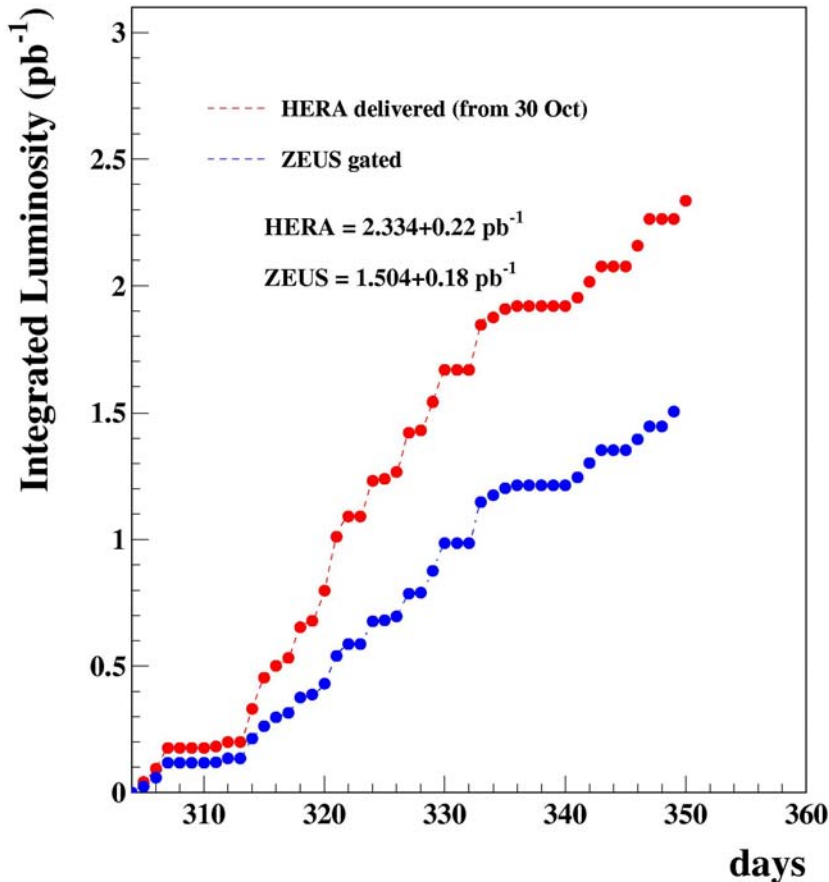


ZEUS Status Report

HERA Coordination Meeting

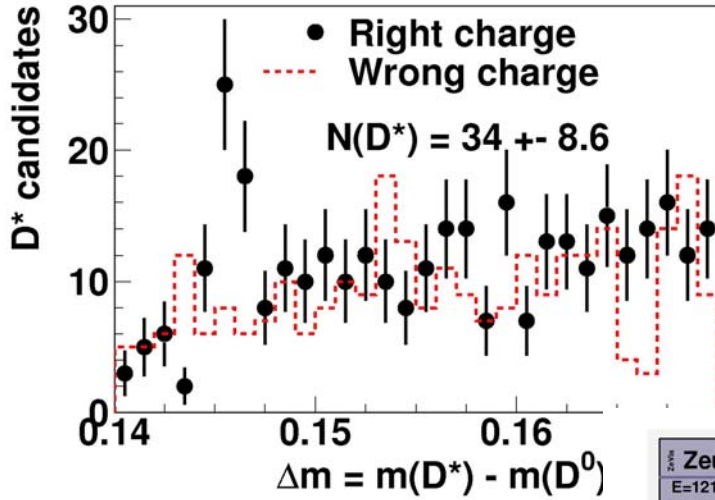
21.01.2003

HERA/ZEUS luminosity

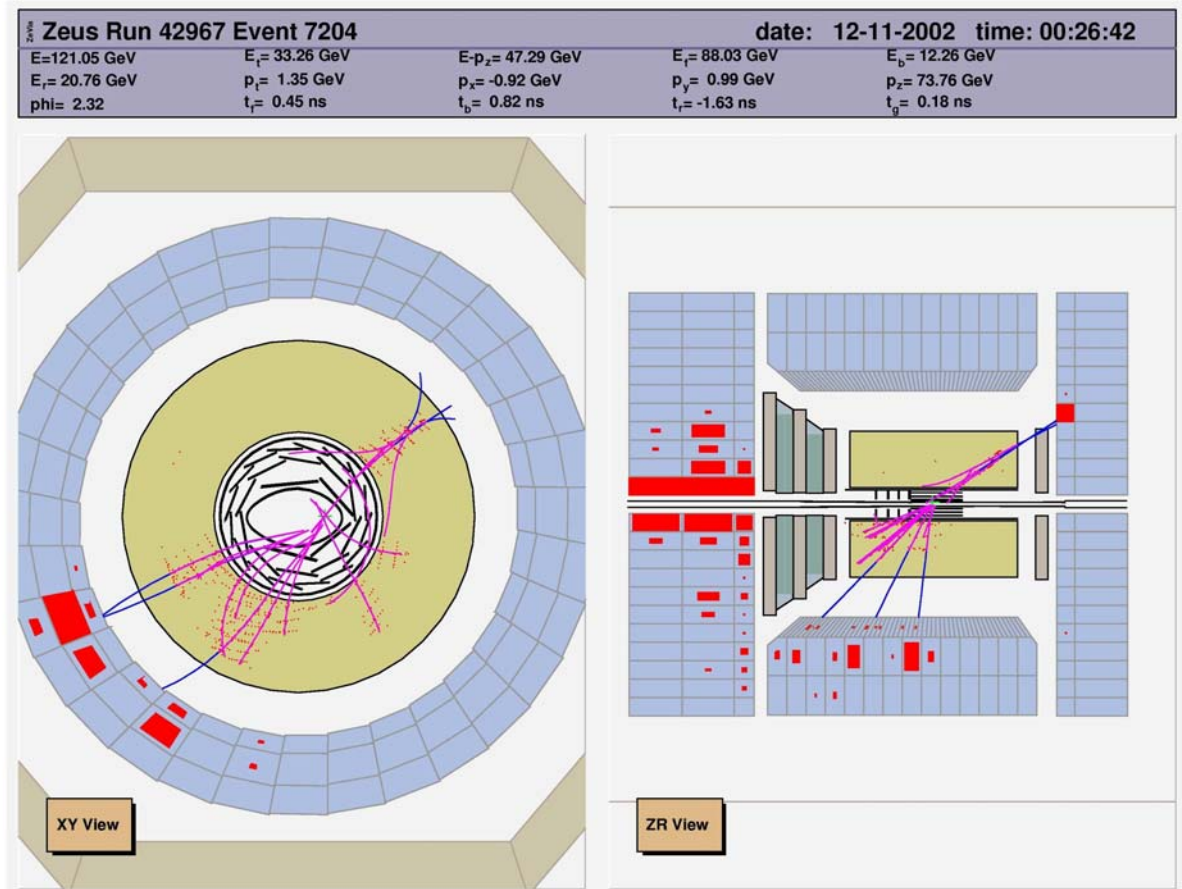


- ZEUS is running fine
- Background normally bearable
- Aim for MVD alignment 2pb^{-1} with MVD + CTD
got: $\sim 30\%$
- Aim for CTD HV + tracking studies
One long fill with lower p-current missing

D* in Photoproduction and in DIS



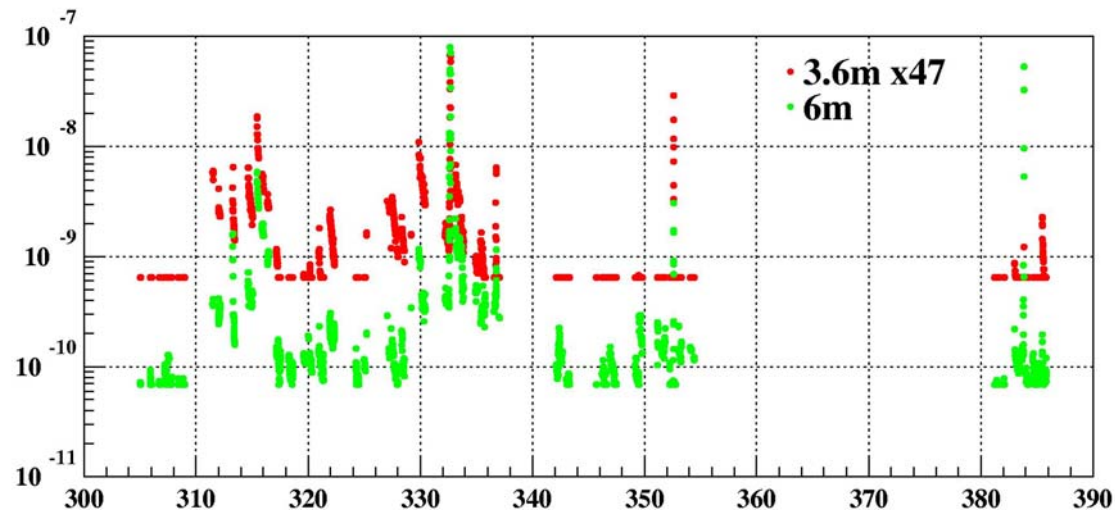
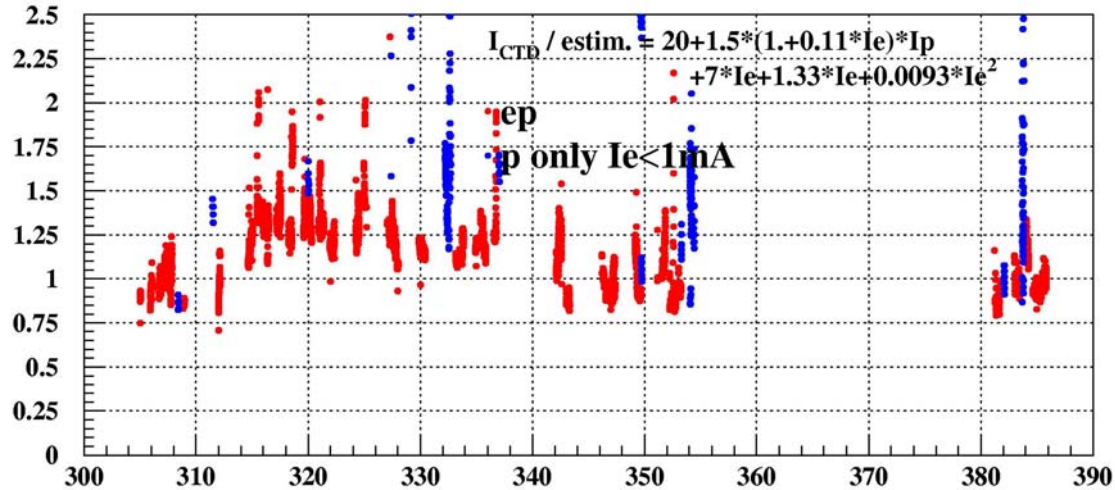
Efficiencies and cross sections under study

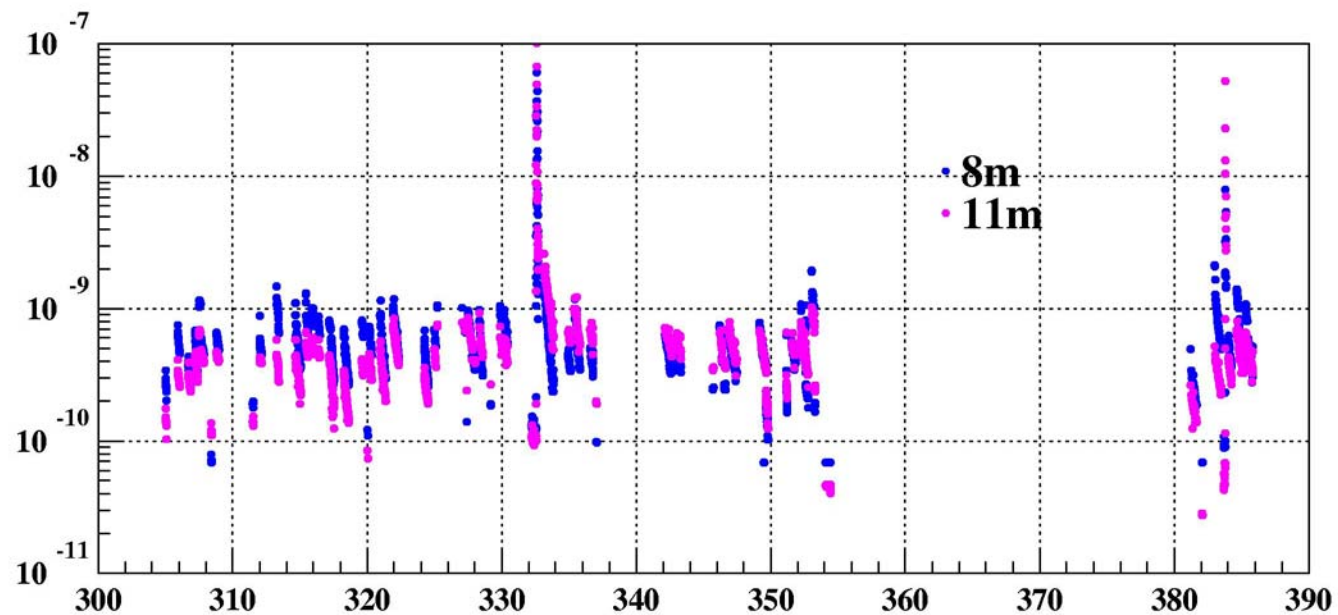
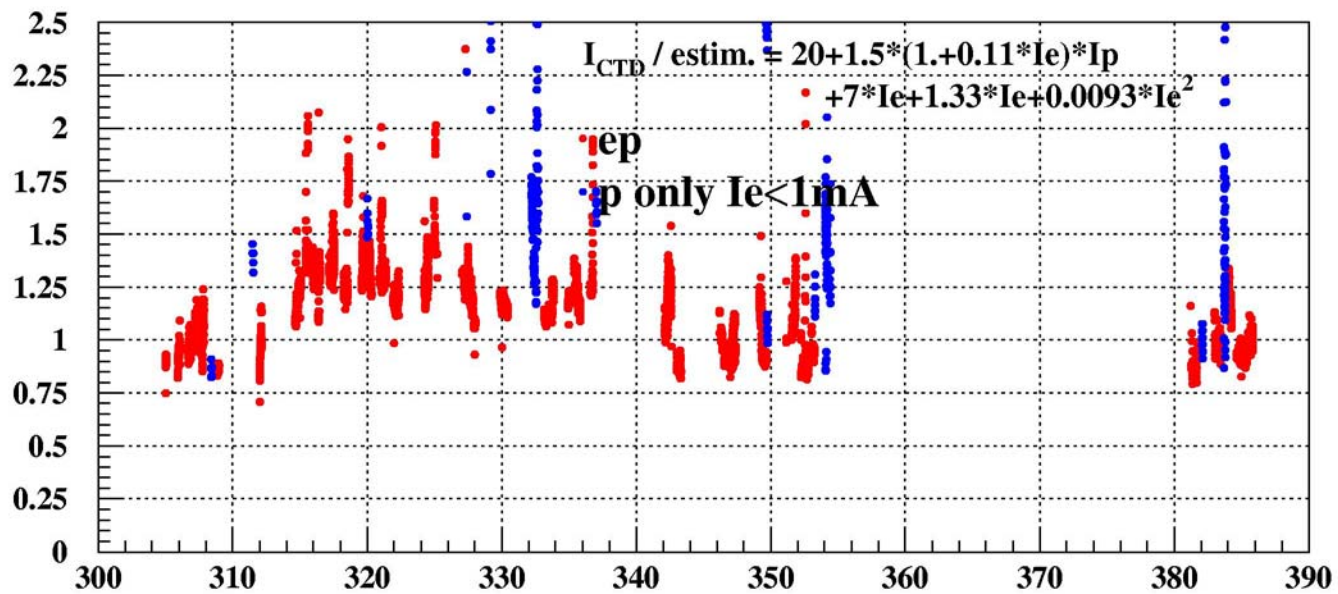


CTD current – Measurement / Prediction

No improvement over Christmas

10 days pumping with warm magnets had no effect





Pressing Questions:

- Can HERA deliver 50mA e^+ in colliding beam mode ?
Proposal: continue running with increasing e^+ current
in case of problems dedicated studies
- HOM contribution to the proton background
Proposal: Several ep fills with $E_e=12$ GeV and conditions as close as
possible to colliding beam mode
- Do the rotators add unexpectedly to the background ?
Proposal: ep running with rotators switched on
- Off-momentum background from the GA-region
Proposal: Fire pumps in the GA region in an e^+ run
- Check the background composition again
Proposal: e^+ run with high intensity

Possible schedule

Assume shutdown starts March 3

Continue running until Jan 27 with increasing currents

If $I_e \sim 50\text{mA}$ is in reach **then**

Continue

Run ep with 12 GeV for 2-3 days for HOM studies

One long positron only with high intensity

Rotator studies

Else

postpone high intensity running towards the end of running
work down the list above first.

To make the best use of the remaining time and to be able to react flexible, propose to fix the schedule on a weekly basis

Short Summary of Shutdown Work

- Replace C5 collimators
Requires rear calorimeter to go on extension rails
and removal of the GG magnet
- Repair the Straw Tube Tracker
Requires forward calorimeter to go on extension rails
and removal of the GO magnet and entire forward tracker
- Minor repairs on the detector
- Exchange of an undercarriage of the iron yoke

Time needed: 18 weeks

Summary

ZEUS proposes a shutdown of 18 weeks, starting March 3, 2003.

Before the start of the shutdown the four most urgent problems must be investigated, they are:

High positron intensity, HOM heating, off momentum positrons from the GA region, possible background from the rotators.