

ZEUS STATUS
HERA COORDINATION MEETING
March 15, 2005
W. Zeuner

- Detector Status and Data Taking
- Preparation of STT Repair

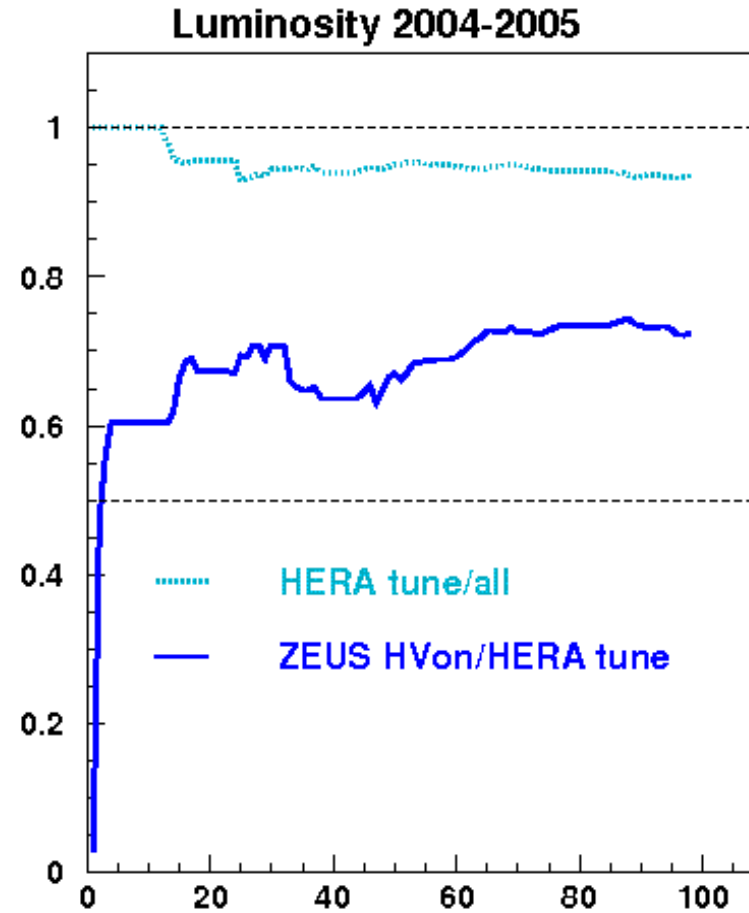
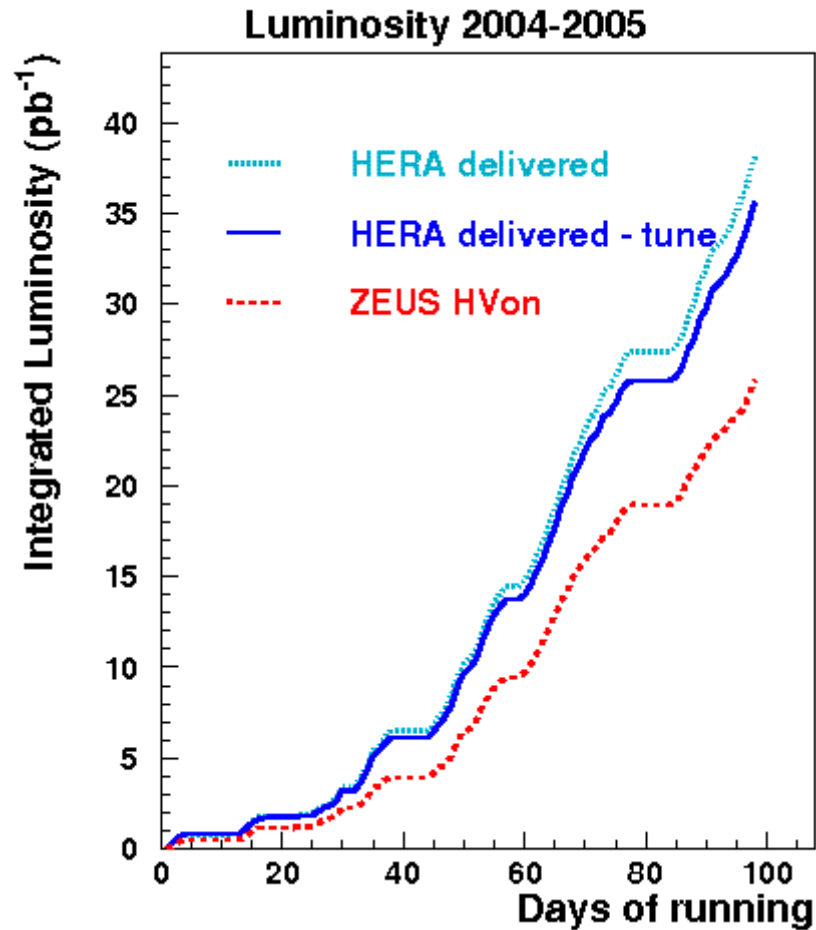
Detector Status and Data Taking

- ZEUS components are fine
- Data taking works efficiently
- Data quality is very good

- Delivered luminosity is impressive
- Already more electron data than in 1998/99

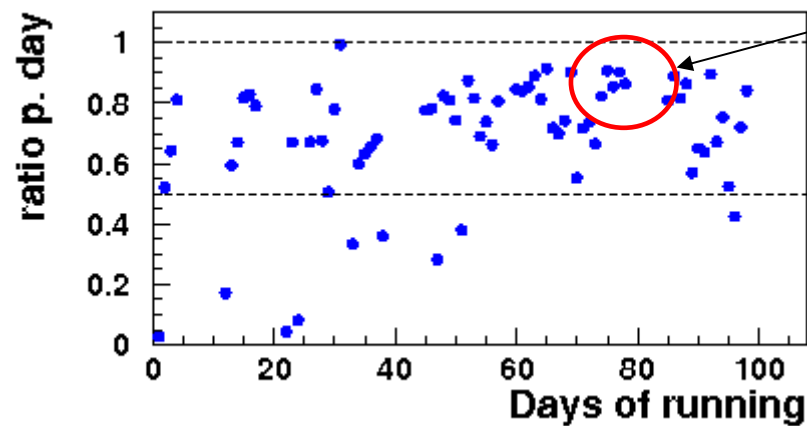
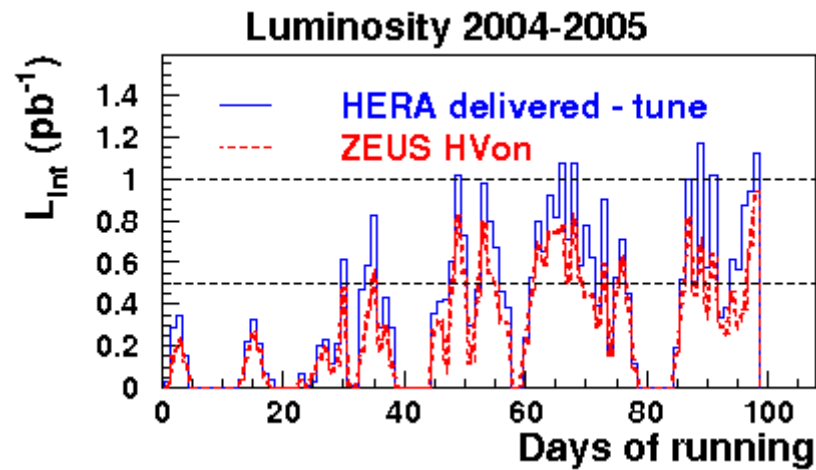
- Proton background sometimes very bad
- Polarization still low

Integrated Luminosity Efficiency



Background problems and
beam scraping not subtracted

Luminosity efficiency per day

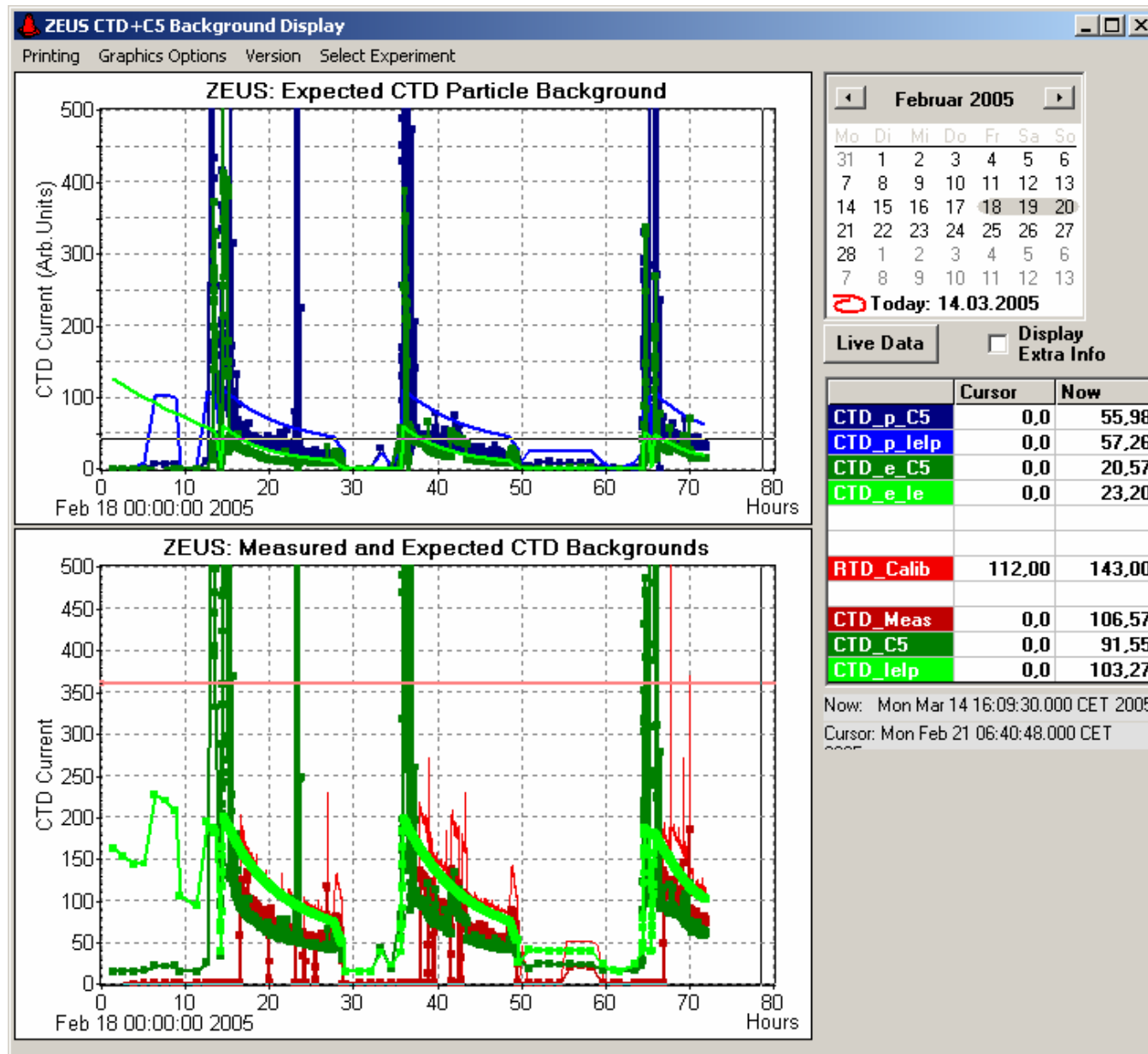


Best days Feb. 18-20
before the cryo-failure

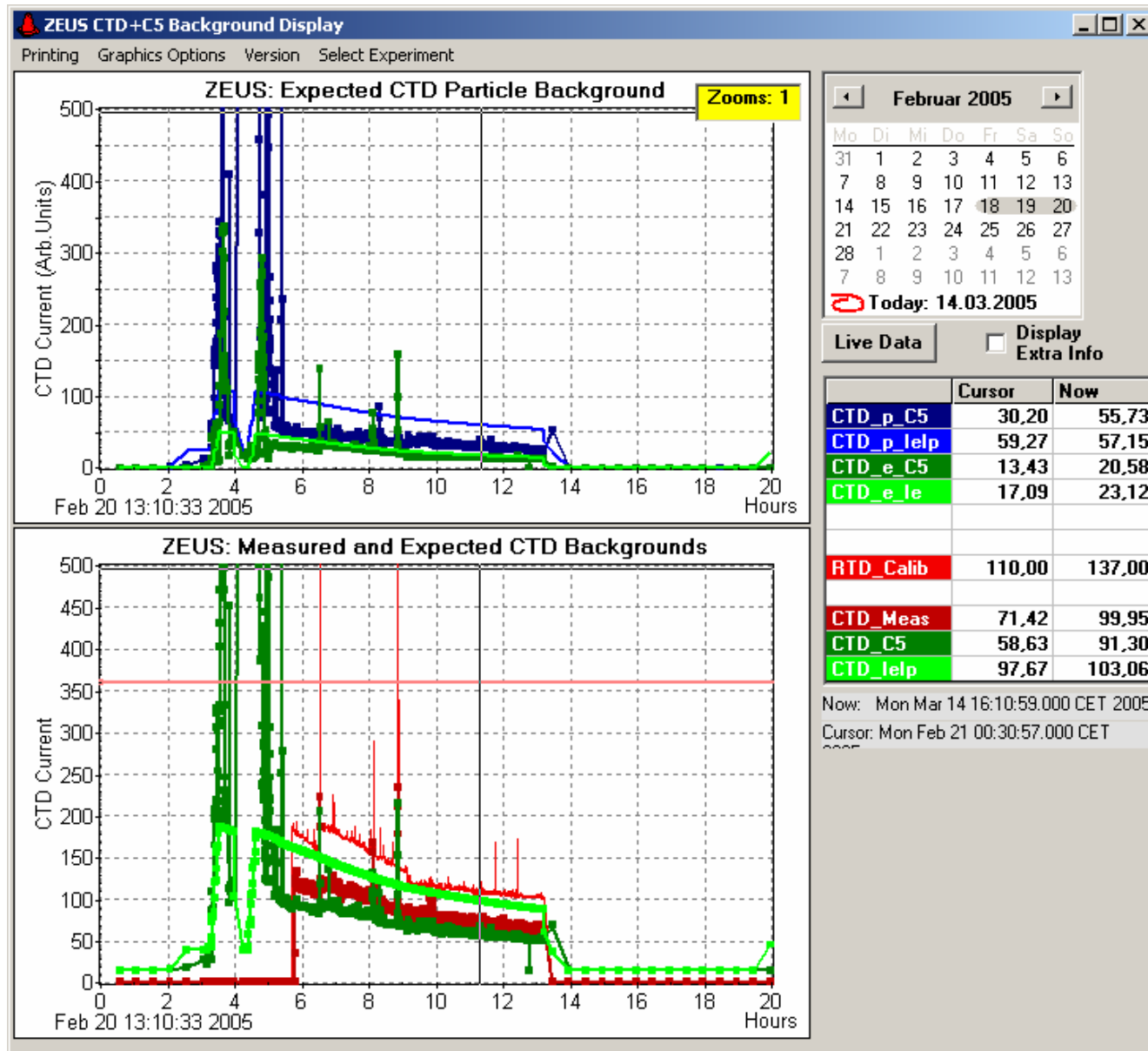
With good background conditions the luminosity efficiency is typically above 80%

Background conditions vary from fill to fill

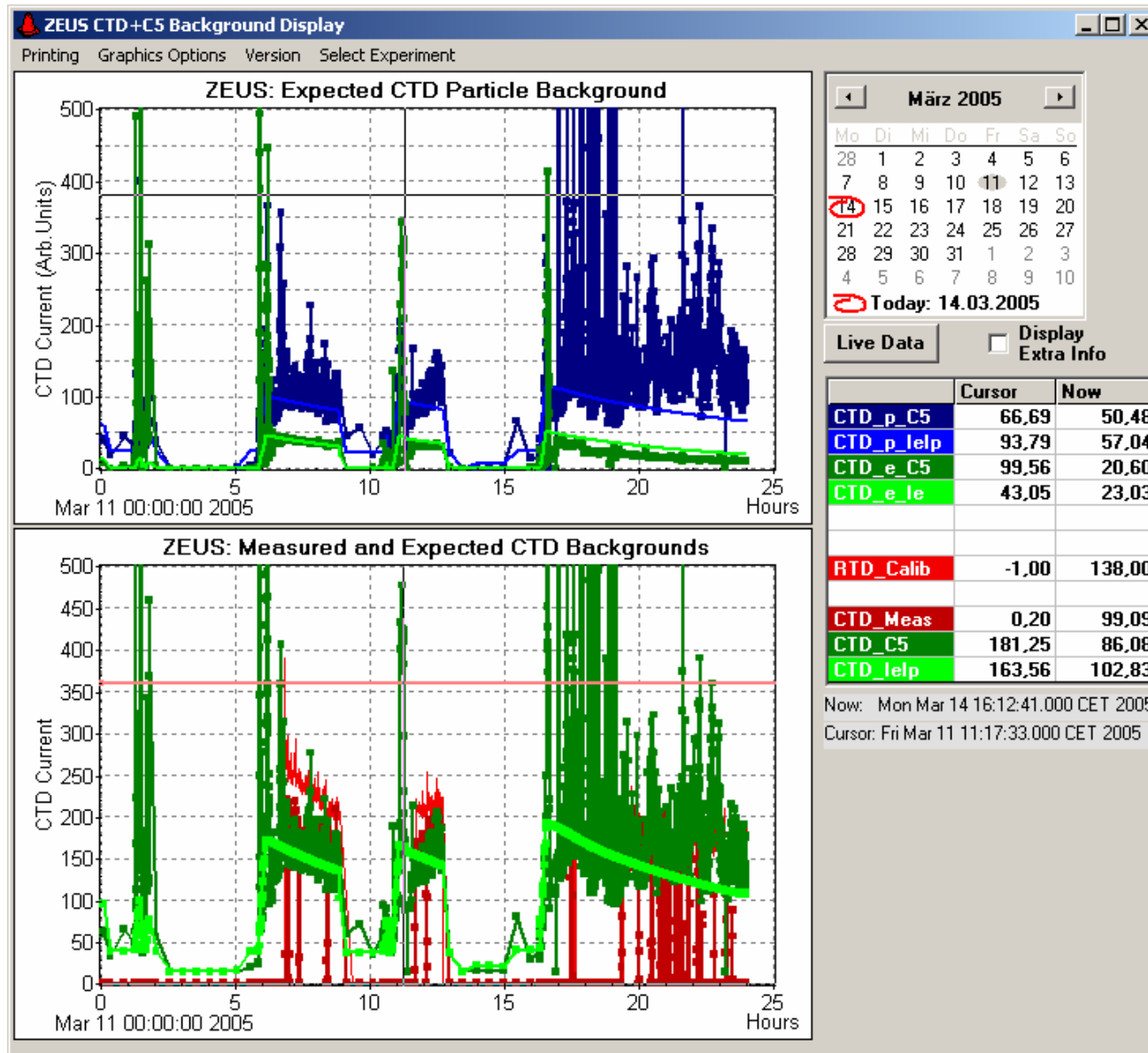
Good Conditions before the cryo-failure – Feb 18-20



Proton background low and stable – minor spikes did not do any harm



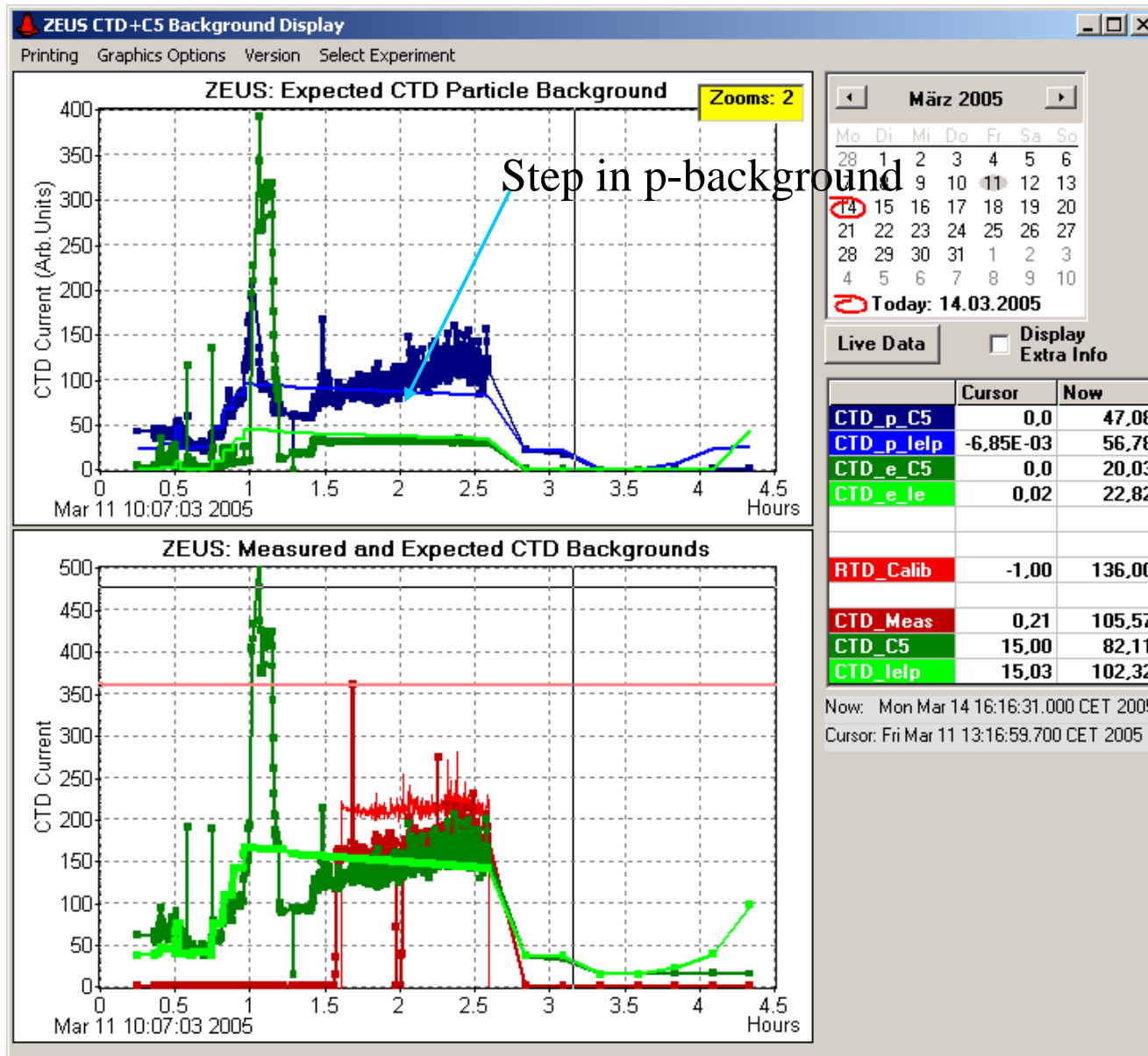
Completely different picture, e.g. March 11



- Baseline too high
- Enormous spikes

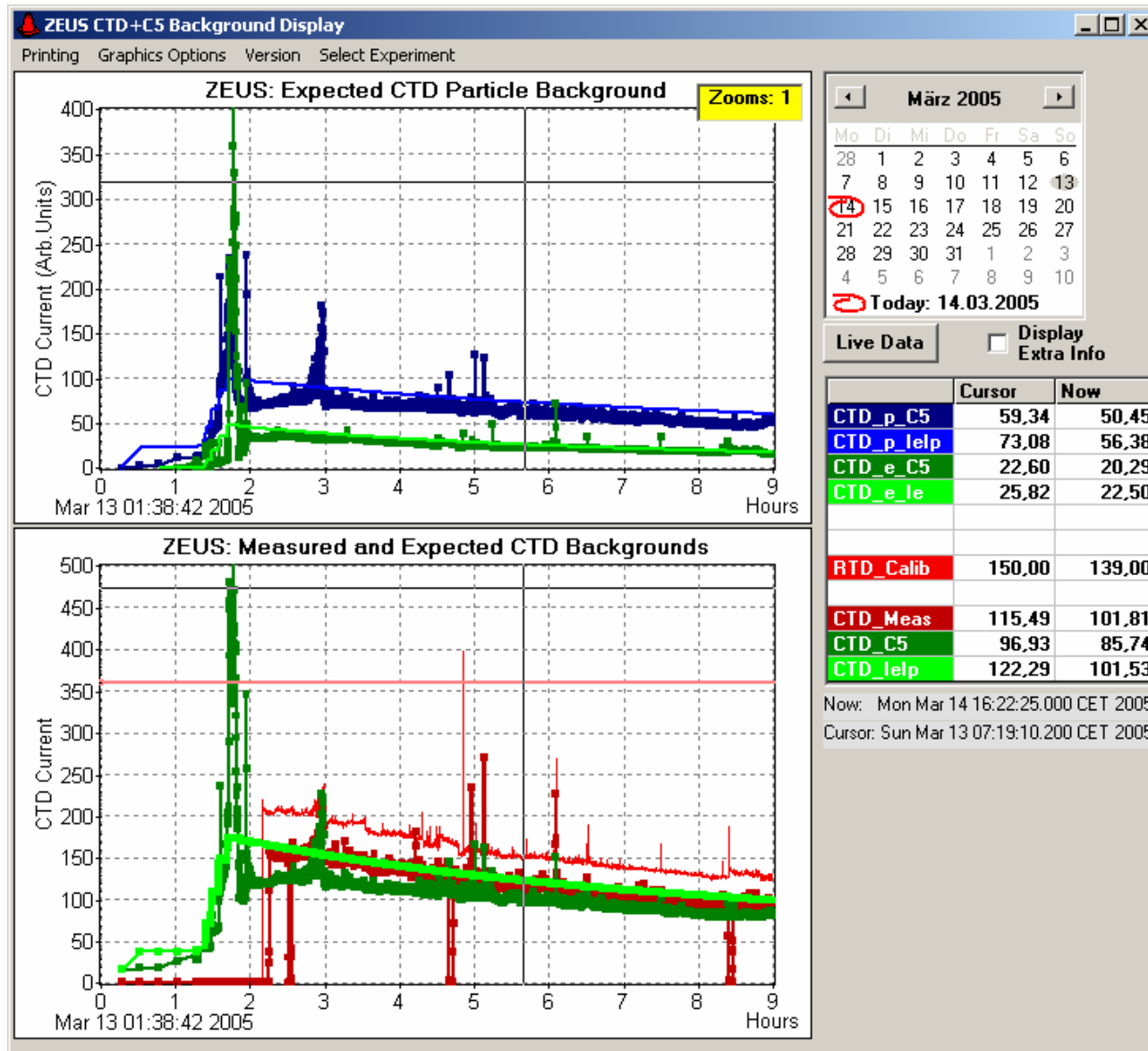
This is not the vacuum !

Something strange happens at begin of luminosity running



New feature since restart after cryo-problems

Background is not reproducible...



Good conditions
March 13

Preparation of the STT Repair

News since last meeting

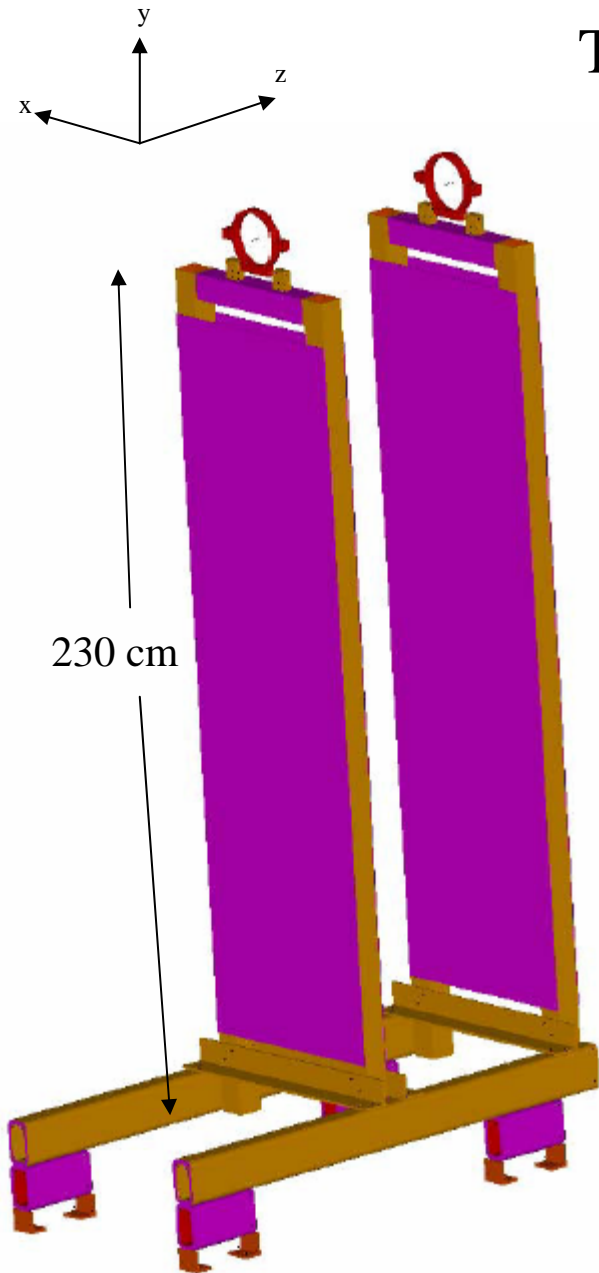
- Construction has been (almost) finalized
- Construction of support and FE-load calculation finalized
- Preliminary ok from external reviewer
Final discussion today or tomorrow at DESY
- Production has started
- Discussion with Machine Group (M. Bieler et al) on Feb. 4
No objections

Next: Test assembly and tests with dummy load in May

Ready for use: End of May – as planned from the beginning

In parallel work is ongoing to improve the cooling of the STT

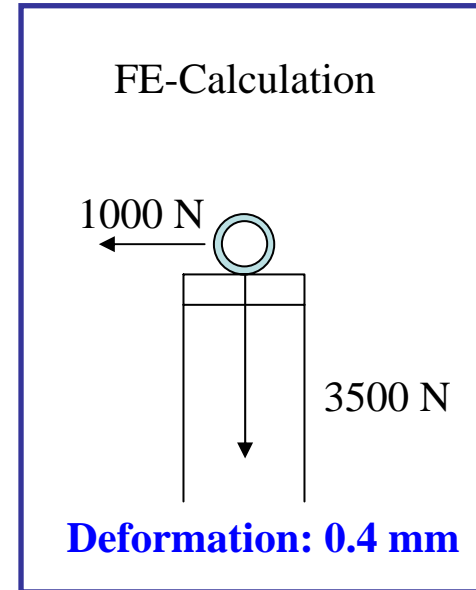
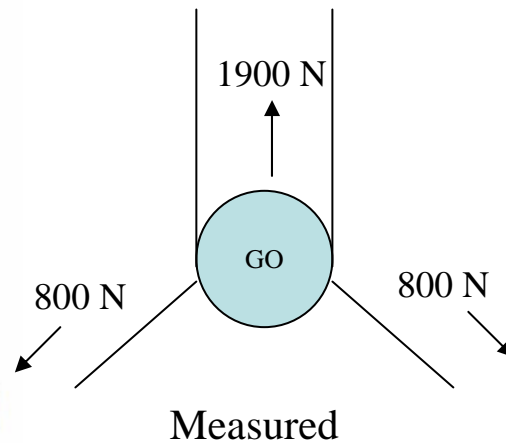
The Support Structures for the GO-Magnet



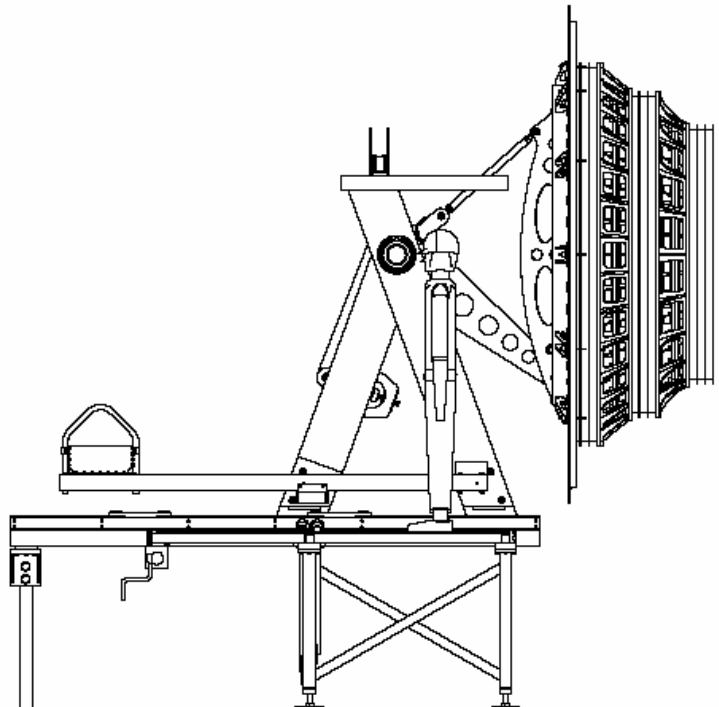
- Steel/Al frame, stiffened by Al-plates
 - Adjustable vertically and horizontally
 - Mountable in place
 - Fixed at the CAL rails
 - Can take forces in y and x direction
- System is fixed in z-direction

Limit of allowed movement: $\sim 0.5\text{mm}$

Mass of the GO-magnet: 301 Kg



STATUS



Side Frame Left



Counter Weight Carrier



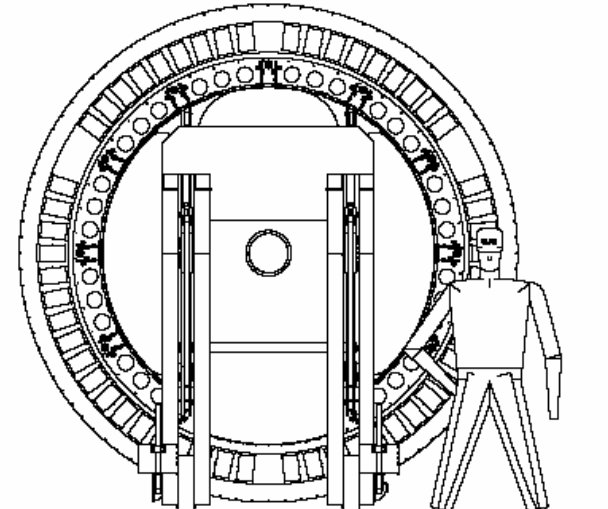
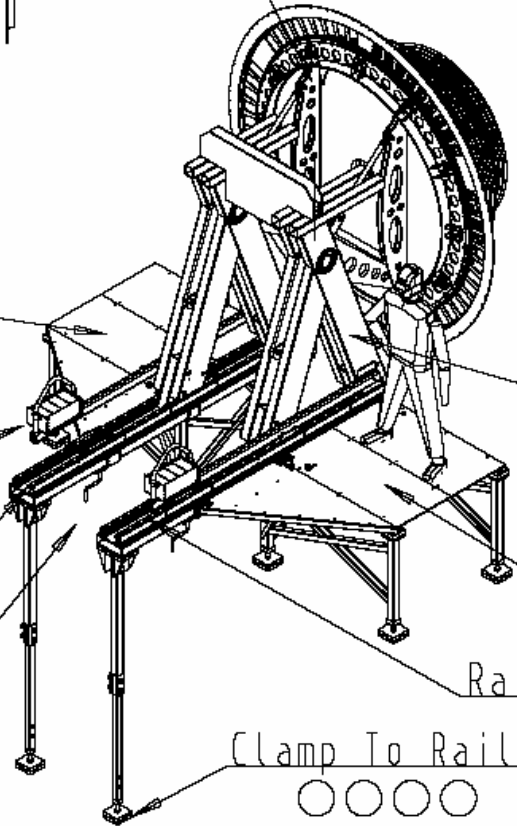
Rail With Post Left



Distance Adjustment



Adapter With Wings



Mobile Traverse



Side Frame Right



Rail With Post Right



Clamp To Rails



Design
 Drawings
 Material Ordered
 Under Production

Project Name	FR/ST
Project Number	FR/ST
Project Manager	FR/ST
Project Status	FR/ST
Project Start	FR/ST
Project End	FR/ST
Project Budget	FR/ST
Project Cost	FR/ST
Project Revenue	FR/ST
Project Profit	FR/ST
Project Loss	FR/ST
Project Breakdown	FR/ST
Project Summary	FR/ST

