scan mode	Pure scan
sample	Angila 2micron electrodes
FB mode	phase
Osc/gain/peak	1.5/3/8
Pgain/Igain for Hybrid	0.5/0.5
Freq/Q	33.4/800
probe	Electric: Pt in glass pipette
Environment	-k
Step resolution	150 nm



In the image above the left is current and right is AFM which were taken simultaneously. The parameters of the above scan are in the table