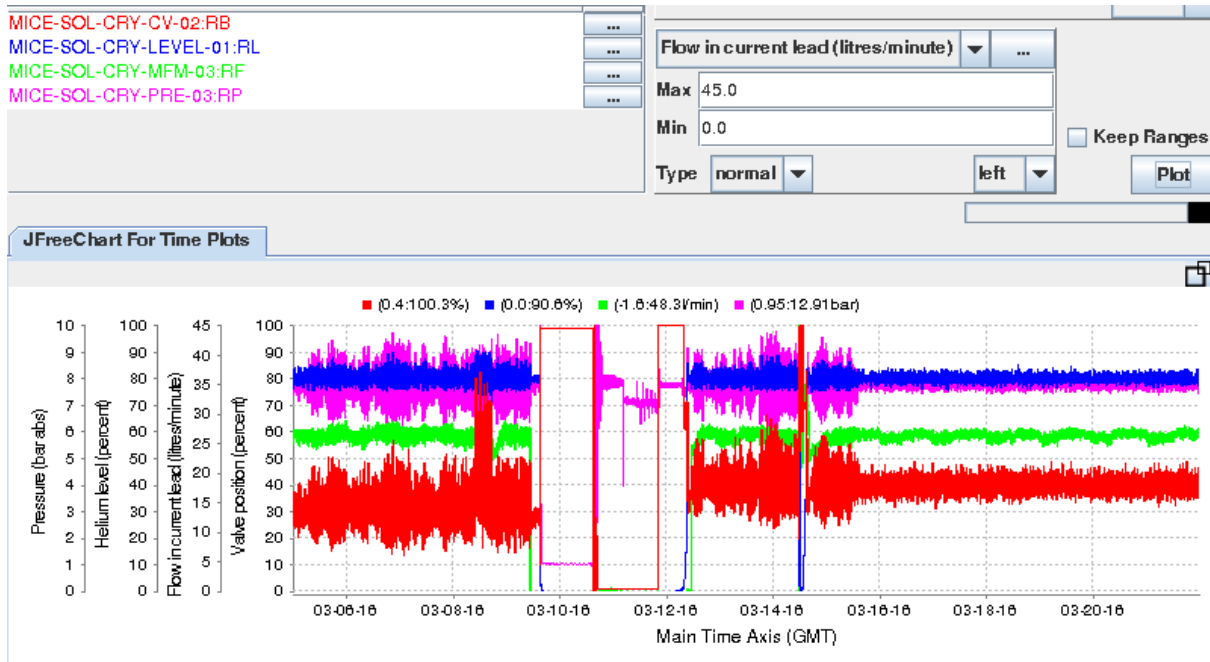


## Plot of Stability of Decay Solenoid



Pre March 10<sup>th</sup>: instability of compressor/Linde/DS cryostat – large oscillations in pressure, valve positions, and helium level resulting in frequent alarms causing consternation in the MLCR

March 10<sup>th</sup> to 12<sup>th</sup>: Cleaning of gas in Linde circuit

March 12<sup>th</sup> to 15<sup>th</sup>: No change in oscillatory behaviour. Resonant behaviour between the helium level control and gas storage buffering.

March 15<sup>th</sup>: Adjustment of control parameters in some PID loops – takes system off resonance and saves the control valves, resulting in very few alarms.

NB.

- 1) Possibility of losing more gas during a quench or trip due to changed response of valves
- 2) Possibility of changed cool-down characteristics for same reasons
- 3) System can be re-set to original values easily at the control PC (a re-boot of the control PC will re-set all the values). I have made notes of all changes (see also the eLog).