

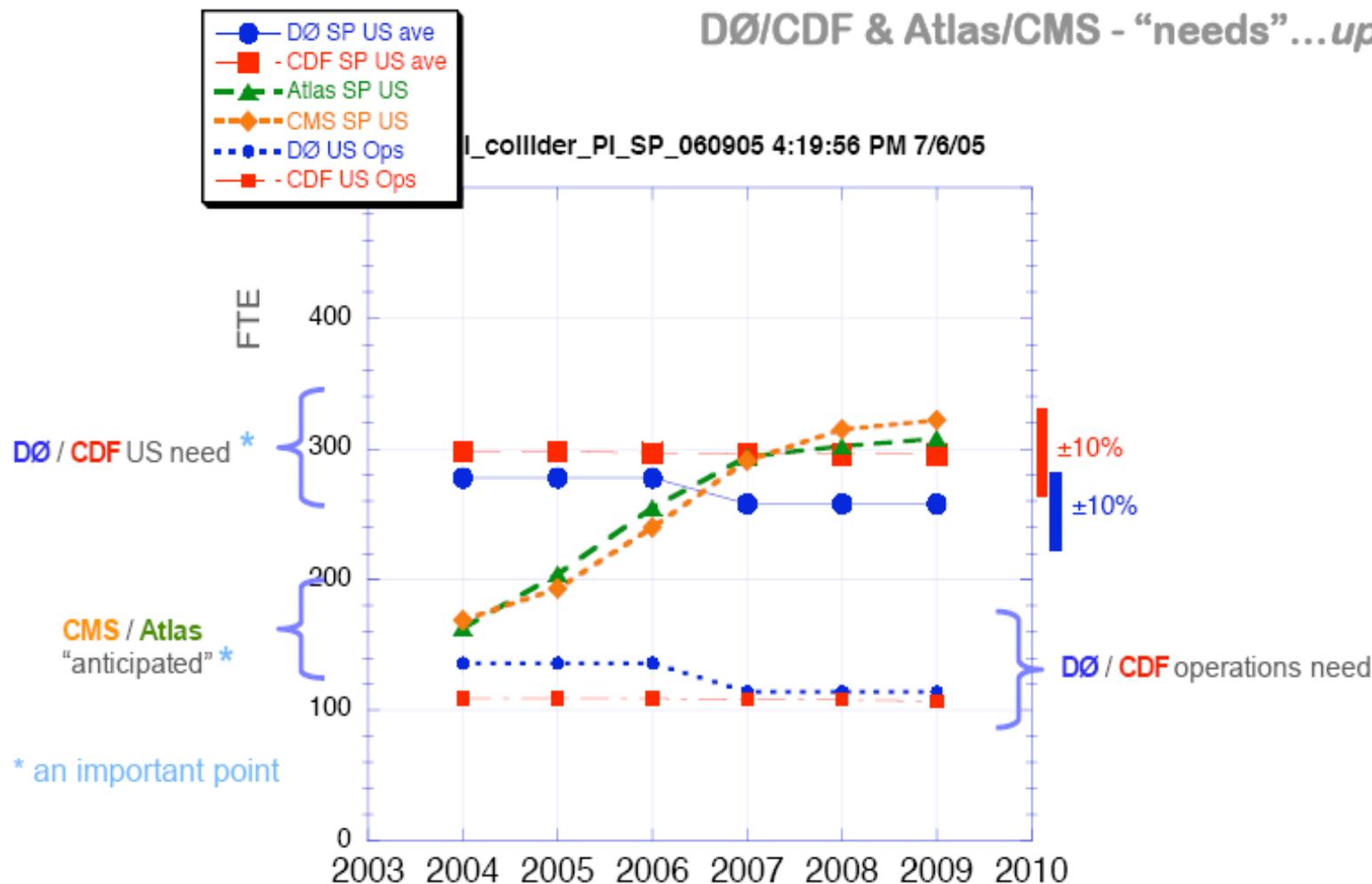
CDF Resources for running in 2010 and beyond

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For the CDF Collaboration

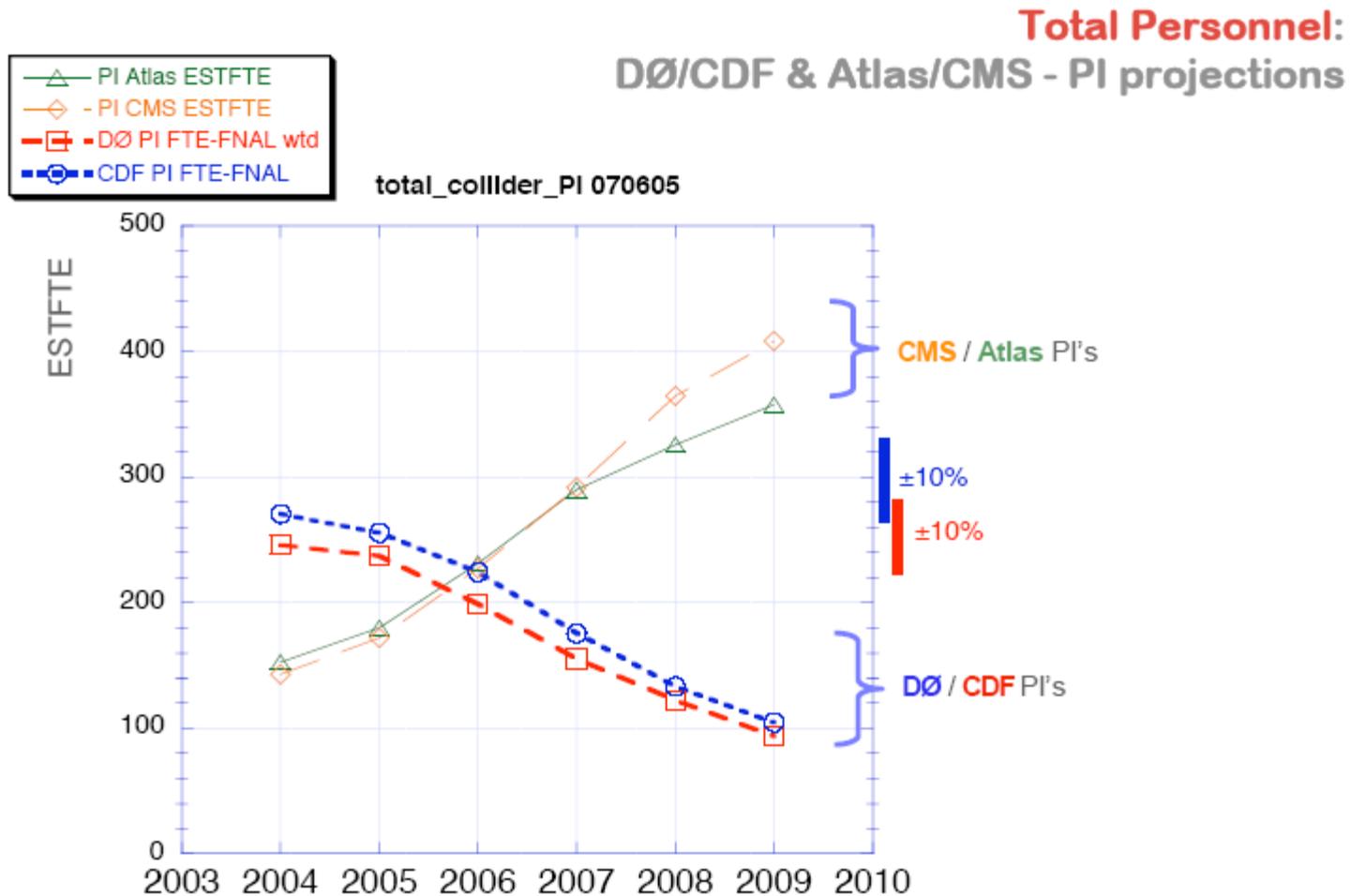
2004 HEPAP Survey -- Summary Plot of Needs

Total Personnel:

DØ/CDF & Atlas/CMS - "needs" ...updated



“The Shot Heard Round the World”



2009 FTE Projects vs Survey Year

Survey year	2005	2007	2008	What we have today
US	80	130	140	180
Non US	80	100	130	140
Total	160	230	270	320
Students		82	90	110
Post Docs		54	63	90

Today we have more people participating than we ever expected!

What is the underlying reasons for this success?

- Tevatron's Success at delivering luminosity
 - People see what we will get the data sets needed to make an impact
- Our Physics Program
 - We continue to get results out that are making a difference
- Success rate in placing our young people
 - Our Post Doc's are successful on the job market
- Delays and Problems with LHC
 - We have data now!
 - We will have data next year

What about 2010?

- Based on our 2008 Survey.... Where we told each group to make their own assessment as to what the LHC would be doing at the time...

	FTE's
US	110
Non US	100
Total	210
Students	60
Post Docs	45

2009 Numbers are about 15% higher than the 2008 prediction

We expect these 2010 would also scale by roughly 15%

What about 2011?

- To date we have made no effort to quantify this
- Numbers will depend a lot on
 - Will we keep running?
 - What is the LHC doing?
- Our Collaborators have thus far not been considering the possibility of running in 2011, just continuing analysis efforts
- If we want this to be a possibility, the lab and DOE needs to make as formal a statement as they can to the collaborations of the intent and to keep this option open.

Our Estimate to Operate CDF in 2005

	<u>2007</u>	<u>2009</u>
Operations	55	55
Offline	26	20
Management	10	10
Algorithms	35	26
Total Service	126	111

In FTE \equiv fraction of total working week.

We have spent a lot of effort automating, and eliminating effort

Our current estimate is probably 80% of 2005 numbers

Other Information

- CDF author list is now at 602 people
- Author list is not shrinking very much – groups are not disappearing, just reducing their fractional research effort
- Post doc's that joined CDF in ~2007 time frame that only intended to do one analysis and move to the LHC have stayed
- As a result of the September LHC incident, we expect to get of order a dozen or so senior LHC students to come to CDF to do an analysis and graduate – also have one Post Doc that has transitioned as well.
- Once there are real collisions at energy at the LHC, we expect to take a considerable “hit” in available resources

Issues with Running Beyond 2010

- The Detector is not an issue thus far. Silicon and COT performance do not indicate any problems
- Retention of experts will be an issue
 - Its not just bodies
 - We need specific expertise in key positions
- FNAL Visitor Funds and our IFC tax (~600,000 USD/year) allows us to bring in significant and targeted help. This is a huge help!
- To run well in latter 2010 and certainly in 2011, a bump in funding for University program and the Lab is needed
- There is nothing more “shovel ready” than a tevatron experiment!