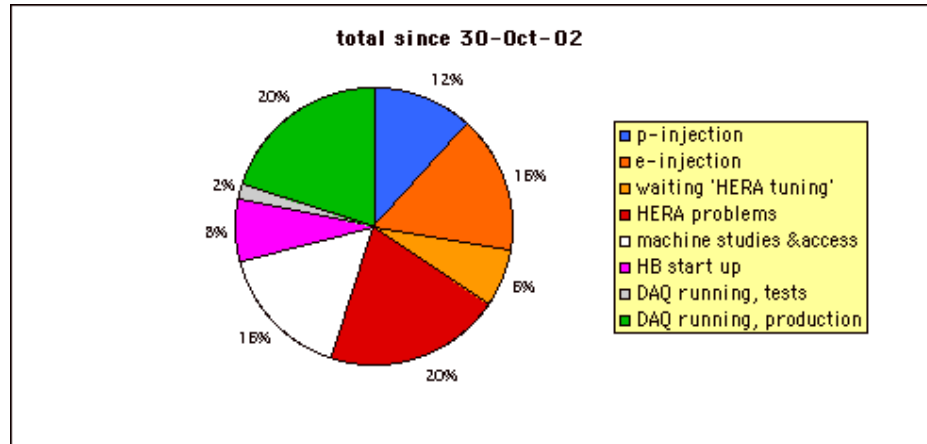


HERA coordination meeting
November 19, 2002

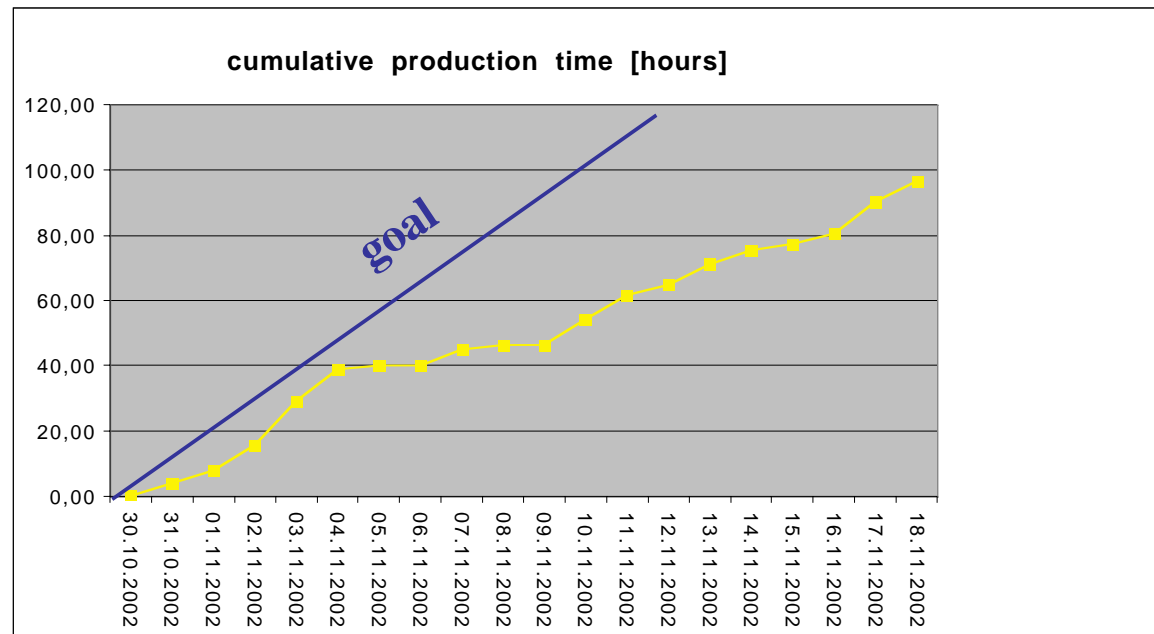
- running experience
- problems
- expectations

Running statistics since October 30th:



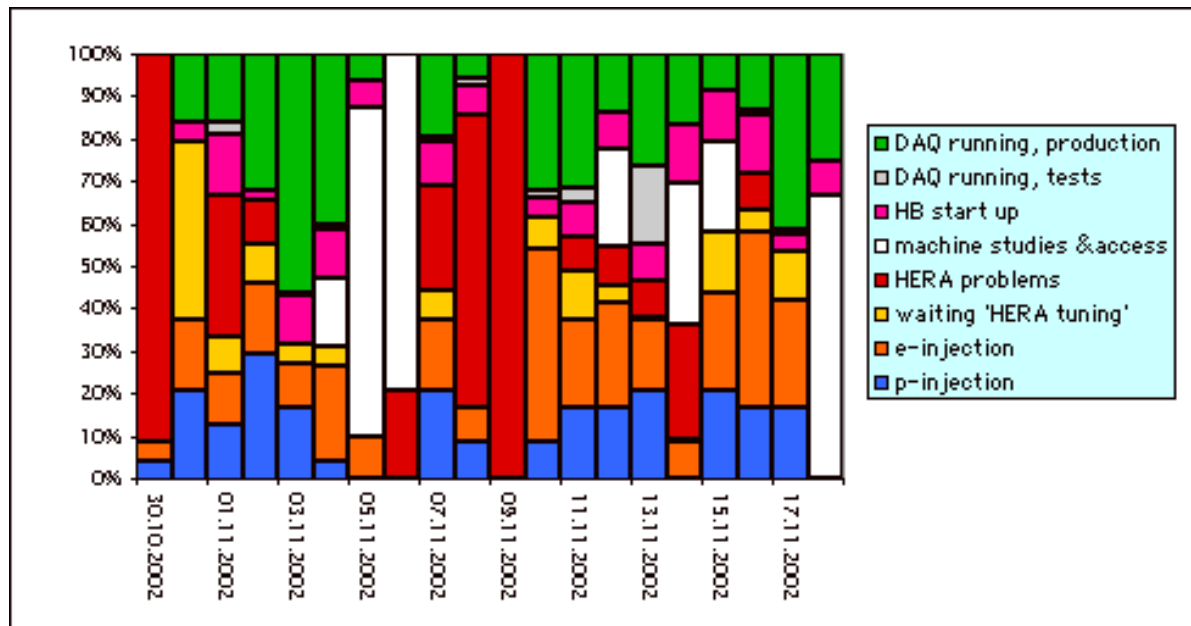
beam on target: 29,4 %
production eff.: 74,1 %
 DAQ time : 21,7 % (5.2 h/day)

~ half what we hoped for

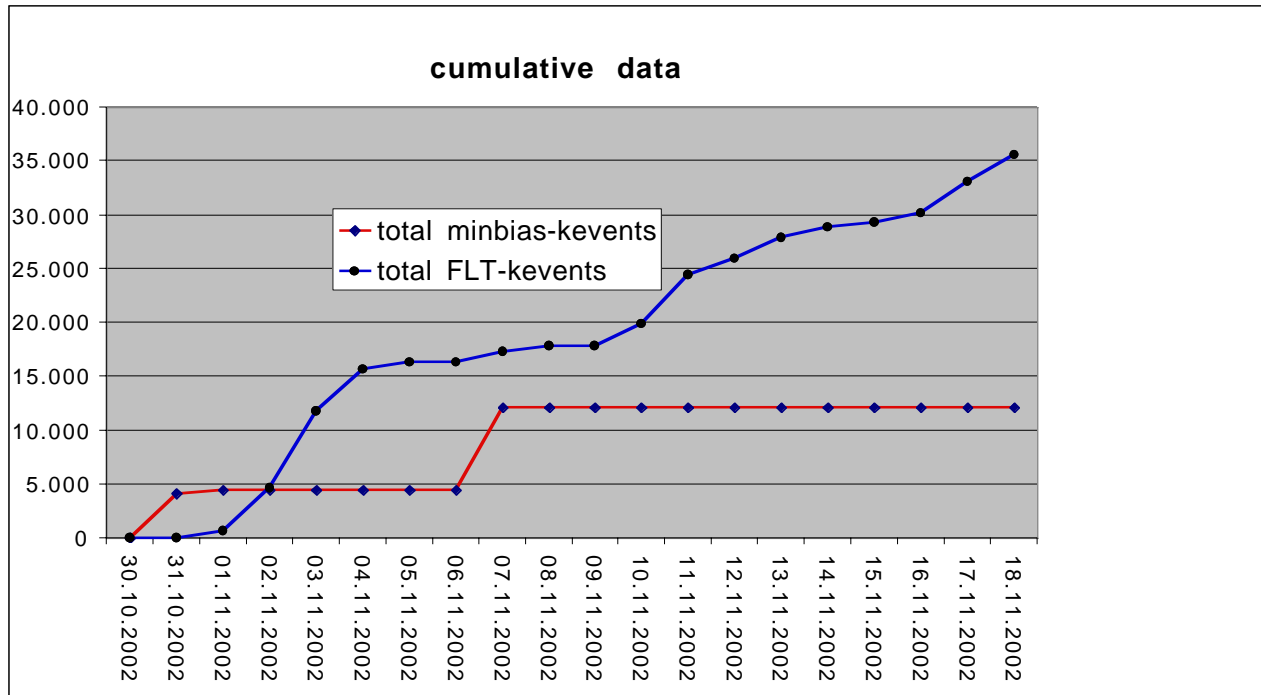


main reason for poor running efficiency:

Technical problems,
predominantly with
positron operation



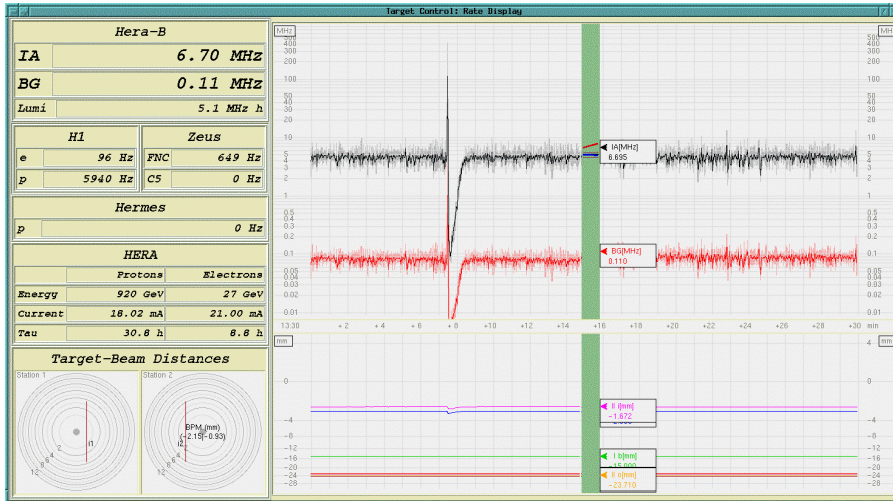
Data produced :



analysis of
selected samples

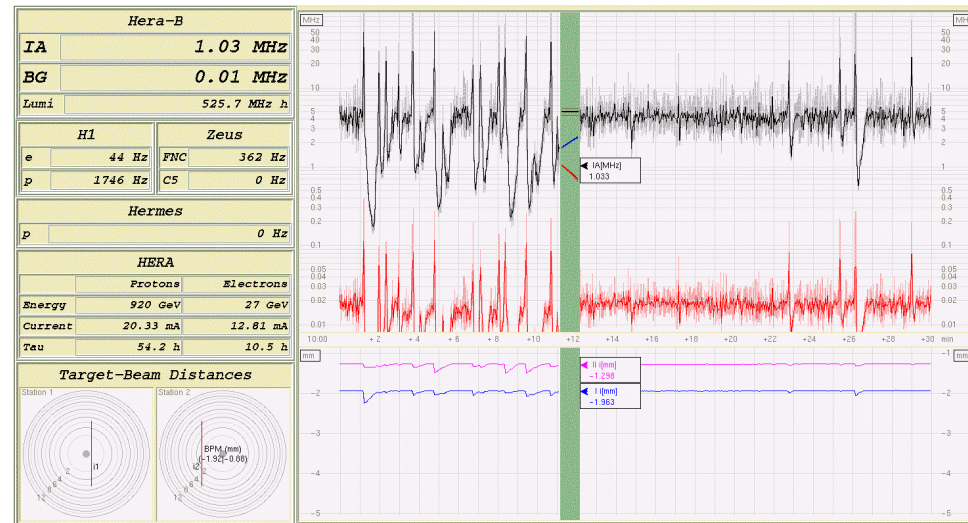
Mainly J/ψ running, expectation $\sim 70\,000$ J/ψ on tape
(Carbon + Tungsten, electrons and muons)
Min. bias running with new logging : 1 kHz to tape

Most recent problem: beam instabilities -> **rate spikes**



If rare (~hour(s)):
chambers trip
risk of damage

If frequent (~minutes):
switch off

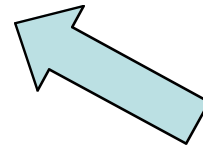


Spike rate:

- no relation to Carbon vs. Tungsten
- some relation to vertical vs. horizontal wires

We also had “close to perfect” fills !

- low background
- small rate fluctuations
- no spikes
- perfect cohabitation



Make this reproducible..

Conclusions :

- beam situation far from satisfactory
- HERA efficiency too low
- reliability not given (experimental state)
- good beam conditions not reproducible so far

The deficit in data cannot be overcome without additional beam time.