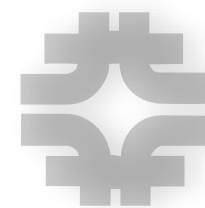# CMS Goals and Expectations

- **LHC Schedule**
  - ★ initial engineering run at end of 2007
  - ★ pilot physics run starting spring 2008
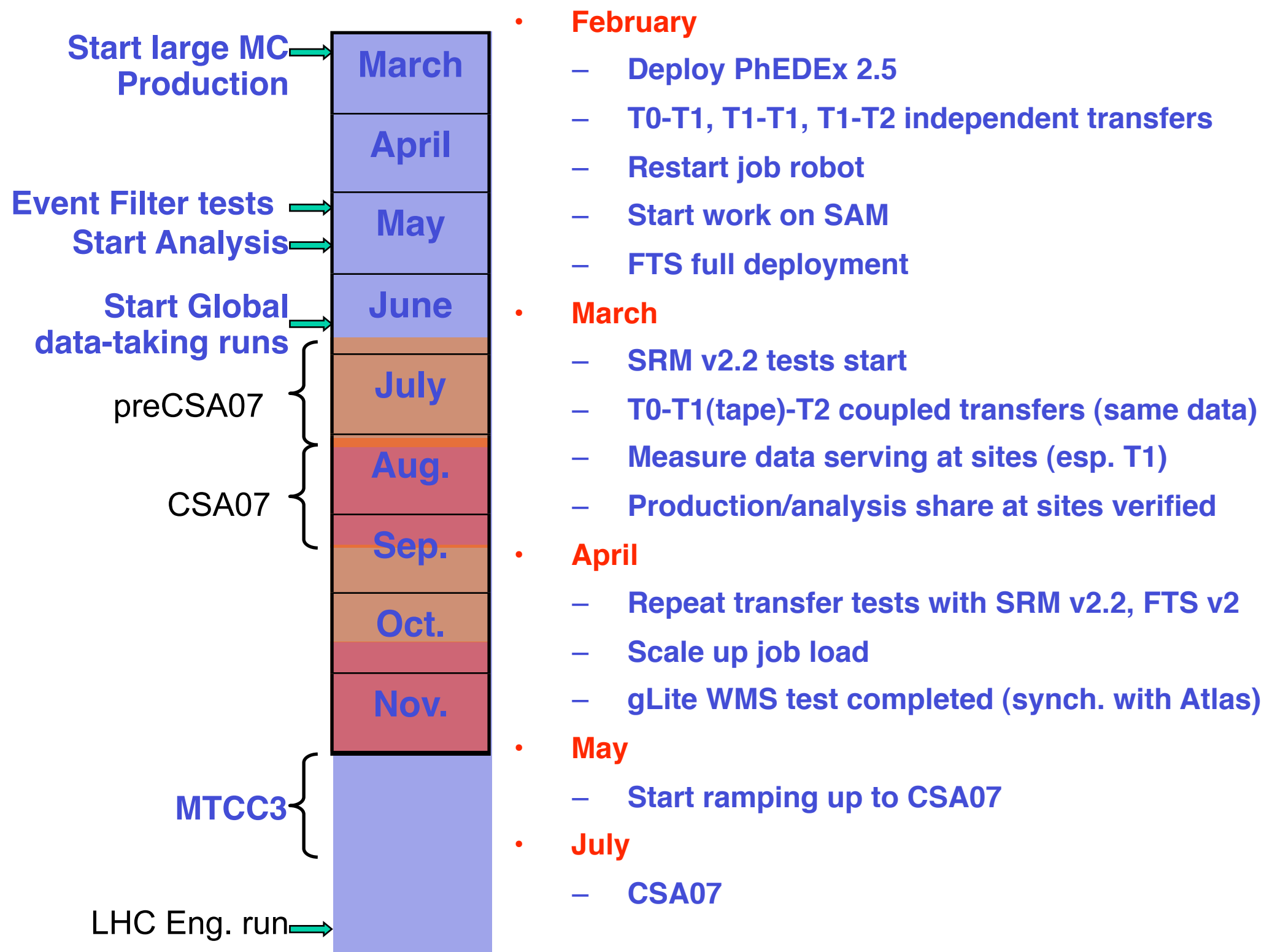- **Commissioning the CMS computing system on OSG and WLCG**
  - ★ CSA06 demonstrated much of the workflows, including simulation production, data processing, data analysis running, re-processing, calibration processing, conditions database distributed access, etc
  - ★ continue to establish all aspects CMS computing model, with all the roles of T1 and T2 centers, at the required scale
  - ★ detailed plan for series of CMS software releases, physics validation
  - ★ production of some 100M simulated CMS events (within few months)
  - ★ data analysis of samples, preparing a set of "papers" later in the year
  - ★ series of data taking exercises, with "challenges" to measure success
- **Main CMS computing commissioning milestone: CSA07**
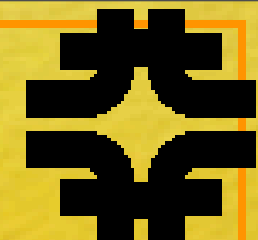- **Start of "cosmic data taking" in fall, segueing into LHC running**

CMS Commissioning Plan until CSA07

Start large MC Production →

March
April
May
June
July
Aug.
Sep.
Oct.
Nov.

Event Filter tests →
Start Analysis →

Start Global data-taking runs →

preCSA07

CSA07

MTCC3

LHC Eng. run →

- **February**
  - Deploy PhEDEx 2.5
  - T0-T1, T1-T1, T1-T2 independent transfers
  - Restart job robot
  - Start work on SAM
  - FTS full deployment
- **March**
  - SRM v2.2 tests start
  - T0-T1(tape)-T2 coupled transfers (same data)
  - Measure data serving at sites (esp. T1)
  - Production/analysis share at sites verified
- **April**
  - Repeat transfer tests with SRM v2.2, FTS v2
  - Scale up job load
  - gLite WMS test completed (synch. with Atlas)
- **May**
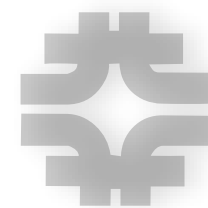 - Start ramping up to CSA07
- **July**
  - CSA07

US Grid Deliverables for 2007

- Goals:
  - Mid-2007:full functionality for initial data taking (commissioning).
  - End-2007: 2 x CSA06 performance.
- Data Movement and Storage needs:
  - Space reservation (SRM V2.2) and compatibility with WLCG Storage Classes definitions (not needed by CMS in the US);
  - Deployed, interoperable, access control (gPlazma);
  - Improved maintainability and ease of configuration and support (VDT).
  - Accounting (Gratia)
- Workload Management and Job Execution needs:
  - Performance and robustness improvements at the execution sites.
  - Experiment level prioritization by job class and user role.
  - Improved success rate (through understanding and fixing of errors; improved retry and fault tolerance in the workload management system and workflows.
- Operational needs:
  - Security infrastructure, processes and auditing following CDF & OSG plans.
  - Improved coverage, usability and interpretation of monitoring and error information

(for details see "additional slide")

Main "Milestones" in WBS

- ✦ Support for CMS Job Throughput 50Kjobs/day
  - ★ 4/1/07
- ✦ Support for CMS Job Throughput 75Kjobs/day
  - ★ 5/1/07
- ✦ Support for CMS Job Throughput 100K jobs/day
  - ★ 6/1/07
- ✦ CMS site validations using the SAM infrastructure
  - ★ 6/1/07
- ✦ Support for CMS Opportunistic use of OSG Sites for Monte Carlo
  - ★ 6/15/07