CLC status

Yuri Oksuzian on behalf of CLC group

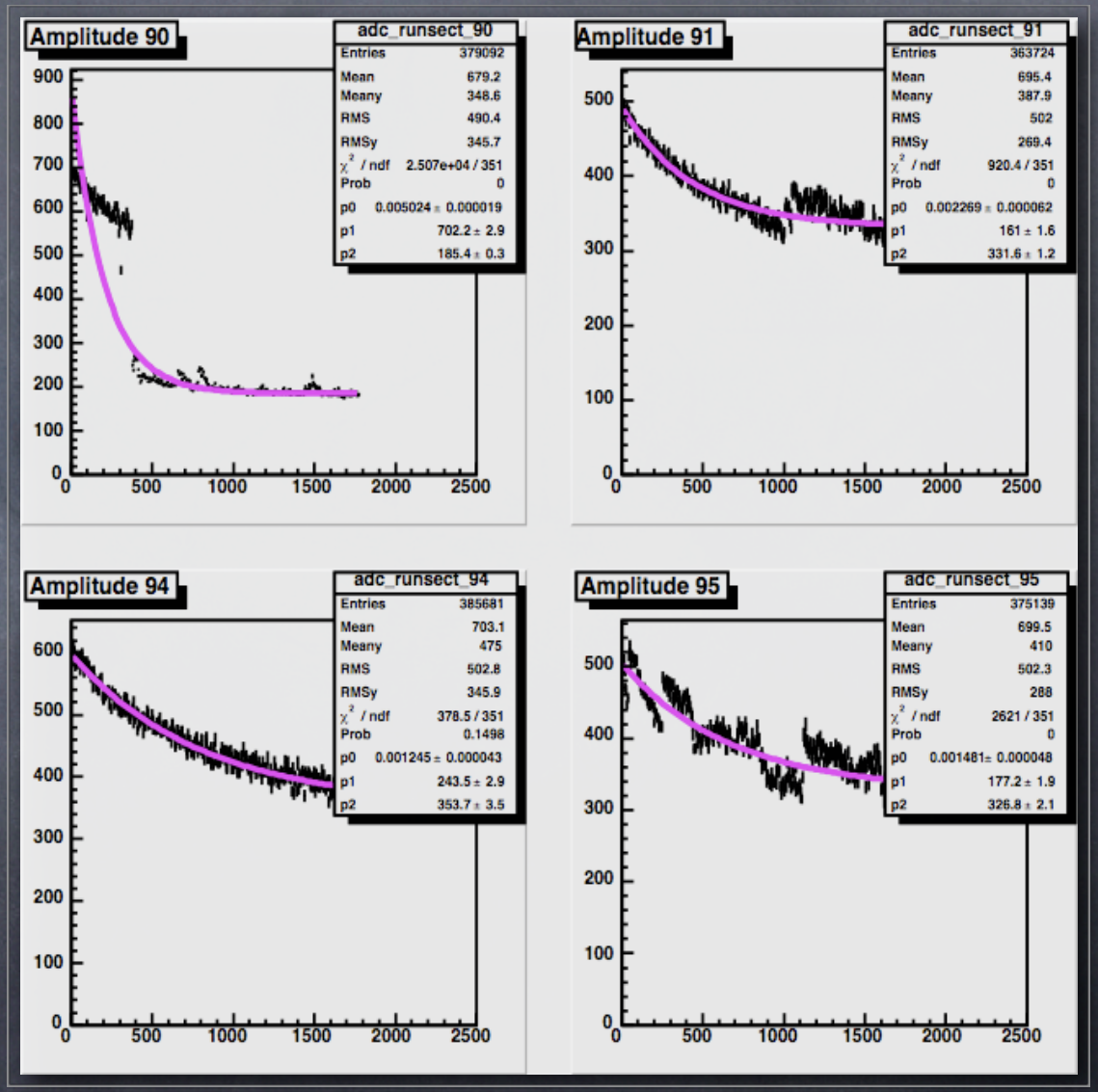
Work done

- Traced down the instability in luminosity measurement to bad soldering in PMT bases
- Replaced 44 bases
  - 18 bases on the west side during SD in 2006
  - 8/18 on the west/east side during SD in 2007

PMT base example

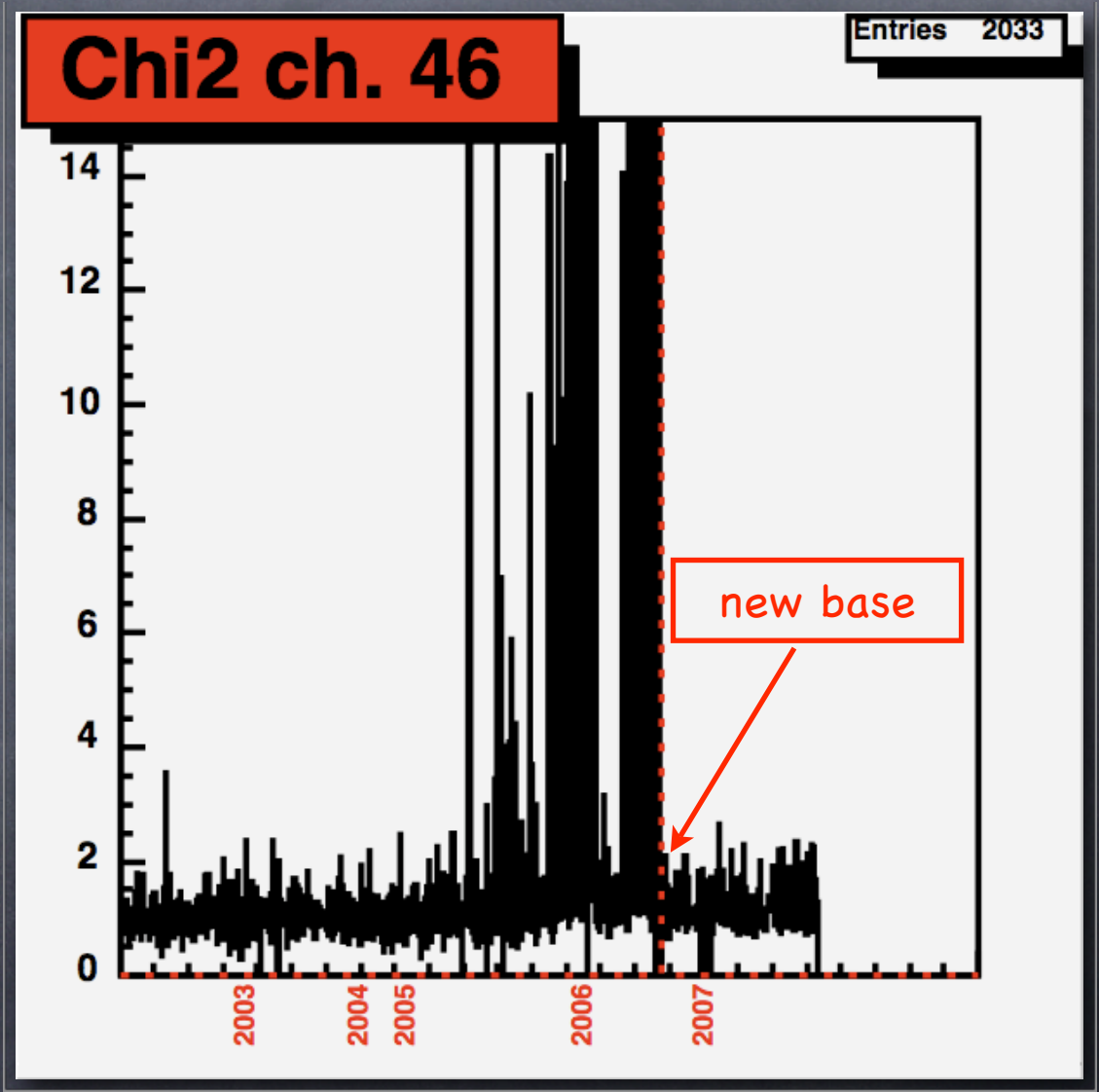
Amplitude vs time

- Here we plot:
  - Y-axis: <ADC>
  - X-axis: Run Section
- <ADC> expected to fall smoothly during data taking

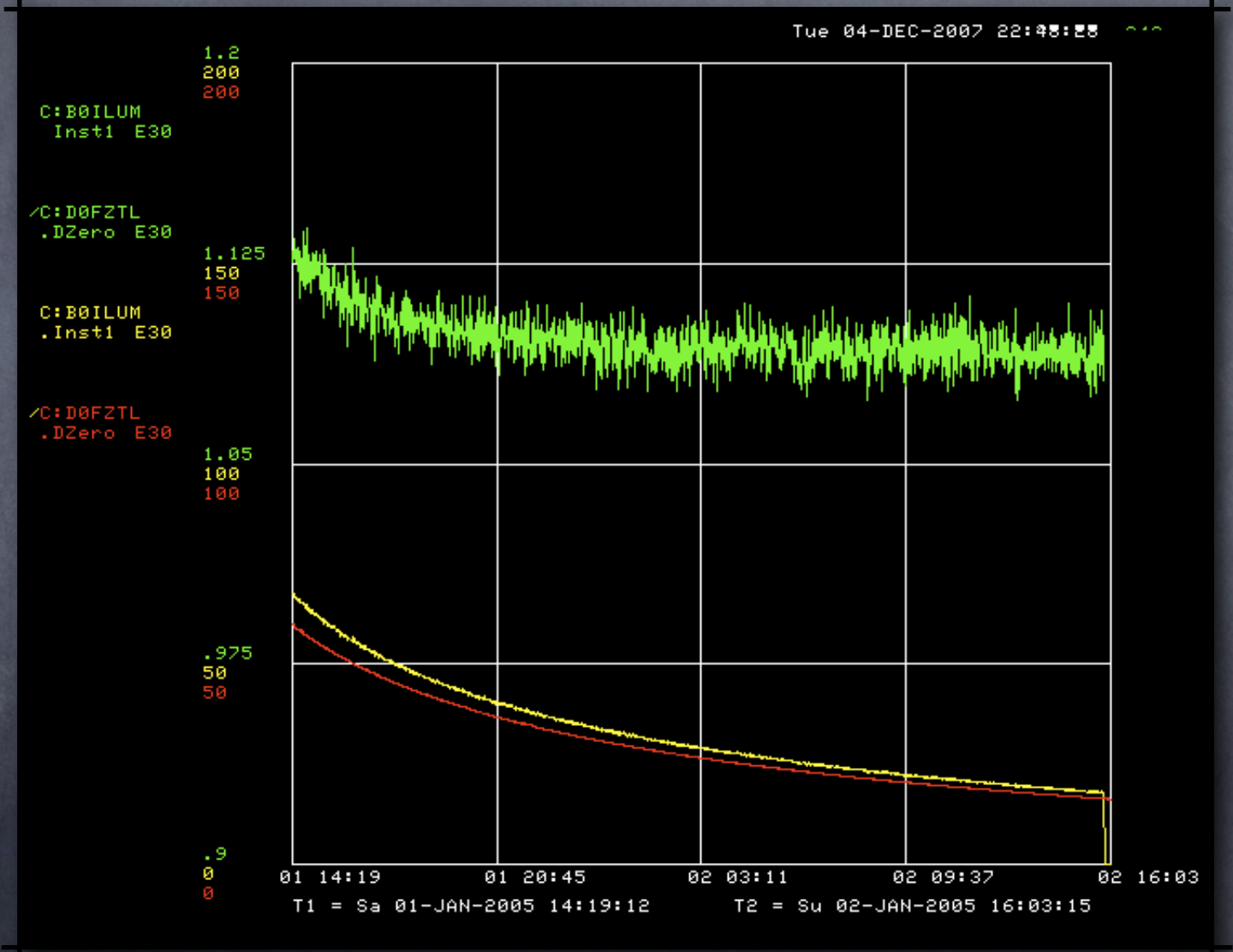


Instability history

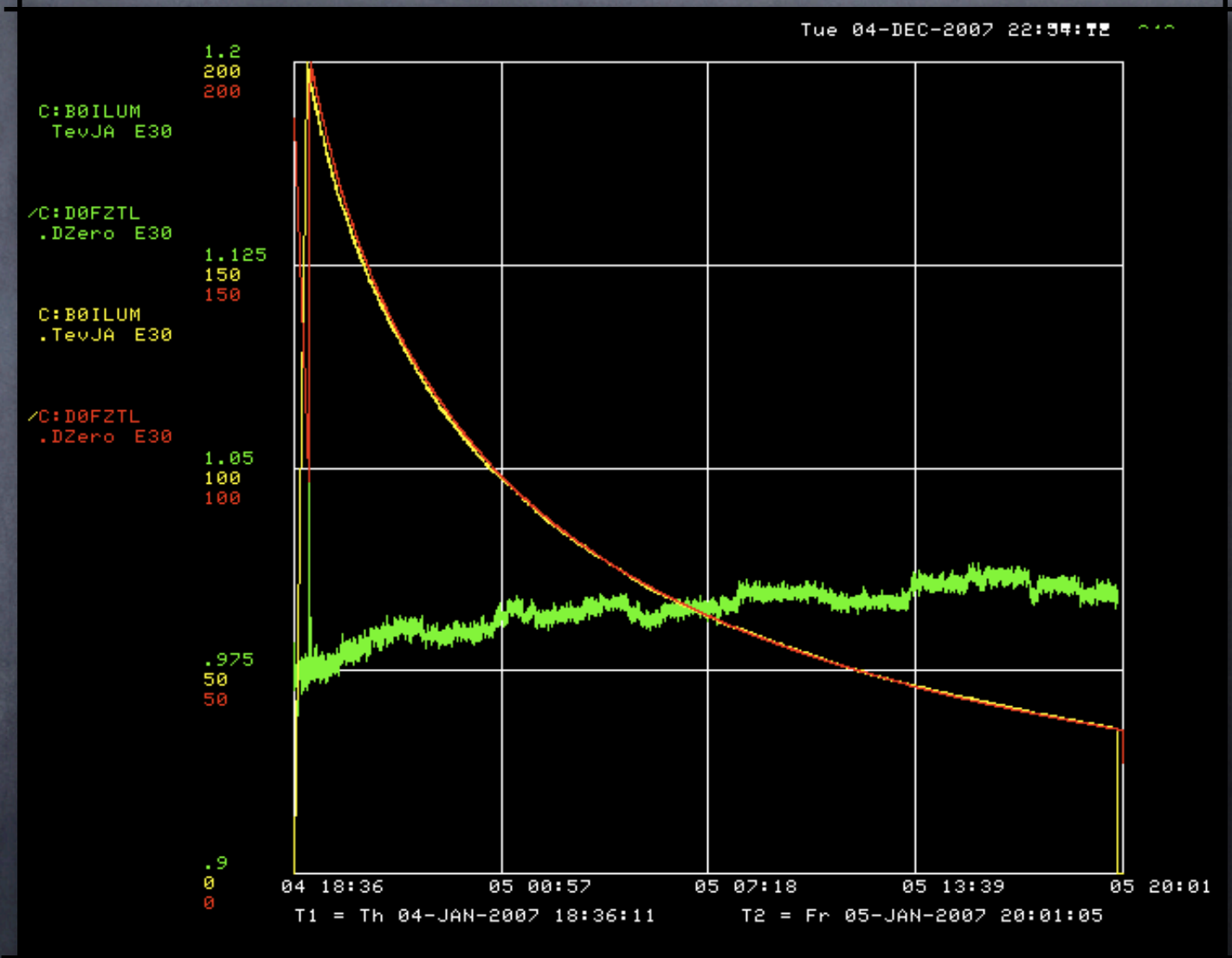
- Here we plot:
  - Y-axis: time
  - X-axis: Chi2 of the fit of <ADC> vs time
- Chi2 aprox. 1 for a stable channel



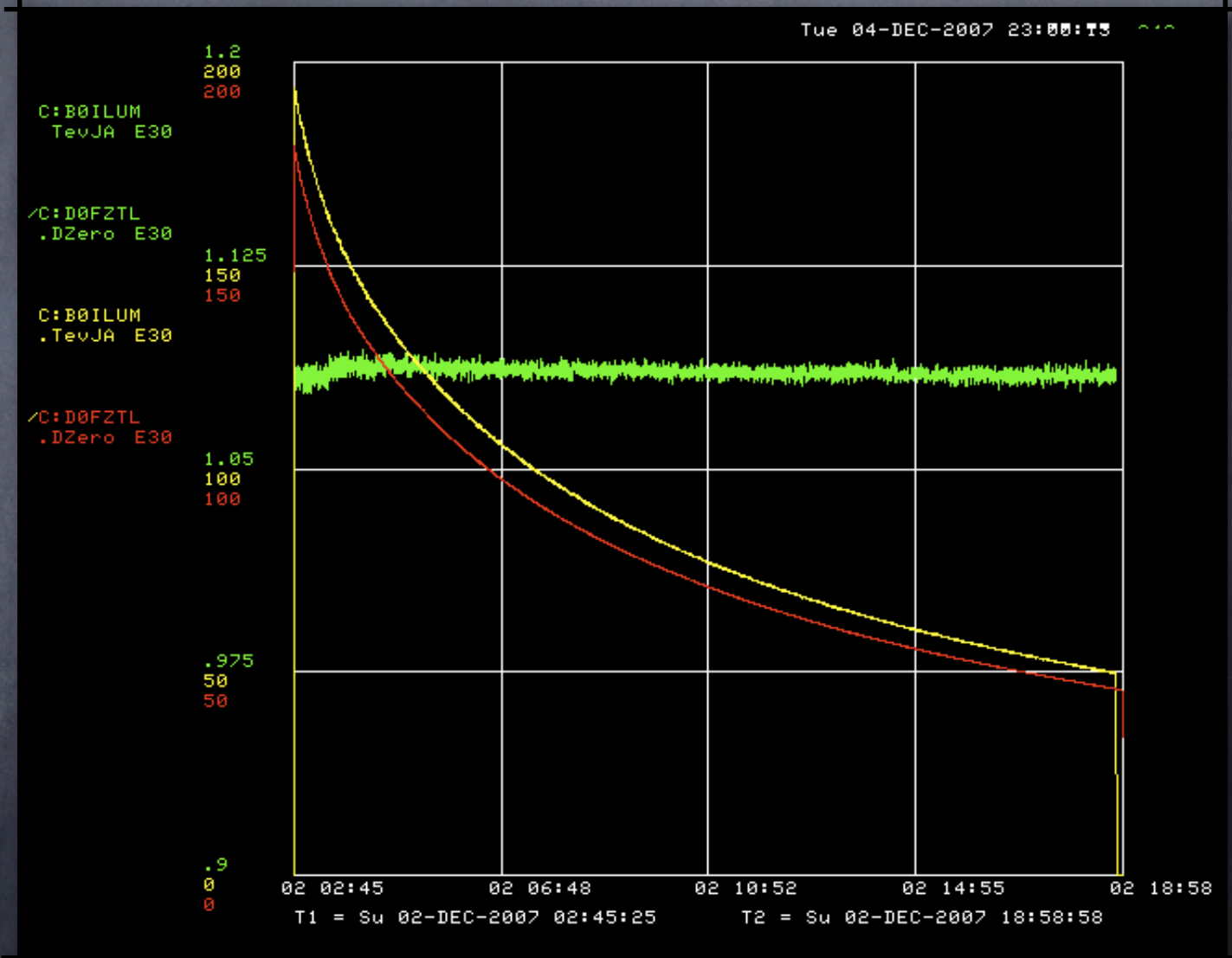
CDF/D0 in 2005



CDF/D0 in 2007



CDF/D0 NOW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.DZero E30
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200
1.125
150
150
1.05
100
100
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50
50
.9
0
0
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02 06:48
02 10:52
02 14:55
02 18:58
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T2 = Su 02-DEC-2007 18:58:58

Conclusion

- Found and fixed the problem of the instability in the luminosity measurement
- Developed the tools to monitor the stability of luminosity measurement
- Effect on the luminosity measurement is small
- Will present the quantitative estimate on the next luminosity meeting