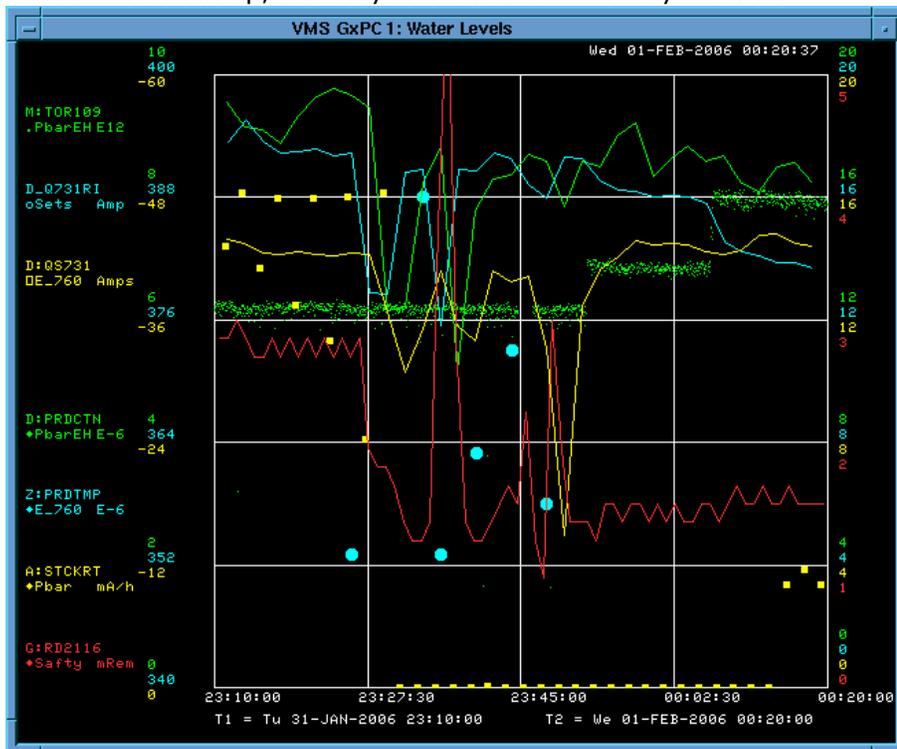


- Work in Booster and MI is being cleaned up. Want to make sure to keep the 8e12 on target
- Re-organization since last meeting.
 - Keith Gollwitzer takes over Antiproton Source
 - Werkema is Deputy
 - Paul Derwent takes over Recycler
 - Elvin Harms goes to ILC
- **Booster**
 - specs for application program by end of week
 - For bunch len. Monitor
 - Will need someone to program this application
- **Main Injector**
 - Now 7.4e12, NoWill try to keep 8e12 on target
 - Mid-level upgrades complete,
- **Pbar**
 - Lots of work
 - Deb hor orbit, center of quads
 - If do that in arc, change energy of maching
 - Optimize aperture hor and ver. Bumps around extractinon kicker, also leads to a slight energy change. Need to put bump back in.
 - New debuncher lattice increased aperature, admittance close to design.
 - At one point had both aperatures within 5% of RunII design goals.
 - Put two transport trims in AP2. Other two trims in Pbar rings
 - Recently had a quad shunt fail in AP2 at the end of the line.
 - Production when up, but only were in a 6 second cycle time.



Pasted from <<http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar06&action=view&page=-438&button=yes>>

- At normal cycle times, rad tripped.
- Changed one quad shunt and quad at the end of the line, production the same, but losses were down.

- but losses were down.
- Go from $6e12$ to $8e12$ (low intensity to NuMI), mixed mode, 2.6 sec cycle time. Stacking improved, but production down.
- ????
- Cooling limitations?
- Optimal gain on transverse?
- Maxing out no TWT power?
- Is the emittance of beam on target vary with intensity?
-
- **Dampers**
 -
- **Rapid Transfers**
 - Keith and Paul figure out what to do.
 - Want to get back to stacking faster.
- **Debuncher Aperture**
 - Items that need to be completed.
 - Quad steering at the end of AP1 and beginning of AP2
 - Installation of the new trim in the DS end of AP2
 - Steer to apertures in AP2
 - New optics in AP2
 - RE-introduction of the horizontal extraction bump
 - Energy match of ap2 and the Debuncher
 - Accumulator orbit and aperture.
 - If Debuncher cooling is weakening with intensity
 - Optimal gain
 - Maxed out power
 - Saturating something in the cooling system
 - To verify plot the SEMS in the D/aA line as a function of beam on target. If we see significant beamwidth growth as a function of intensity, we can do the following
 - Fix the deb cooling system (may be very hard to do)
 - Increase the Accumulator aperture
 - Propose the following study plan
 - Measure D/A sem width and the amount of beam on the Accumulator injection orbit vs beam on target
 - If beam on target is a big effect - accumulator orbit and aperture - 2 days of studies (this weekend)
 - 1 shift to measure quad centers
 - 2 shifts to correct orbit
 - 3 shifts for movable devices
 - Set to apertures in AP2
 - RE-introduction of the horizontal extraction bump
 - Items in 3 & 4 can be done at any time while stacking
 - Fixing the accumulator aperture is a big deal. We should plan for an optimal time. One plan (end of next week)
 - Shoot to the Tevatron when the Accumulator has $60e10$ and the RR has a big stash
 - Immediately transfer to RR after the TEV shot.
 - Start the Accumulator studies
 - Milk the big store for a long time
 - At the end of the big store, do the 1×4 low luminosity store for Dzero with $60e10$ from the RR
 - 4 & 5 should give 6 shifts to the Accumulator. At the end of the studies, start stacking.