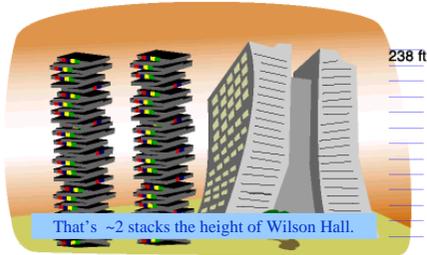# CD in support of Top—then...

The tapes were 8 mm camcorder tapes.
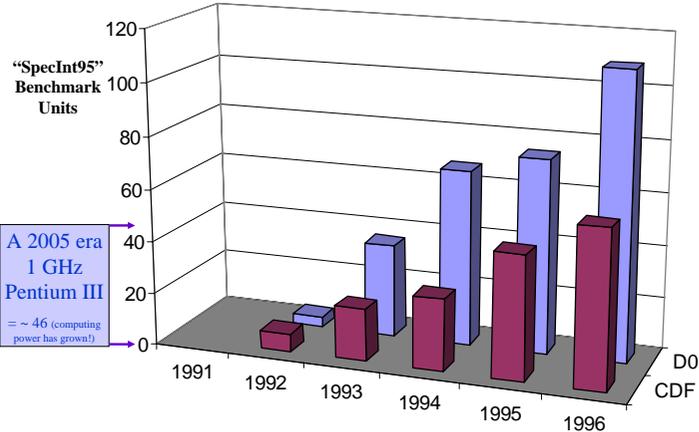

About 5,000 tapes total.

238 ft.
That's ~2 stacks the height of Wilson Hall.

CDF used a tape robot for intermediate data (DST's).

Assignment: Make taped events from ~12.5 Trillion proton-antiproton produced collisions containing ~2,000 Top's accessible world-wide via networks and robots. Process 24x7.

"SpecInt95" Benchmark Units

A 2005 era 1 GHz Pentium III = ~ 46 (computing power has grown!)

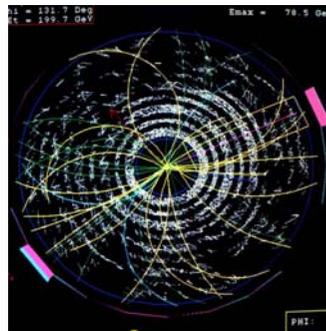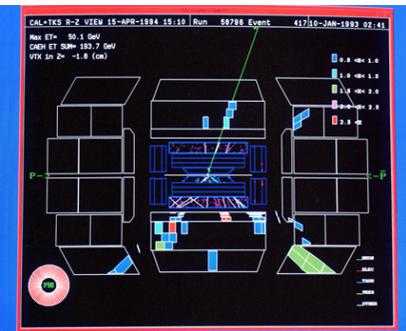1991 1992 1993 1994 1995 1996   D0   CDF

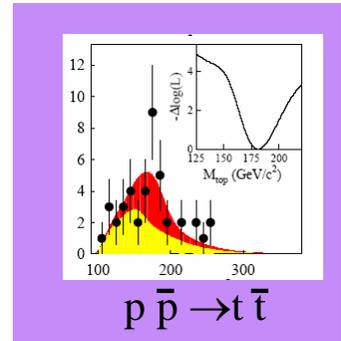A hundred tape drives provided the input/output to/from the raw data on the 8mm tapes.

A hundred IBM and SGI computers reconstructed events.

Assignment: Every 2 years, double farm computing power. Install new; operate existing so researchers can reconstruct accumulating events and analyze them without interruption.

DZero did this phase of its computing on the D0FS and FNALD0 (both all VMS) clusters as well as some SGI and IBM desktop analysis nodes.

CDF did this phase of its computing on a 32 processor SGI Challenge XL and also used the FNALD VMS cluster and VMS and UNIX desktops in the trailers.

Results

M_{top} (GeV/c^2)
$-\Delta\log(L)$
$p\,\bar{p} \rightarrow t\,\bar{t}$

March 2, 1995

Assignment: Provide enough post-reconstruction analysis computing to decipher complex events. Make it possible to find the Tops hidden in the collisions.

Result: Observation of ~44 Top events by CDF and DZero in the initial discovery analyses.