

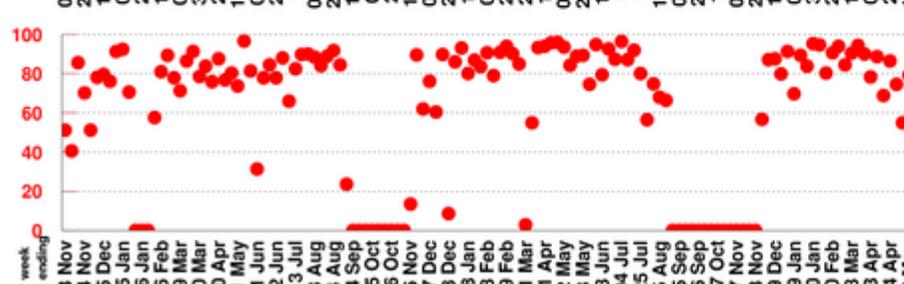
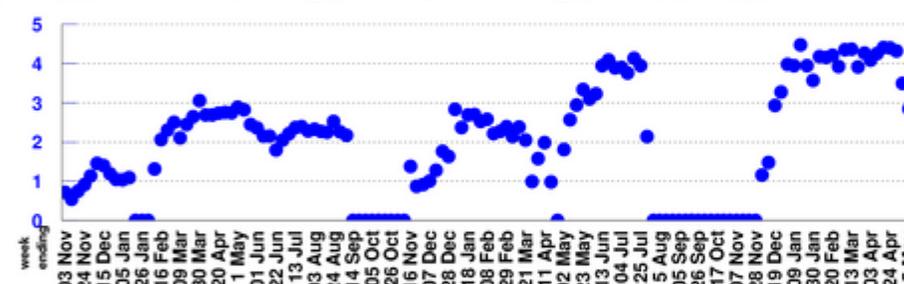
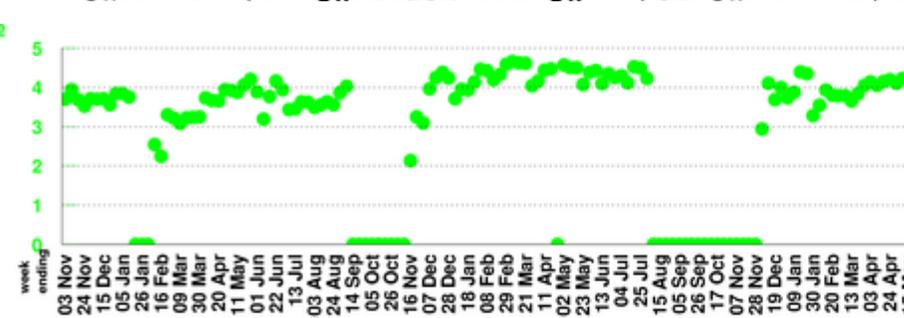
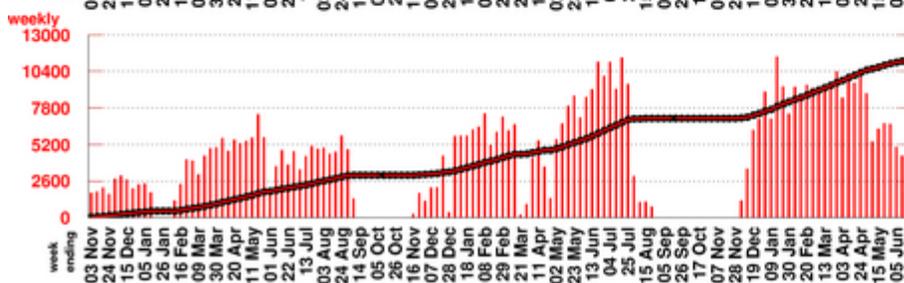
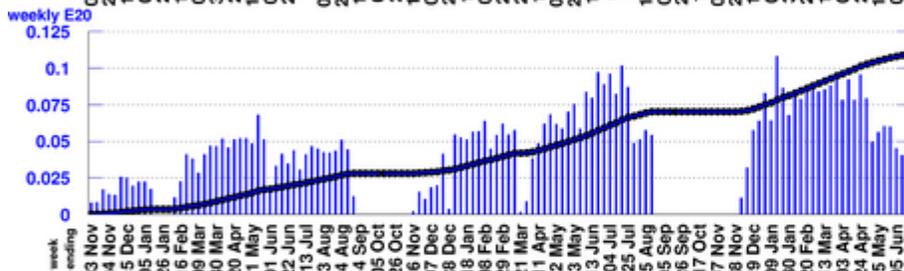
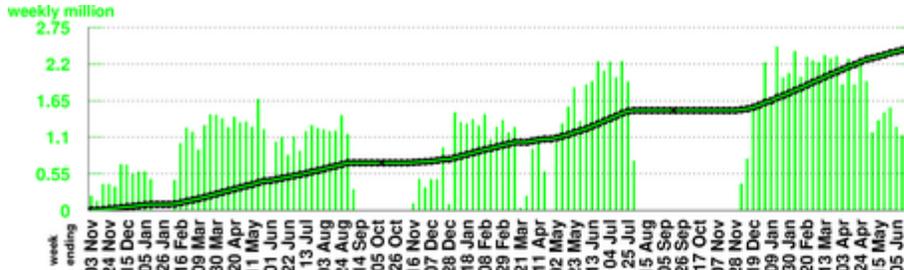
MiniBooNE Report

Paul Nienaber

Saint Mary's University of Minnesota
for the MiniBooNE collaboration

20 JUNE 2005

12 June – 19 June



Number of Horn Pulses
 To date: 137.15 million
 Largest week: 2.46 million
 Latest week: 1.31 million

Number of Protons on Target
 To date: 5.7084 E20
 Largest week: 0.1084 E20
 Latest week: 0.0487 E20

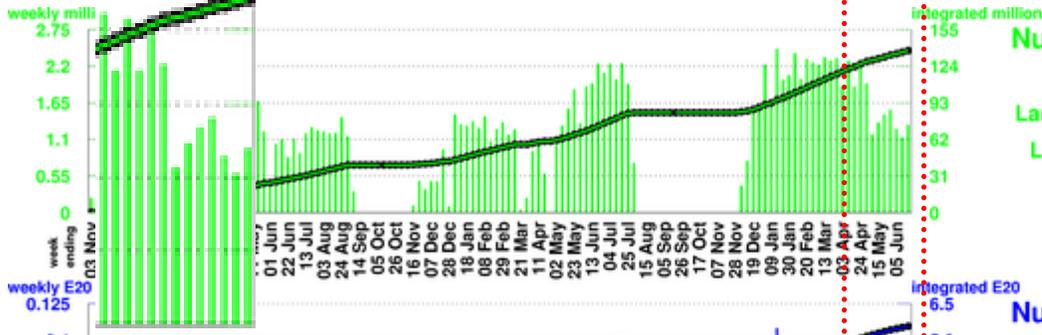
Number of Neutrino Events
 To date: 601186
 Largest week: 11447
 Latest week: 1703

POT per Horn Pulse
 Largest week: 4.66 E12
 Latest week: 3.7 E12

Horn Rate
 (for time periods with beam)
 Largest week: 4.48 Hz
 Latest week: 2.55 Hz

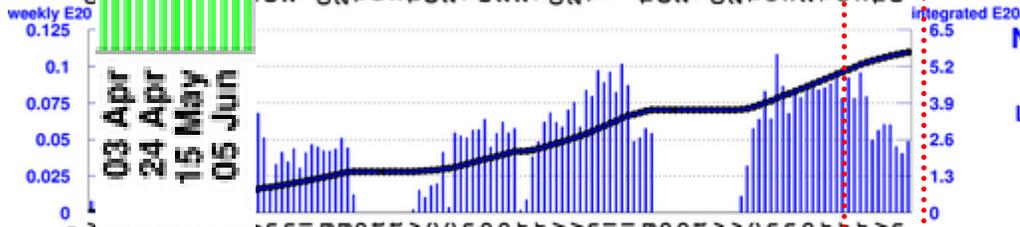
Beam Uptime Fraction
 (fraction of time with beam)
 Largest week: 96.6 %
 Latest week: 83.7 %

12 June – 19 June



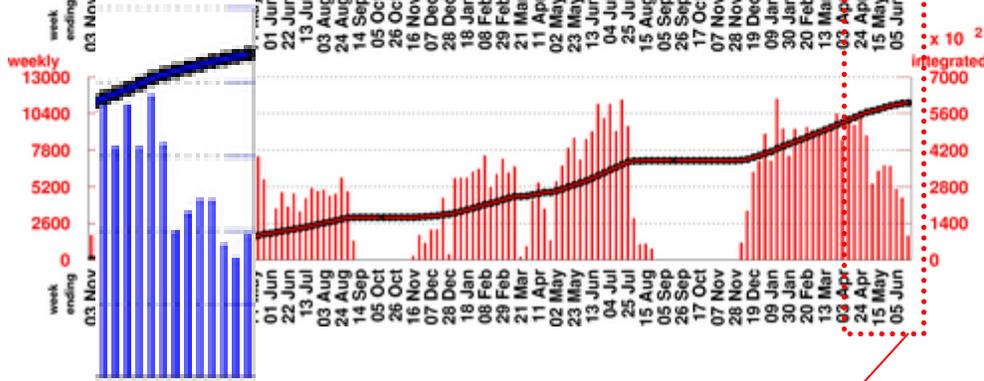
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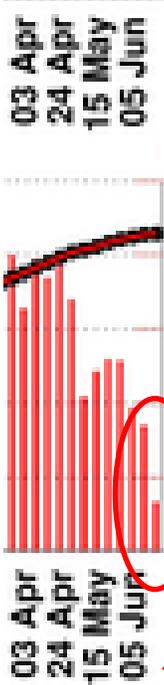
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Number of Neutrino Events

To date: 601186
 Largest week: 11447
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what happened?

- on Tuesday timing of Booster extract signal was changed
- this had never been changed before
- it was noticed in some subsystems immediately, but not in the horn timing
- one monitoring system was flagged as behaving strangely, but expert was not available for diagnosis
- upshot: horn current pulse and beam arrival out of sync
- consequence: neutrino event rate low

new diagnostics

- we have changed the appropriate delay in ACNET, and will examine the timing as soon as beam returns
- we are in the process of adding new tools to the beam and detector diagnostic checklists
- this change and its consequences were unfortunately unanticipated, but we expect these new monitors to alert us to issues of this kind should they arise in the future