CCRC08 Phase 1
RAL's Perspective

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GridPP
UK Computing for Particle Physics

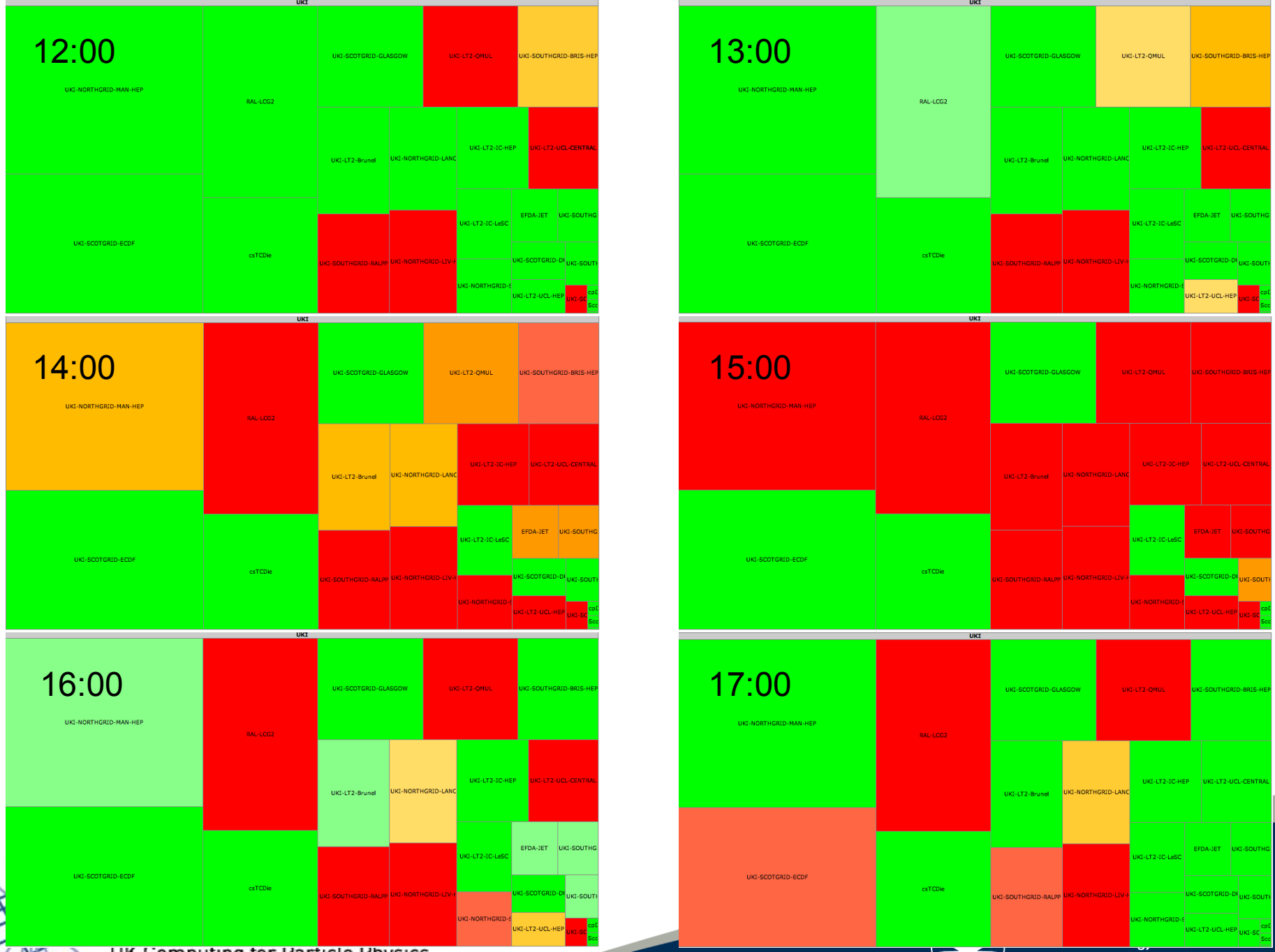
Science & Technology Facilities Council
e-Science

Problems Before

- Experiment Requirements
  - Differing levels of detail
  - Information trickling out by multiple routes
    - GSSD twiki, Broadcasts, presentations
- Baseline Services defined in advance (good)
  - But not all available until **very** late on

Problems During - Power

- Who turned out the lights?
  - Power Cut on 7th Feb RAL machine room
  - Getting the word out
    - GOCDB down, site exchange servers down
      - No EGEE-broadcast, no e-mail
      - Phone
  - Need to distribute/replicate national services
    - Gridmap shows about 4 hours of failures for UK T2s
  - http://www.gridpp.rl.ac.uk/blog/2008/02/18/review-of-the-recent-power-failure/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Problems During - Castor

- Tape migration rates poor
  - Affecting CMS and Atlas
  - read/write contention?
- Space Tokens
  - Atlas began writing using a lower case Space token
    - Apparently stopped with no one changing anything
- Disappearing Space
  - Info provider bug and deletes not working

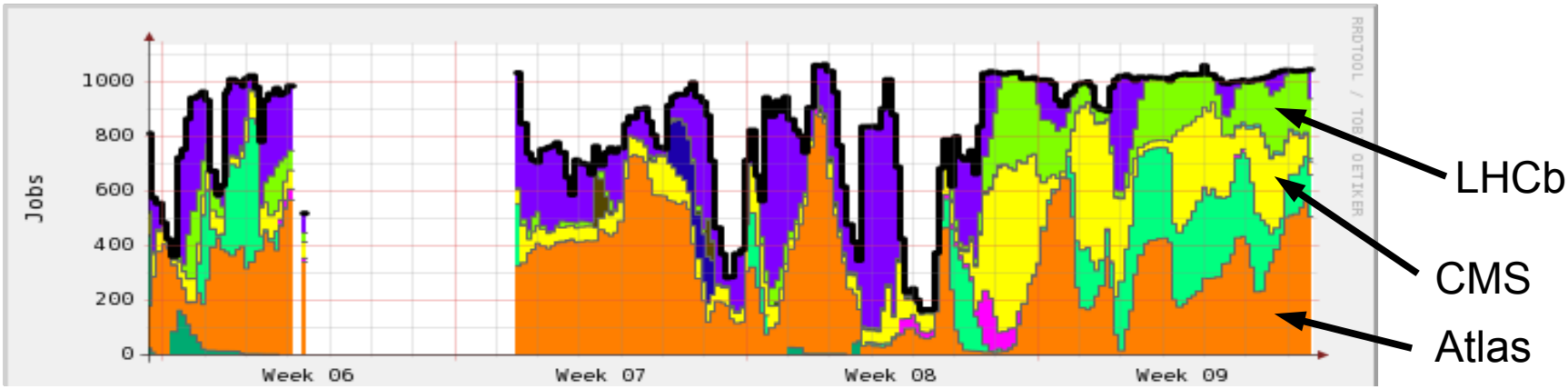
Problems During – SRM

- Negative file sizes
  - Correct inside Castor, but incorrect in gridftp logs and lcg-ls output
- Connection hangs
  - Lasts 10-45 minutes
  - Only affecting Atlas

Problems During - FTS

- Little time to test due to last minute release
- Proxy renewal problem
- New release broke our setup
  - Custom cloud configuration for CMS
  - Couldn't use automatic tools, endpoints added manually

Common Running



- Mapping issue only allowed 1 LHCb job to run at a time – DIRAC Issue (21-22 Feb)

Plans

- Castor
  - Move to 2.1.6 (March) - *Done*
  - SRMv2 moved to SL4 64bit – *Not Done*
  - Tape migration issues - *Testing solution*
  - Repack testing using CCRC08 data - *Not Done*
  - Backend DBs moving to Oracle RAC - *Not Done*
  - Storage ramp up - 180 more servers from April - *Hopefully Nearly Done*
  - Alice - xrootd - *To Be Done*

More Plans

- Move LFC to Oracle (April) - *Done*
- Network reconfiguration - *Happening today*
- Deploy new worker nodes - *Soon*

Summary

- Success
  - Problems were overcome
  - Experiments happy
    - CMS and LHCb achieved higher than expected rates
  - SRM v2 now deployed and in production
- **Lots** done for May
  - But not everything that was planned
  - Still things to do