

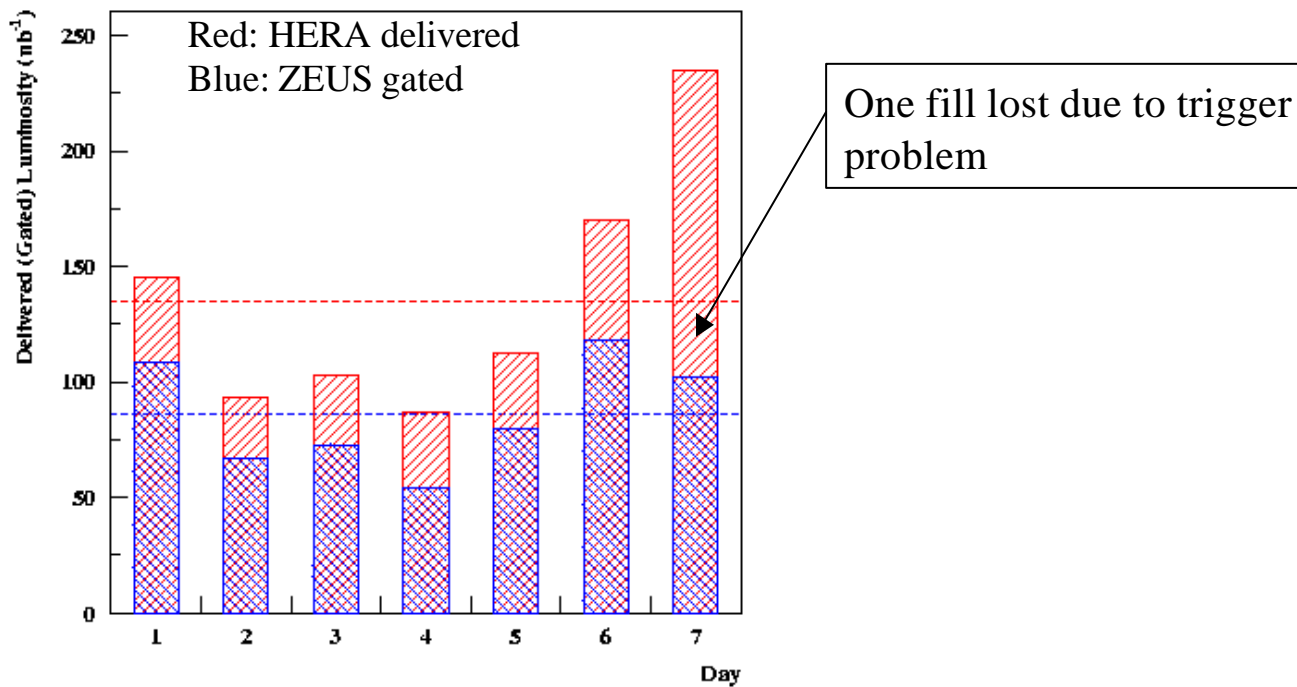
ZEUS Status Report

HERA Coordination Meeting

Dec. 2, 2003

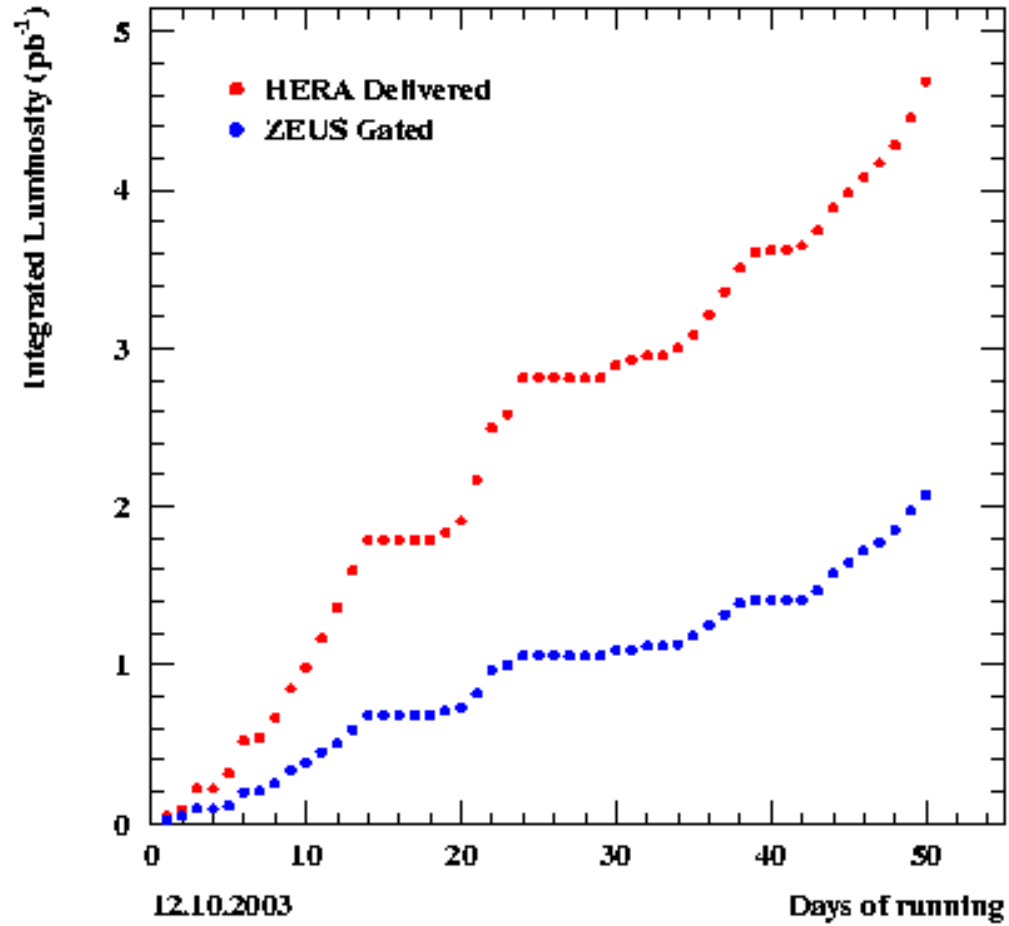
W. Zeuner

- ZEUS Detector is in good shape – all components are operational
- Efficient data taking is possible
- Very positive: e^+ injection has been very clean recently



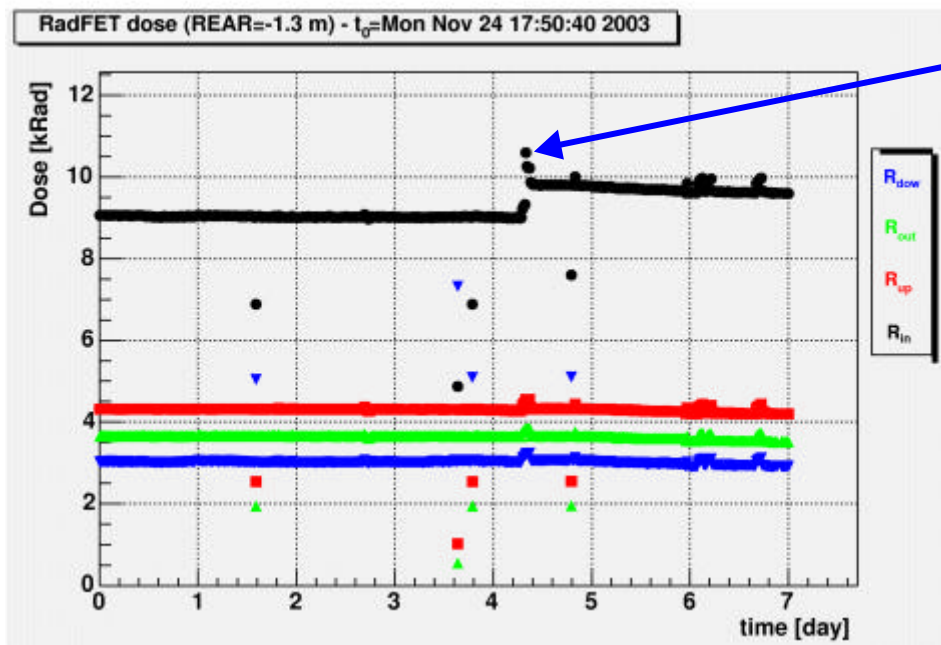
Luminosity since October 12 2003

LUMI until 1.12.20 00:00



There is still room for improvement....

Very fast positron beam loss caused 1.5-2 krad in the RadFETs



e⁺ beam loss
Saturday 29.11.
~ 01:50 am

Would like to find measures to avoid this kind of losses

Background Conditions

On Nov 17 break through on three frontiers

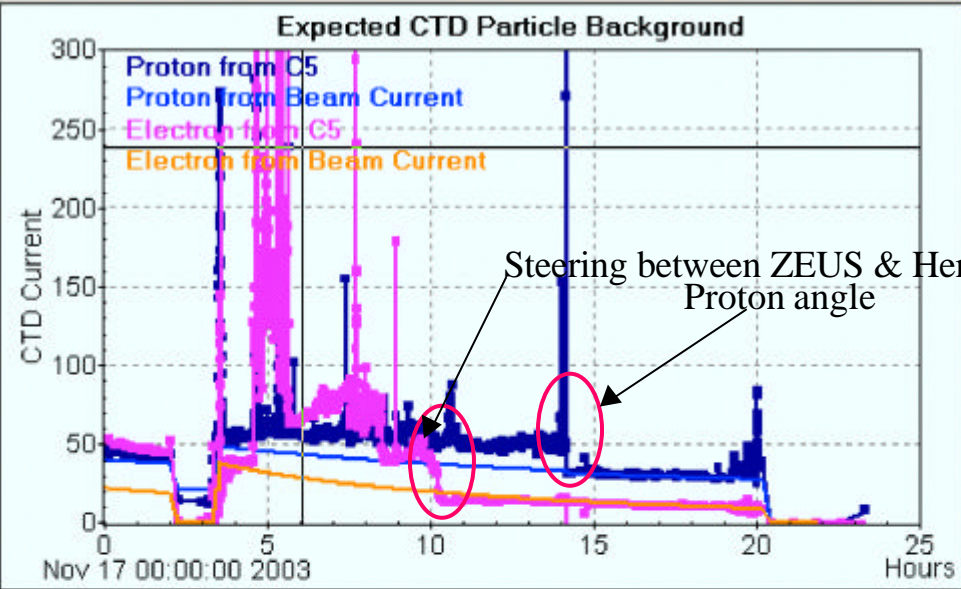
- Positron background decreased with bumps between ZEUS & HERMES
- Proton background reduced by changing the angle at IP
- Luminosity went up to same level as H1 by 2)

- Reachable current product: 100mA vs 38 mA
- Further improvement seen after warm up and regeneration of NEG pumps.
- Vacuum is still improving

→ If extrapolation is correct ZEUS will be able to run at full current

ZEUS CTD+C5 Background Display

Printing Display Menu Graphics Options Version



November 2003

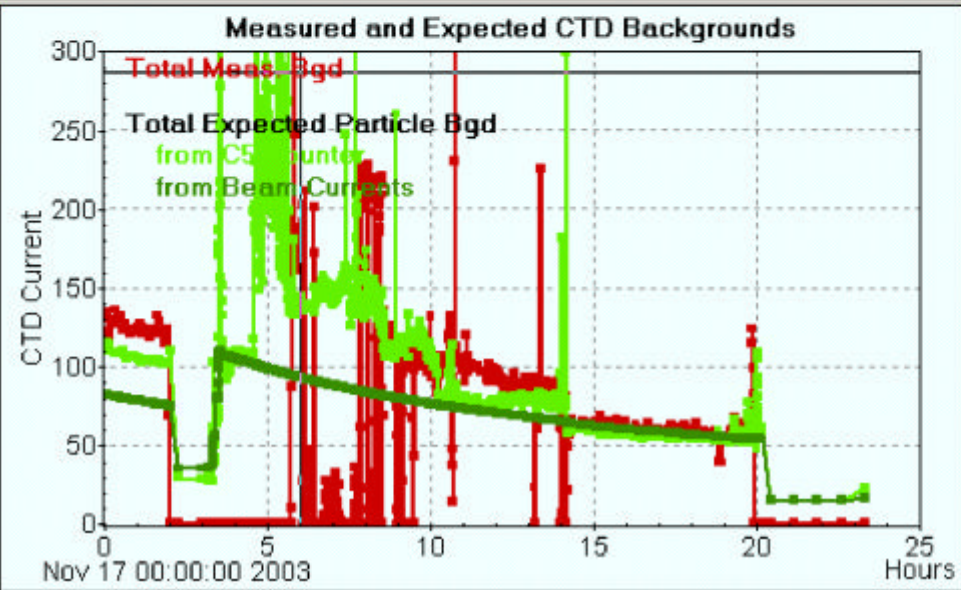
| | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|
| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| 26 | 27 | 28 | 29 | 30 | 31 | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 1 | 2 | 3 | 4 | 5 | 6 |

Today: 02/12/2003

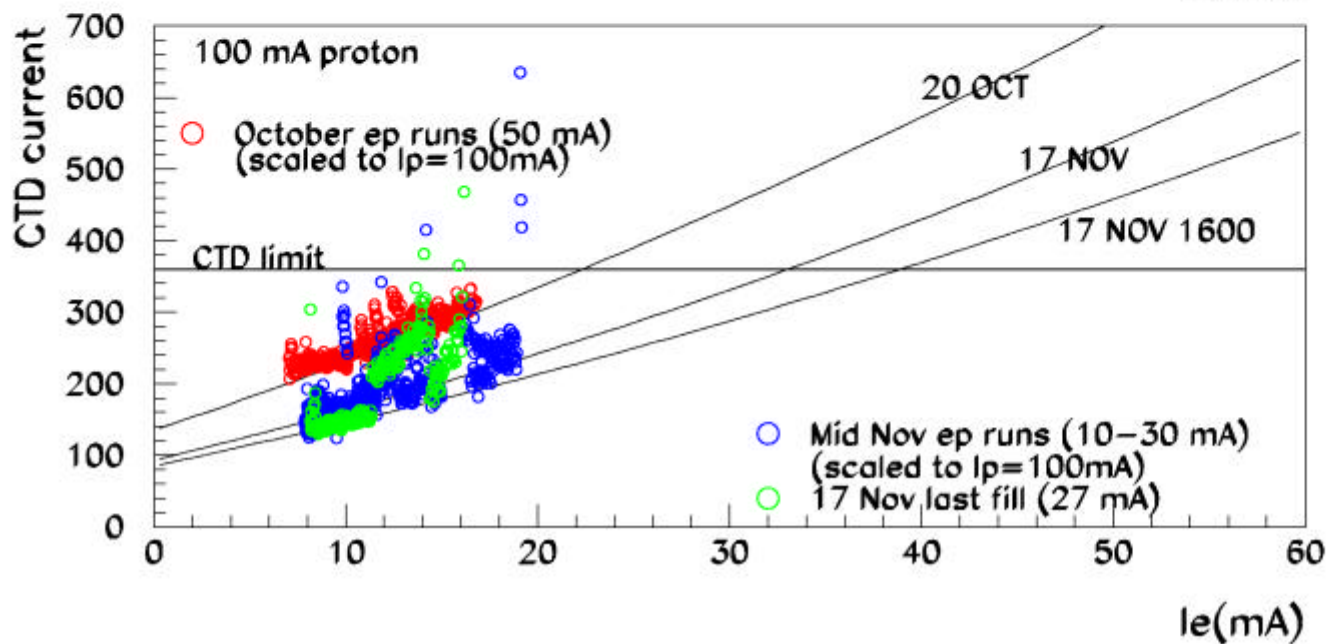
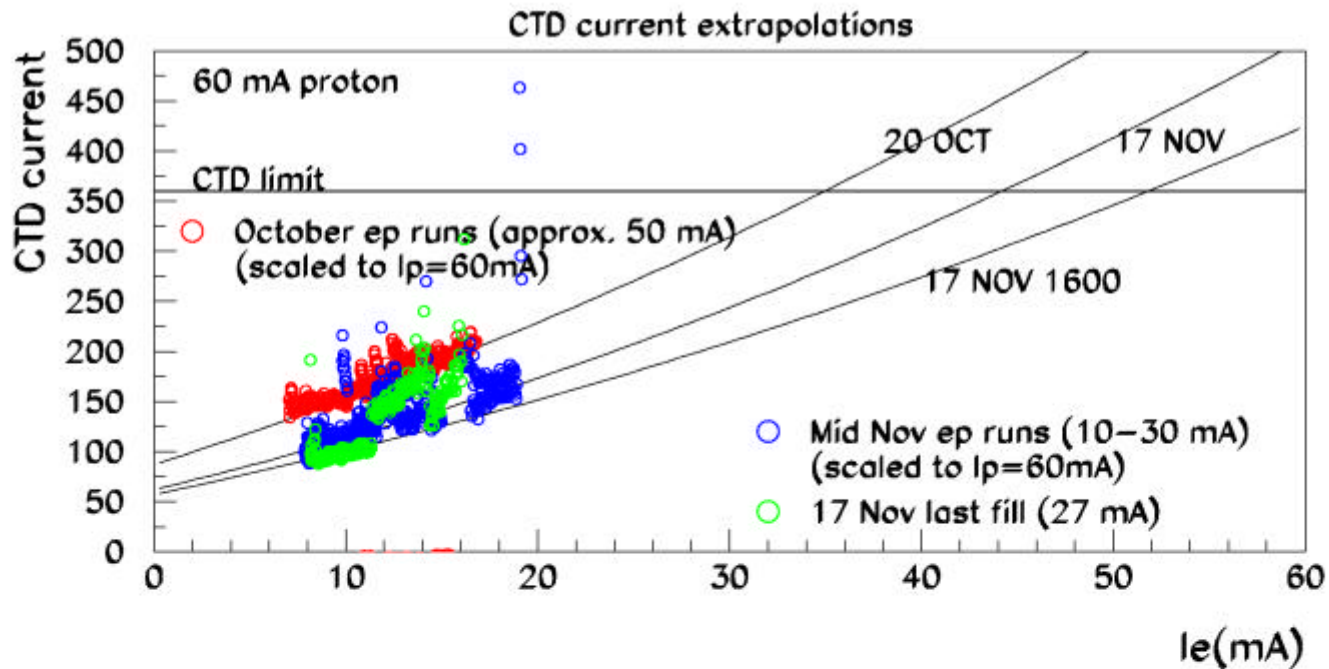
Live Data Display Text

Now: Tue Dec 02 09:24:47 2003
Cursor: Mon Nov 17 06:03:27 2003

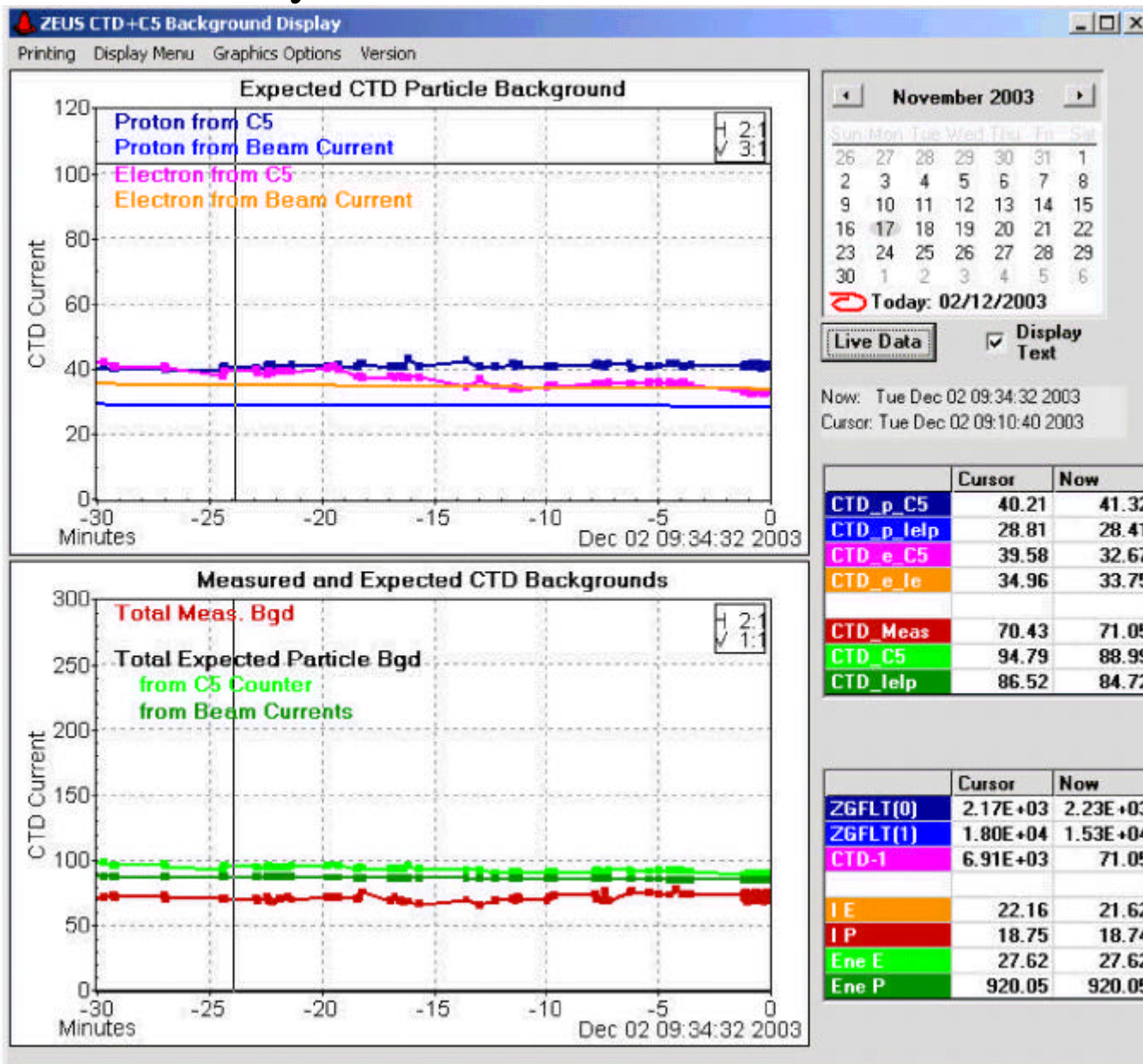
| | Cursor | Now |
|------------|--------|----------|
| CTD_p_C5 | 54.31 | 40.97 |
| CTD_p_1elp | 42.89 | 28.59 |
| CTD_e_C5 | 66.00 | 33.96 |
| CTD_e_1e | 28.02 | 34.29 |
| CTD_Meas | 202.70 | 4.29E+06 |
| CTD_C5 | 135.31 | 89.93 |
| CTD_1elp | 92.57 | 85.53 |



| | Cursor | Now |
|----------|----------|----------|
| ZGFLT(0) | 2.94E+03 | 2.21E+03 |
| ZGFLT(1) | 2.93E+04 | 1.58E+04 |
| CTD-1 | 2.05E+04 | 4.29E+06 |
| I E | 19.05 | 21.85 |
| I P | 30.32 | 18.74 |
| Ene E | 27.61 | 27.62 |
| Ene P | 920.05 | 920.05 |



Today December 2, 9:30



Remaining Problems

- Temperature, south right at 11m and 19m
 - Try to find solution without decreasing p-aperture
- Save and fast p-beam dump

Plans for a shutdown in August 2004

- No major repair planned yet
 - If no disaster happens the calorimeter will not go off the bottom yoke
- The shutdown must be kept as short as possible