POD JPARC REPORT (May 25 2010, Tuesday morning)

• People at JPARC
  • Dan, Melanie, Walter, Raj, KevinC (Ian & SteveM left last weekend)
  • Walter leaves June 1, Dan & Melanie leaves soon June 6, Kevin leaves June 11.
• RUNNING
  • beam started May 9 and has been running at 44KW with few interruptions
  • P0D shifters (dan,melanie,kevin,raj,walter) doing well, no problems so far
  • there have been some attempts to improve kicker, but did not work
  • ⇒ probably the remaining running will stay at 44KW (to June 25)
• June P0D expert shifts not yet filled (need to be fixed asap).
• Water Target Alarms
  • On Sunday morning, bag #48, 2nd of two level sensors (188cm) went dry Sunday and the pressure depth sensor dropped from 176 to 171cm. The level 4 Sensor set off the alarms every 5 mins and eventually was disabled. After some discussion with Norm, DaveW, KevinC, and Yokoyama-san, we decided to look at drip pan drain hose and KevinC did not find any water. So we do not believe it is a leak, but perhaps the downstream bags (or the P0D) are settling. This probably NEEDS to be looked at this summer when the water Levels are measured. Maybe some additional bracing or spacers is needed??
  • Yesterday it appears the (at least previously unreported) one level 4 sensor is dry in bags 33 (dry since?) and 44 (recently flipped including level 3?).
  • ⇒ URGENT QUESTION is what conditions should trigger a water drainage?
    • Special Opportunities during Accelerator days, this Thursday or June 1-6
SCHEMATIC Diagram of Water Sensors (pressure depth and level)

Remarks;
1) Both bag 48 level 4 sensors dry, but press reading is very low 171 cm, so why is level 3 not dry?
2) Bag 49 pressure 184 agrees with dry level 3 sensor
3) Are all the dry level 4 sensor caused by evaporation or P0D/bag bulging/settling?
#48; PRESSURE and Level 4 sensor’s vs time

Alarm goes off when both sensor are dry!
P0D Temperature Variations on surface near MPPC’s
Has dips of 0.2C due to Neg. Pressure Cooling system Variations.

Neg. Pressure Cooling system is not Fully loaded with Heat load. And it Stops cycling.
OTHER ITEMS
1) Alfons requested to “borrow” spare P0D TFBs. We have found 21 spares. Walter will give 6 (requested by TimD) today. Also the P0D tools and equipment has been found in the NTT7 building. Walter requested that the P0D get a cabinet in the NA building since NTT7 access is limited.
2) Currently there are no scheduled P0D expert shifters in June. We need to have an Oncall P0D expert. Unless there are volunteers, we will have to impress people who are currently on shift. New experts will need to carry the cell phone, attend and report at daily Run Coor. Meetings, monitor plots, water levels, report at P0D meeting, etc.
3) Hiro met with Raj, Ian, and Walter and he suggested various new plots for material to be presented in the June conference.
4) Run Coor Yokoyama-san requested a response from the P0D on special runs (originally to be done immediately at end of running) most likely to be taken June 1-6. These are non-beam & non-magnet runs. I assume for alignment (P0D internal and between P0D/TPC/FGD/Ecal). So the key questions are if any special triggers and any thought about running w/o water.
5) Data Quality meeting, Wednesday 10am, Bruce said Dan to give report.
6) Convenors report, Norm? Walter? tonight?
Considerations on deciding to drain the water bags

Reasons to drain
1) If we find water in the drain lines (when and how often should we check??)
2) If believable level sensors (<180cm) turn dry
3) If believable pressure sensor indicate rapid drop (cm per ??). If sensors indicate drop but we find no water, then the P0D forward layers 47-50 are bulging?
4) Need to take more empty water target data at some point in time

Reasons not to drain
1) In the summer shutdown we want to measure actual water levels, which bags?
2) In the summer shutdown, we can drain and measure the amount of water???
3) We want to maximize the water target running

Questions;
1) Is the water dropping due to evaporation or mechanic bulging or both?
2) What precision is the water content currently known?
3) Which sensors are to be believed? [dry level 4;33,38,42,44,2-47,2-48,2-49,2-50]
4) Is the situation stable enough to wait until the end of the run?
5) Who makes final decision? Who is qualified for draining water bags until Summer crew arrives (when) ??
   ⇒ KevinC (leaves June 11) + helpers (Raj, Jackie?)