Conditioning Report

|  |  |  |
| --- | --- | --- |
| Target material and number | | Ta#50 |
| Target WO-SN | | 41790-5 |
| Operator name | | Aaron Schmidt |
|  | |  |
| Heating start date and time | | 2016-10-19 09:01 |
| BIAS | |  |
| Voltage [kV] | | 30 |
| Current [µA] | | 37 |
| Extraction Electrode (EE) | |  |
| Voltage [kV] | | 1.5 |
| Current [µA] | | 510 |
| TGHT | |  |
| Current [A] | | 582 |
| Voltage [V] | | 7.0 |
| TBHT | |  |
| Current [A] | | 199 |
| Voltage [V] | | 2.2 |
| FEBIAD ANODE | |  |
| Voltage [V] | | - |
| Current [mA] | | - |
| FEBIAD COIL | |  |
| Current [A] | | - |
| Voltage [V] | | - |
| Flow and Temperature HS + MSP | | 27.9 |
| Flow [lpm] | | 3.92 |
| Temperature increase [C] | | 9.4 |
| FC6 currents [A] | | - |
| SIS | 7Li | 6.36E-10 |
| FEBIAD | 20Ne | - |
| SIS | 23Na | 1.52E-09 |
| SIS | 39K | 2.72E-09 |
| SIS | 85Rb | 6.06E-10 |
| SIS | 133Cs | 4.46E-09 |
| Heating end date and time | | 2016-10-21 13:27 |

Comments

-Strong reading from Aluminum noted throughout heating

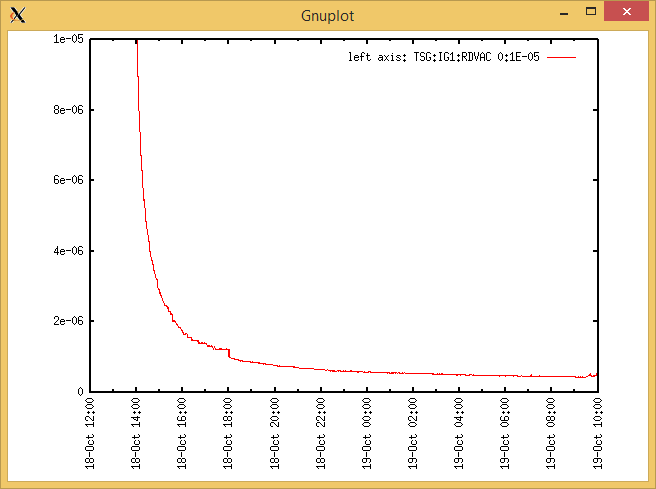
|  |  |  |
| --- | --- | --- |
| SIS | 27Al | 3.03E-08 |

-Wednesday, October 19, 2016, 11:50: TMS:FC0 moved out & TMS:RPM0B began scanning continuously on their own.

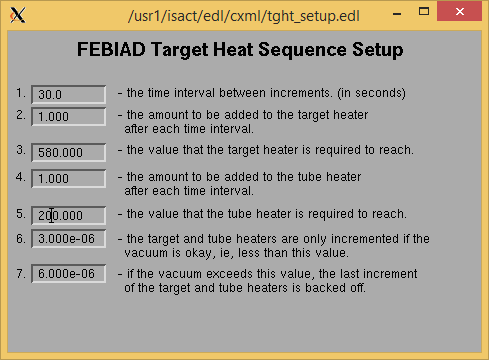
“Pressed start” for wire scan, TMS:FC0 moved back in place. Operation appeared normal afterwards, although monitored.

Plots

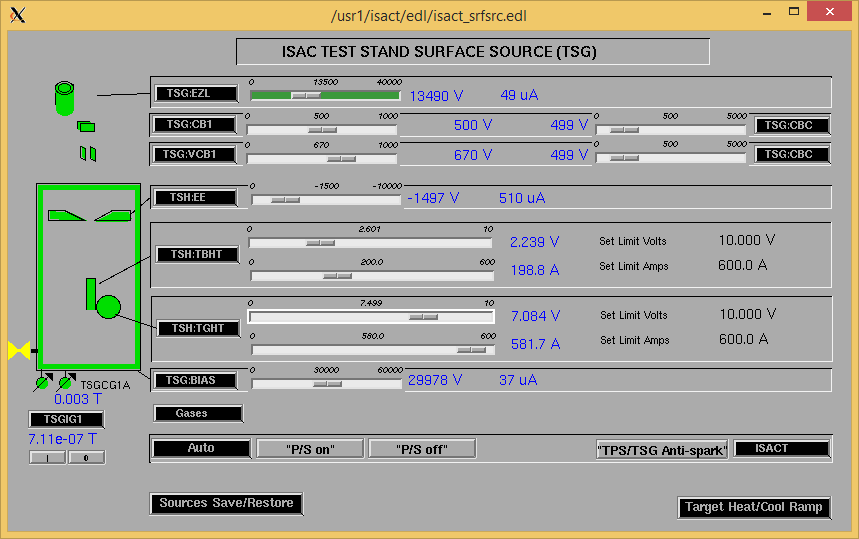
8h Vacuum Pump Down



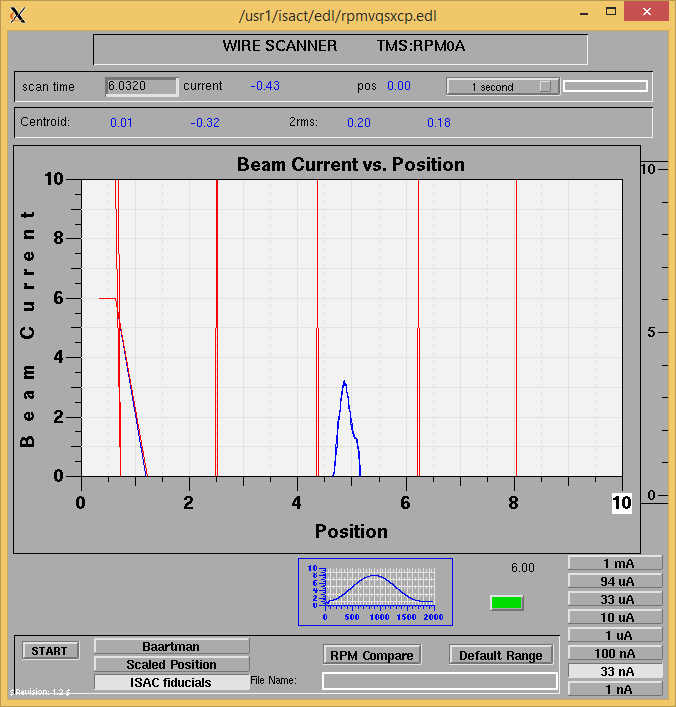
Target Heat Sequence Setup

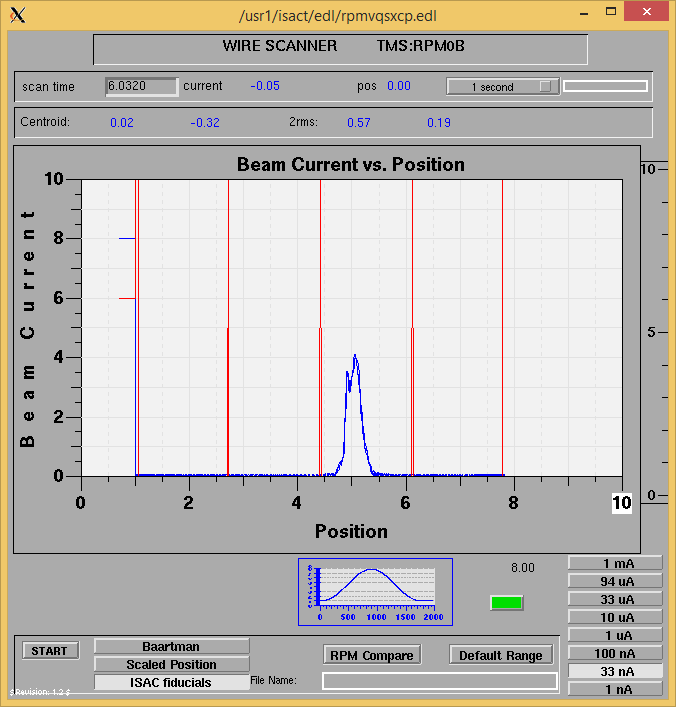


Source Tuning

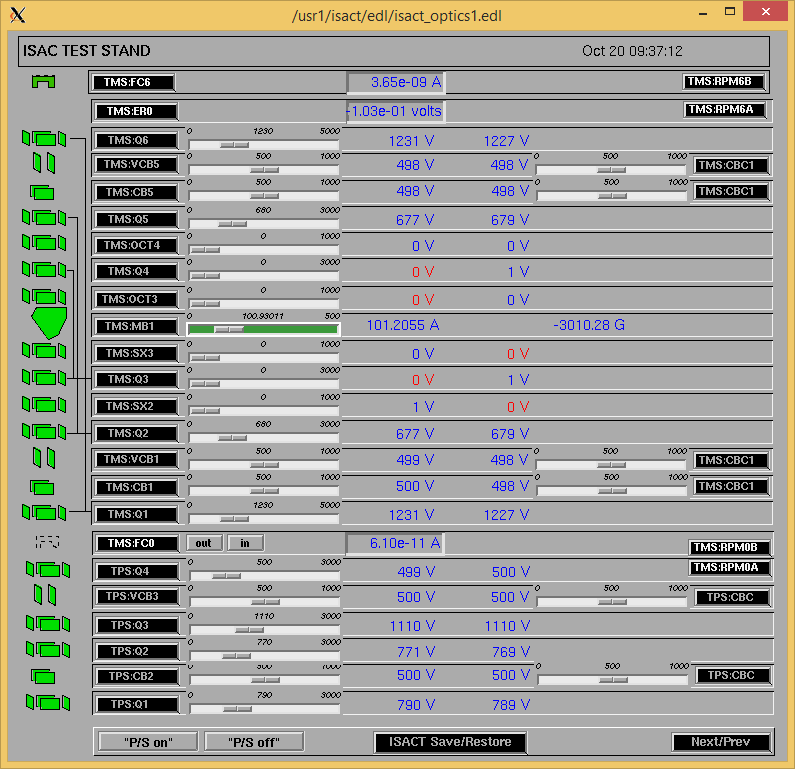


Wire Scanners RPM0A and RPM0B





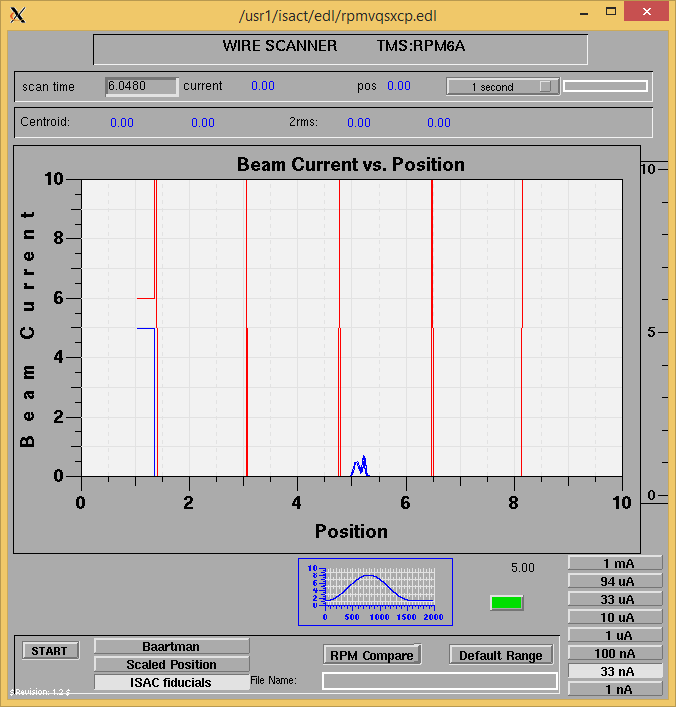
Optics Tuning

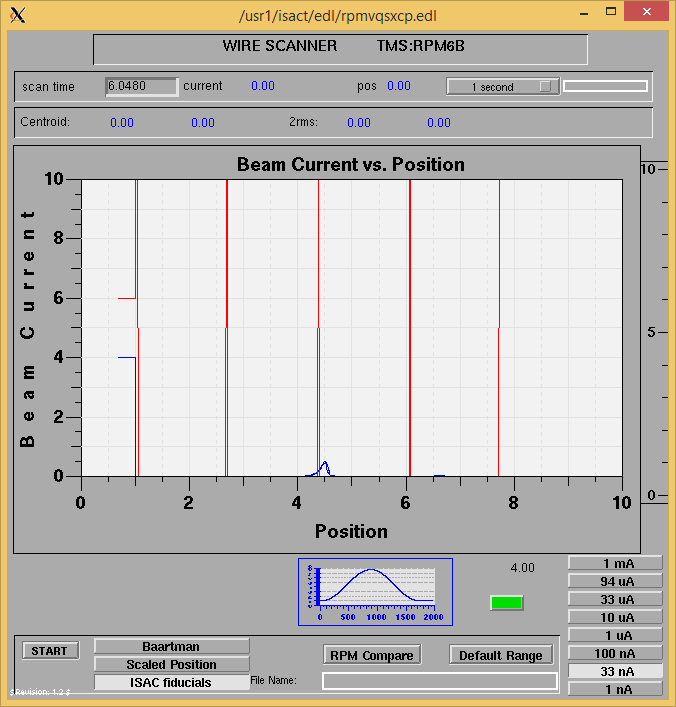


Mass 39

Wire Scanners RPM6A and RPM6B

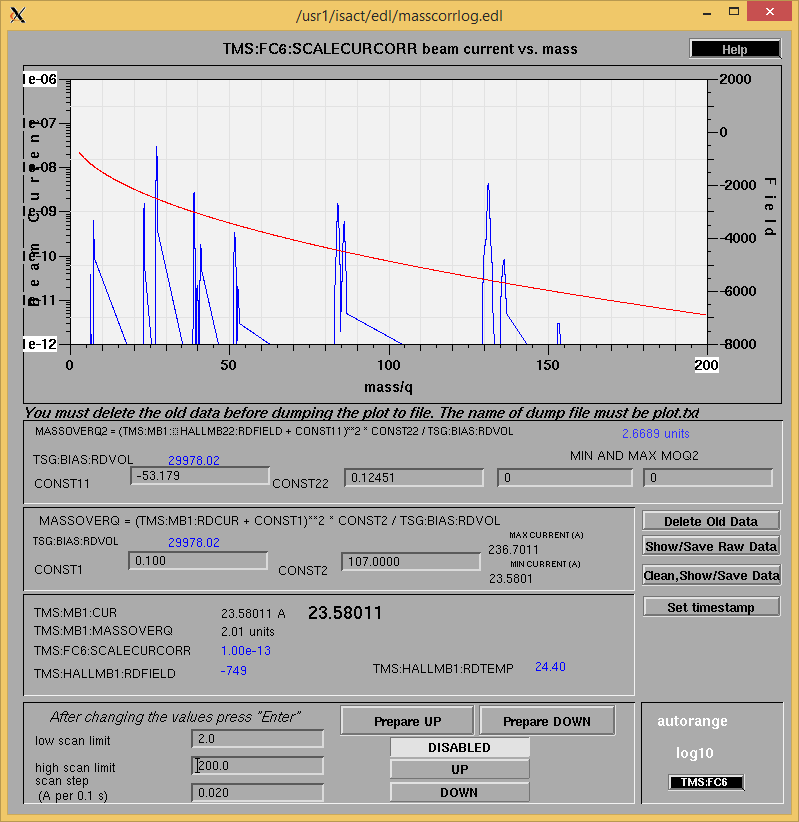
Mass 39





Mass 39

Mass Scan



<http://isacwserv.triumf.ca/onlylocal/isactdata/save_restore/masscorr/2016-10-20-09-30%20Ta%2350>

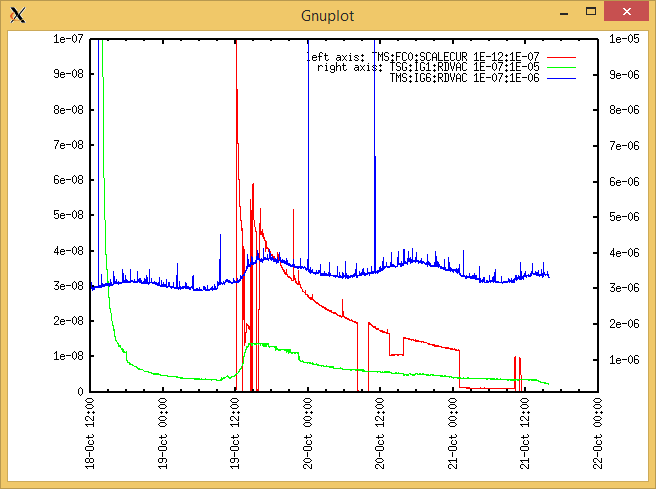
Mass 39

Cooling Parameters

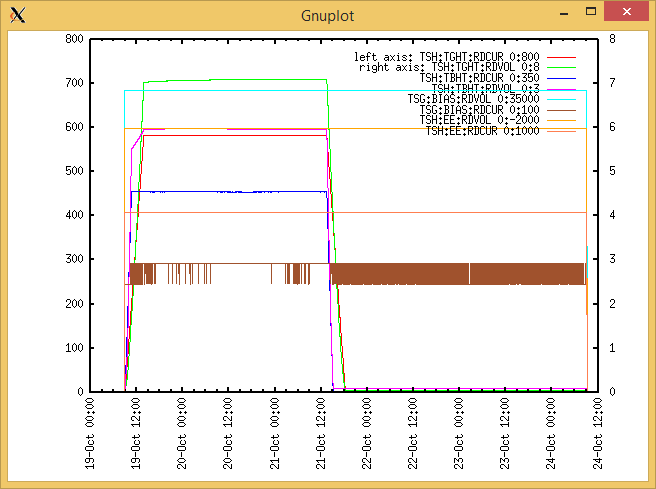


Overview Plots

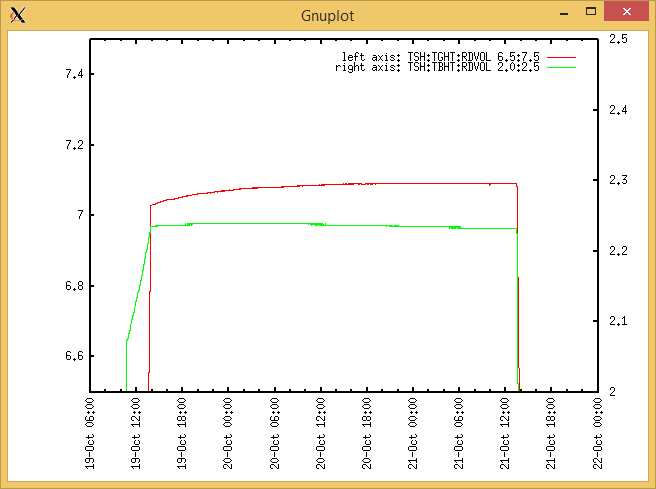
Vacuum and FC0



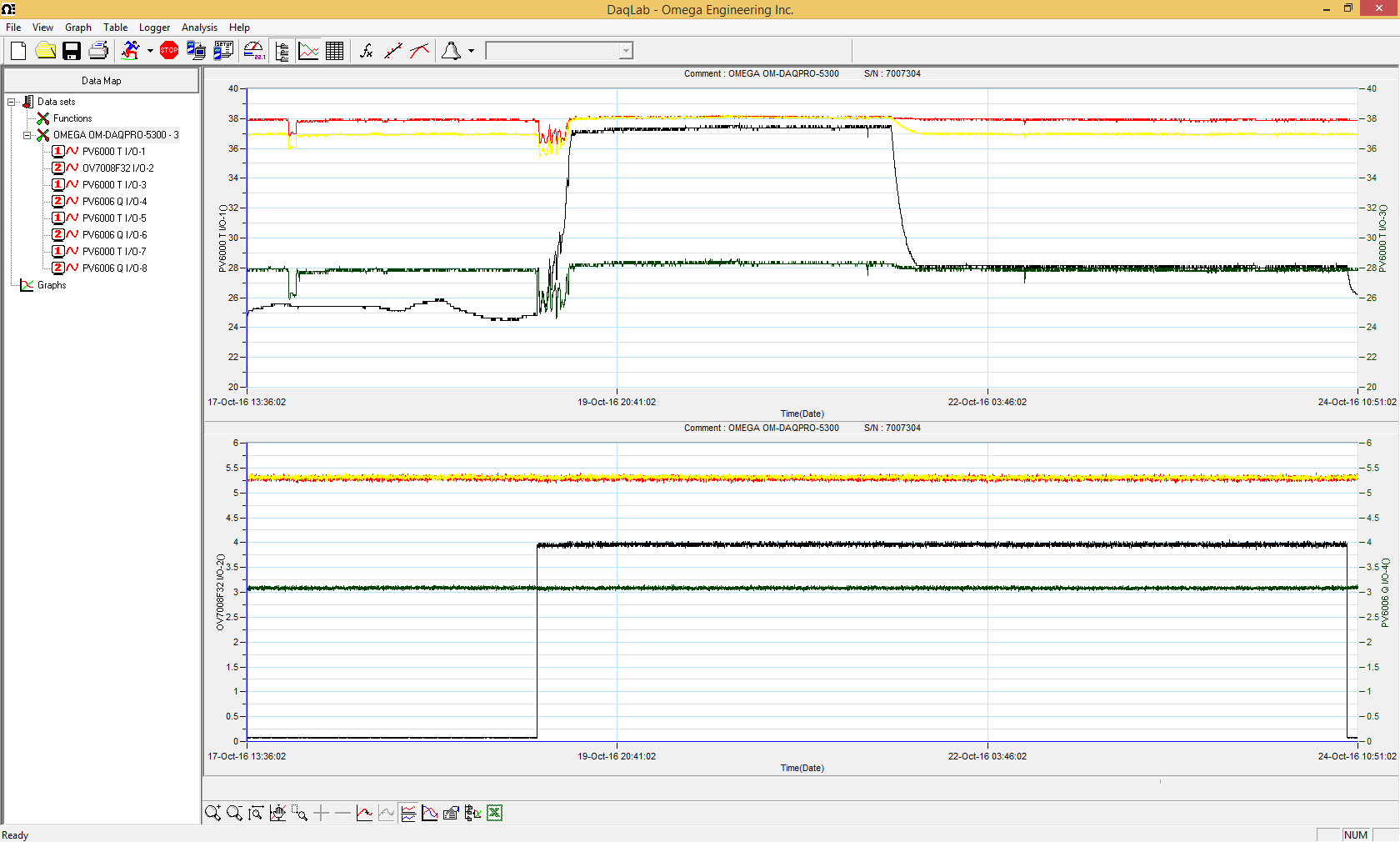
Heating, EE and BIAS



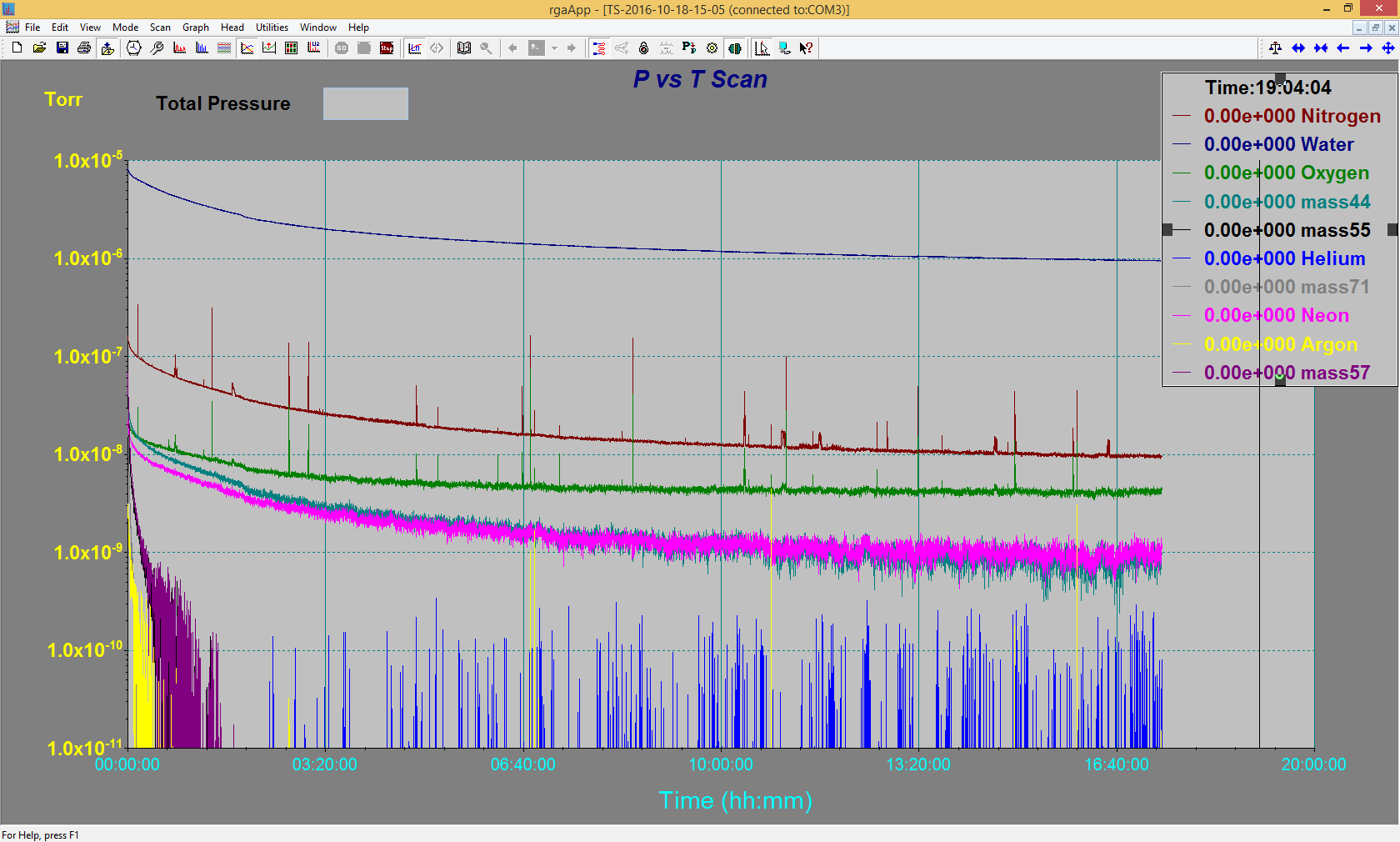
TGHT and TBHT Voltage

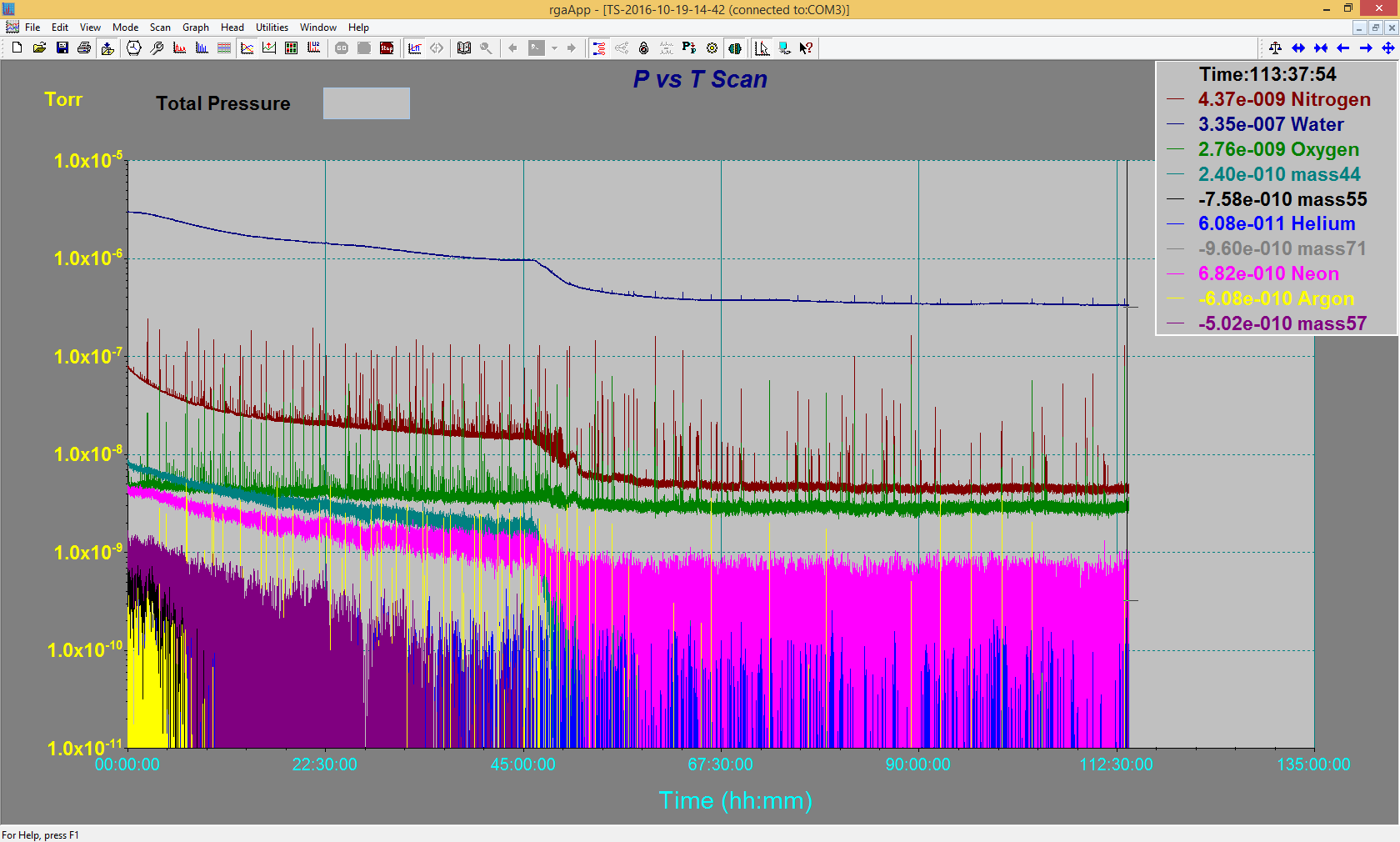


Flow and cooling water temperatures

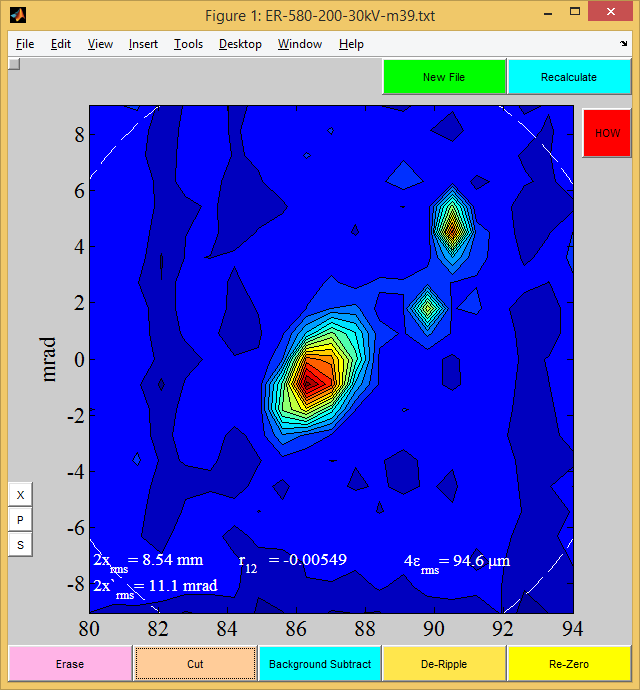


RGA

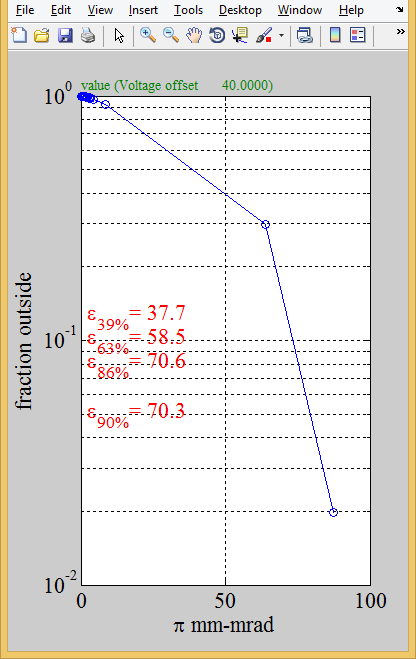




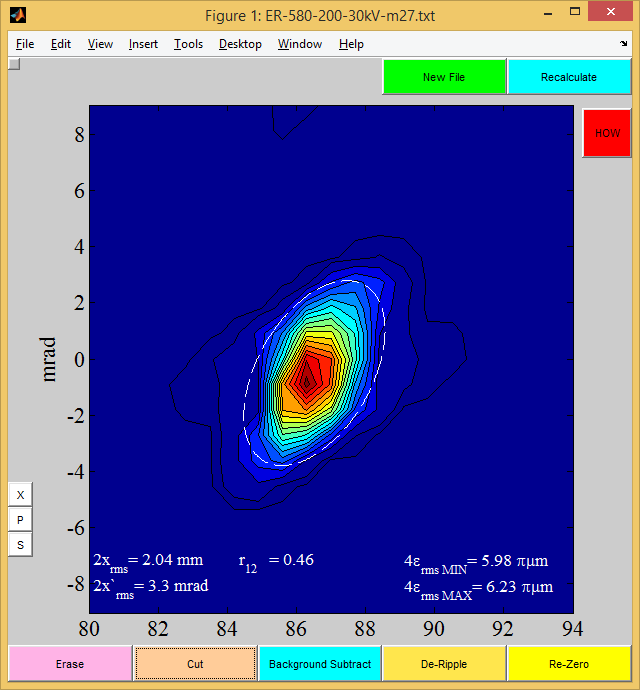
Emittance Scan



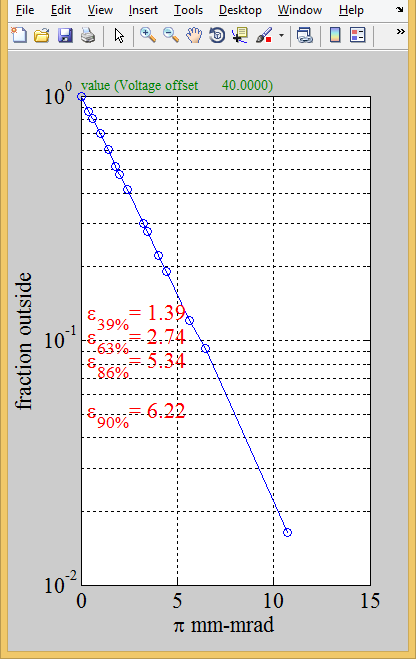
Mass 39



Mass 39



Mass 27



Mass 27