

ZEUS Status
HERA Coordination Meeting
11.1.2005
W. Zeuner

- ZEUS
- FDET – Removal Jig

ZEUS - Status

In general ZEUS is running fine

Recently two major power cuts in the hall

- 21.12.2004 - unannounced maintenance of smoke detection system
- 06.01.2005 - fake gas and evacuation alarm

Always many hours to recover

Always several electronics components break

Restart after Christmas went smoothly

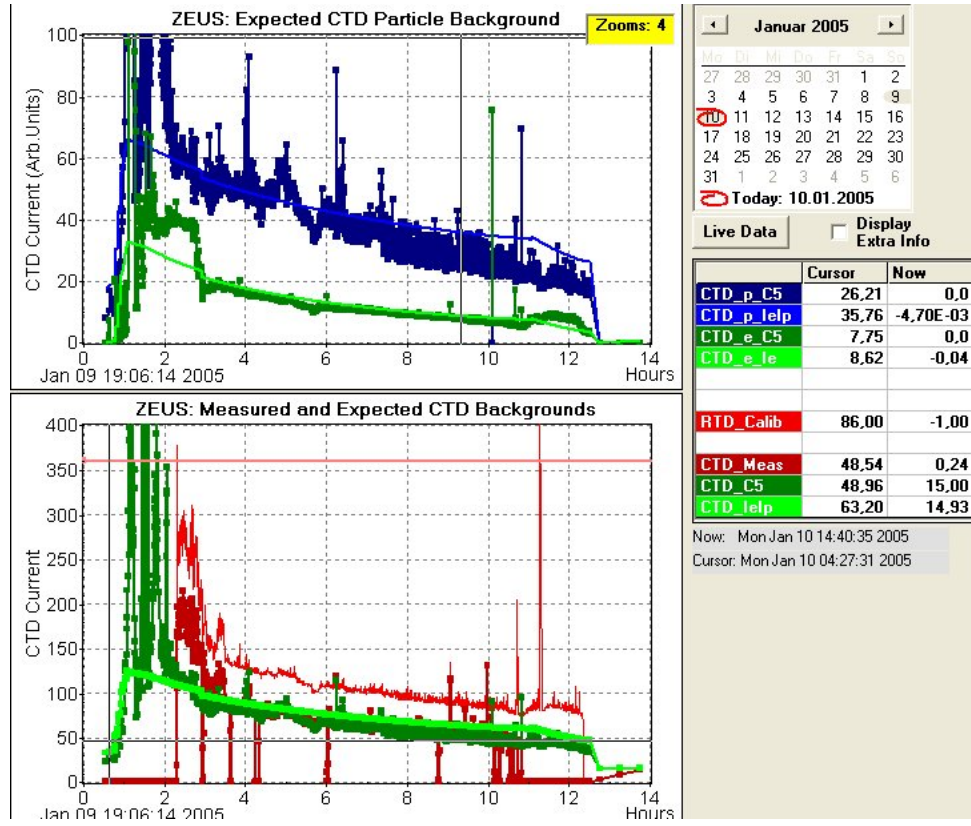
ZEUS was operational on midday of Dec. 27.

Lumi during holidays (27.12 – 3.1.) 700 nb⁻¹ delivered, 500 nb⁻¹ taken

Recently very nice lumi fills, p-tuning still slow

Background

Jan 10, 2005



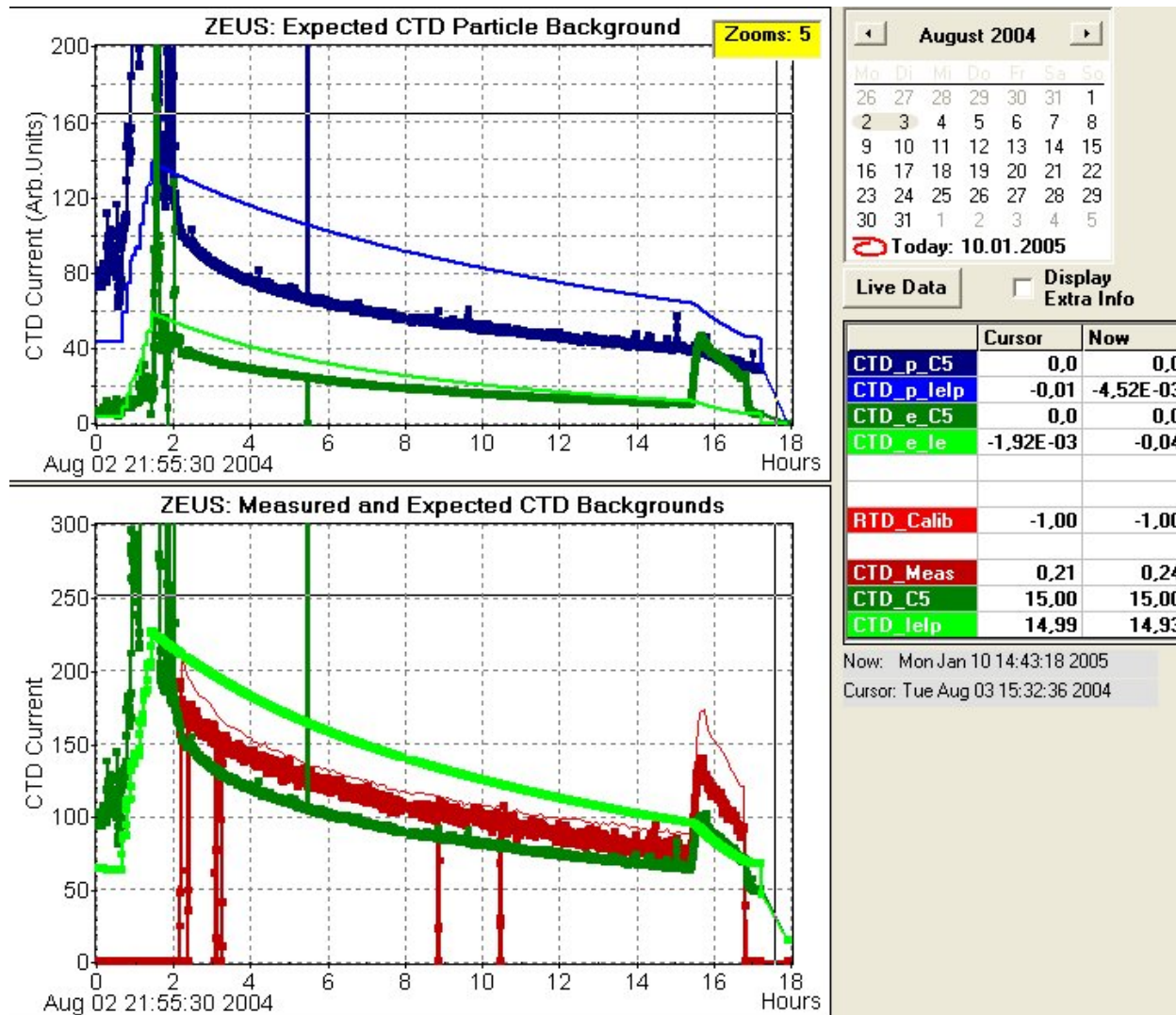
General level of p-background is ok
It is higher and noisier than in Aug. 04
Takes often a long time to tune it down

Elektron background is fine
Sometimes direct synchrotron radiation
needs to be tuned away

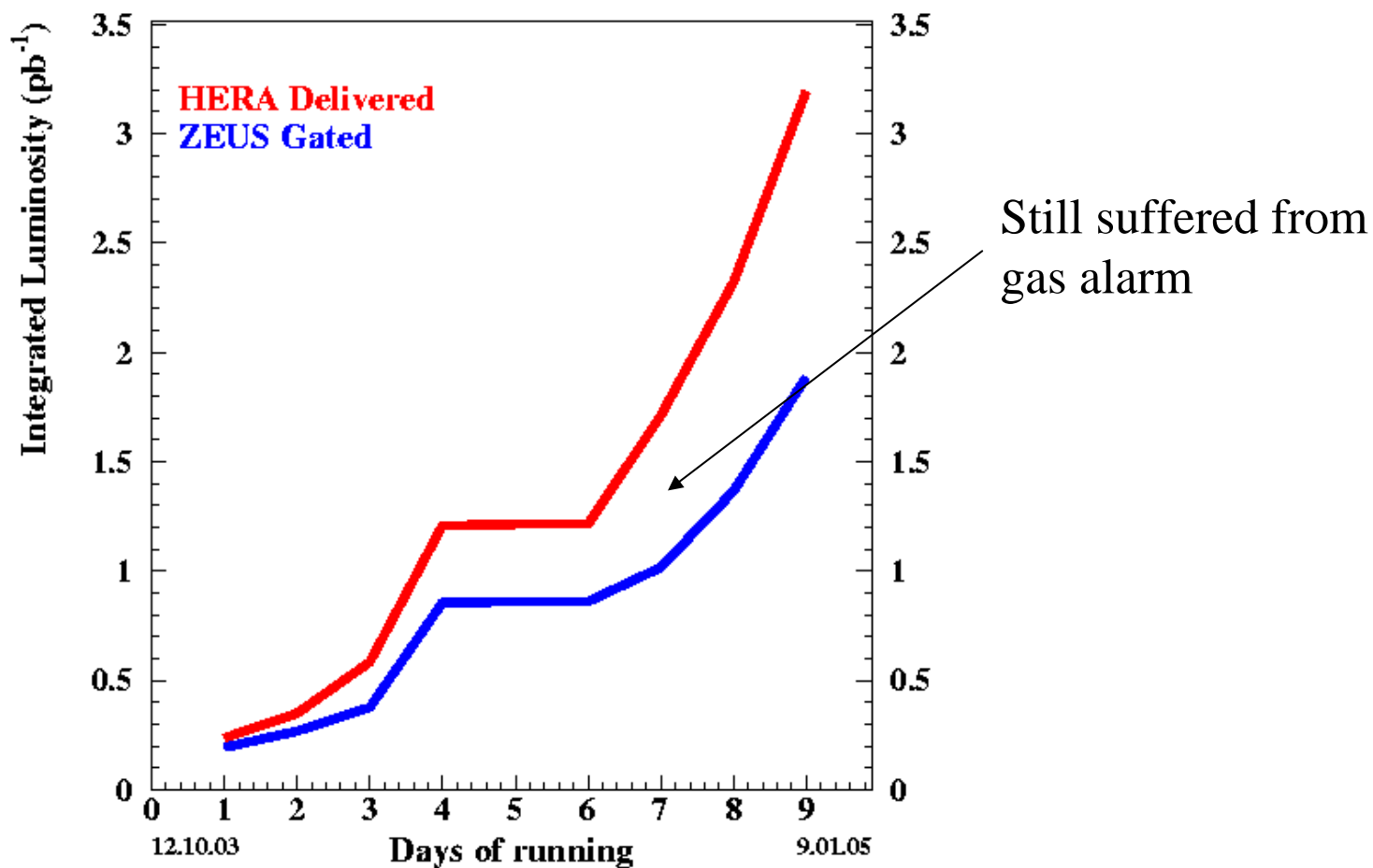
Background

August 3, 2004

The best times we ever had.....



Lumi 2005



ZEUS proposes to increase the e^- current to the maximum H1 can tolerate
If necessary HERA should go to 180 bunches

FDET – Removal Jig

- Construction is well advanced – all production drawings will be ready by Jan. 25.
- The adapter ring to the detector and the big lever arm will be produced externally.
To speed up, the material is already ordered and will be provided by DESY.
The project is small enough that Europe-wide tender processes will not be necessary – This will save a lot of time.
- The support frame with rails will be produced by DESY
Material orders will be placed in the near future.
- Same small parts of the connection lock between the detector and the ring are under production at DESY
- Two engineers from Oxford Univ. are acting as external reviewers
A first set of questions and suggestions has already been discussed.

FDET – Removal Jig

Milestones

Jan. 12 – Meeting with FDET experts to discuss in detail the removal procedure based on the existing drawings

Jan. 25 – Production drawings finalized

Begin of Feb. – Final review by Oxford engineers

Begin of Feb. – Start of production, internal and external.

Begin of March – Review and discussion within ZEUS (ZEUS-Plenary Meeting)

End of April – All bits and pieces should be at DESY

May – Set up and test with a dummy load

Mid-End of May – Ready for use

Mid June – Final decision whether or not to use the Jig in the summer shutdown (ZEUS-Plenary Meeting)

Improvement of FDET Cooling

Univ. Bonn studies possibilities to improve FDET cooling

Most promising – cooling of the frustum that supports the
solenoid

Calculations and design are ongoing

Enough space available, no fundamental problem

Proposal has been made, need detailed drawings

Having a system ready by May is realistic

Next review Jan.12

Teil der FDET/STT Montagevorrichtung
mit Detektor FDET/STT

