

# GridView

- A Monitoring & Visualization tool for LCG

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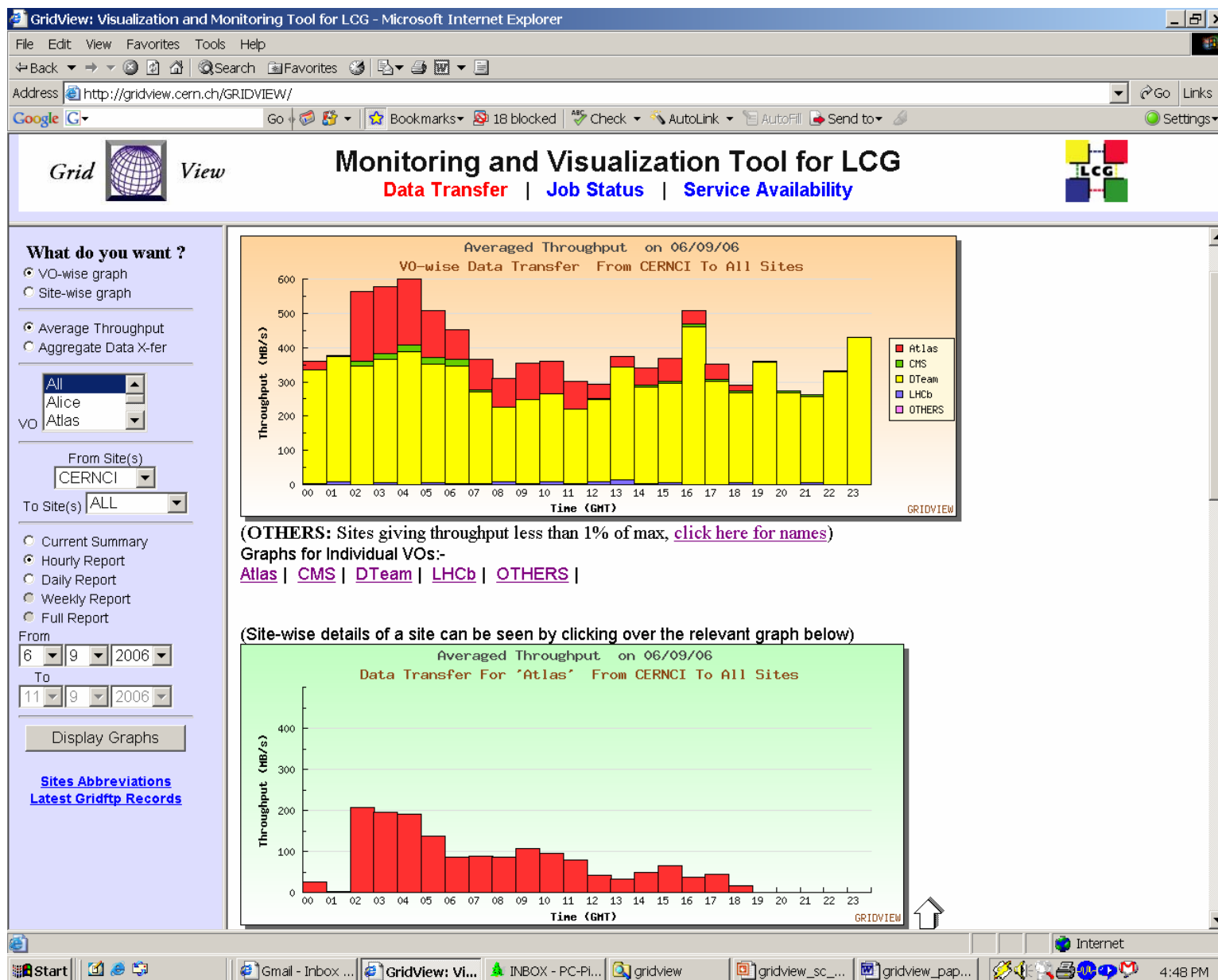
# Gridview : Key Monitoring Areas

- The key monitoring areas in Gridview include
  - File Transfer Monitoring
  - Service Availability Monitoring and
  - Job Monitoring

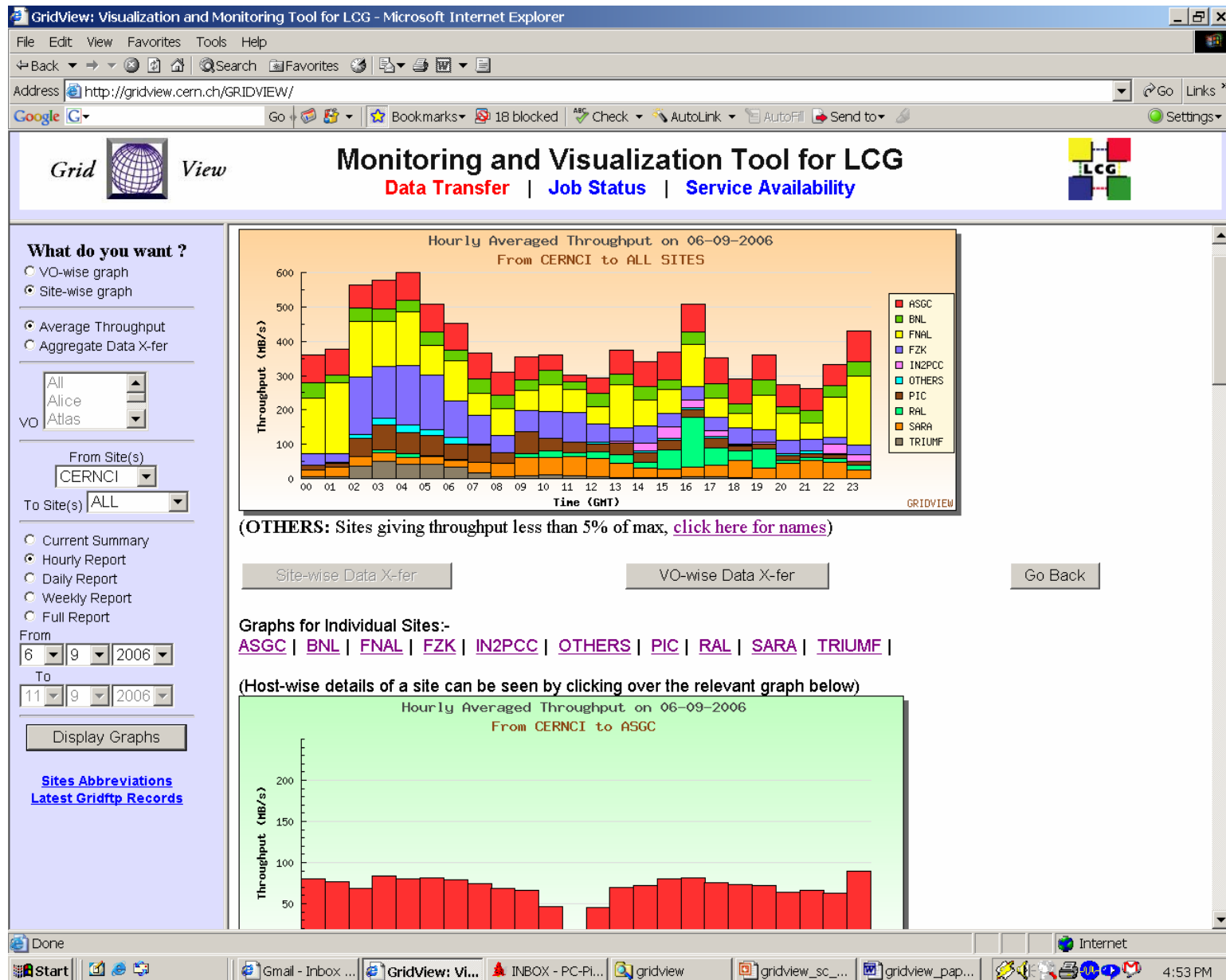
# File Transfer Monitoring

- Gridview summarizes Gridftp logs of file transfers across LCG sites
- Generates and displays periodic Graphs and Reports for
  - Average throughput
  - Aggregate Data Transfer
  - VO-wise, Site-wise and Host-wise details
  - Hourly, daily, weekly and monthly basis
- Refer <http://gridview.cern.ch/GRIDVIEW/>  
( Live Demonstration )

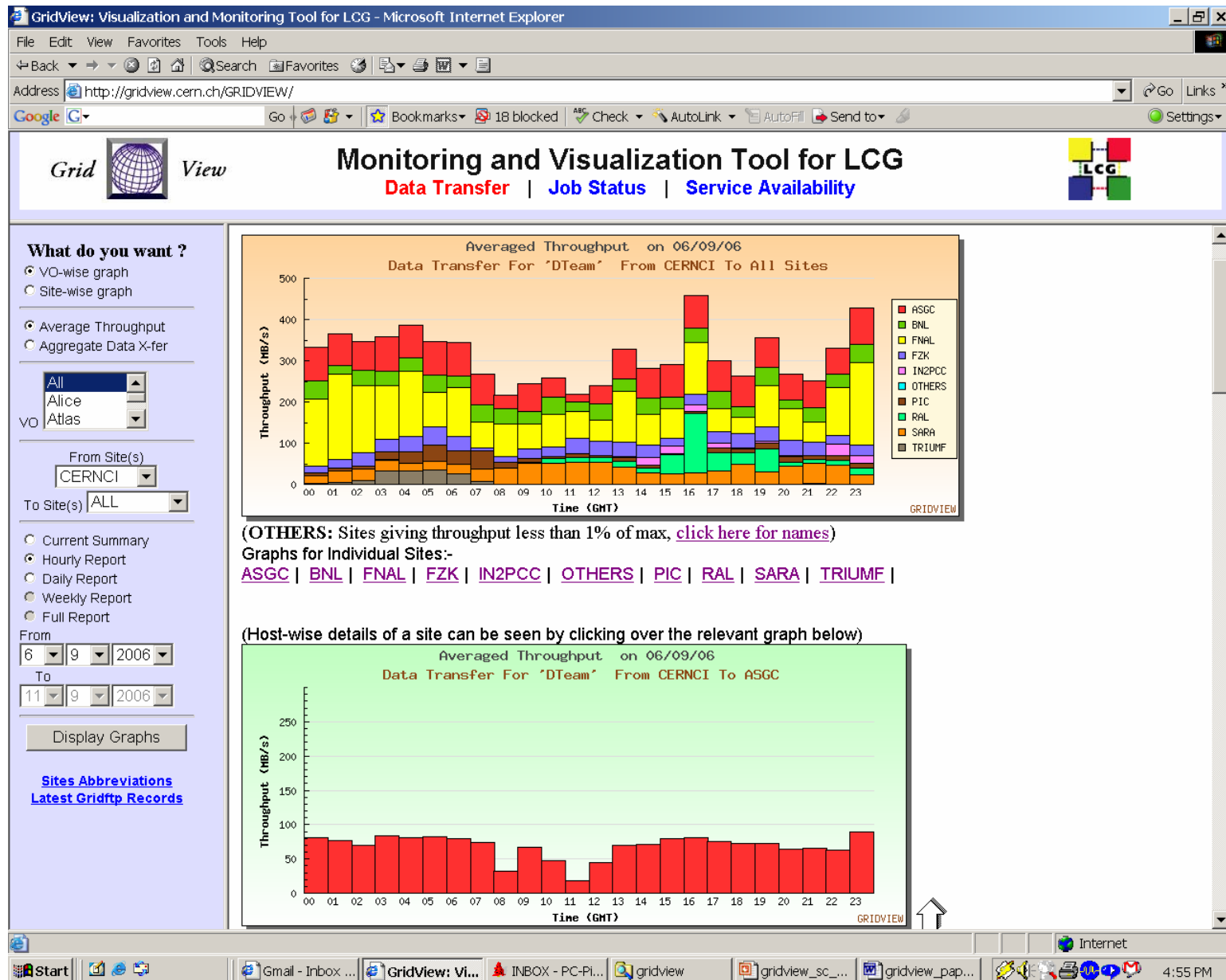
# File Transfer Monitoring : Overall VO-wise Details



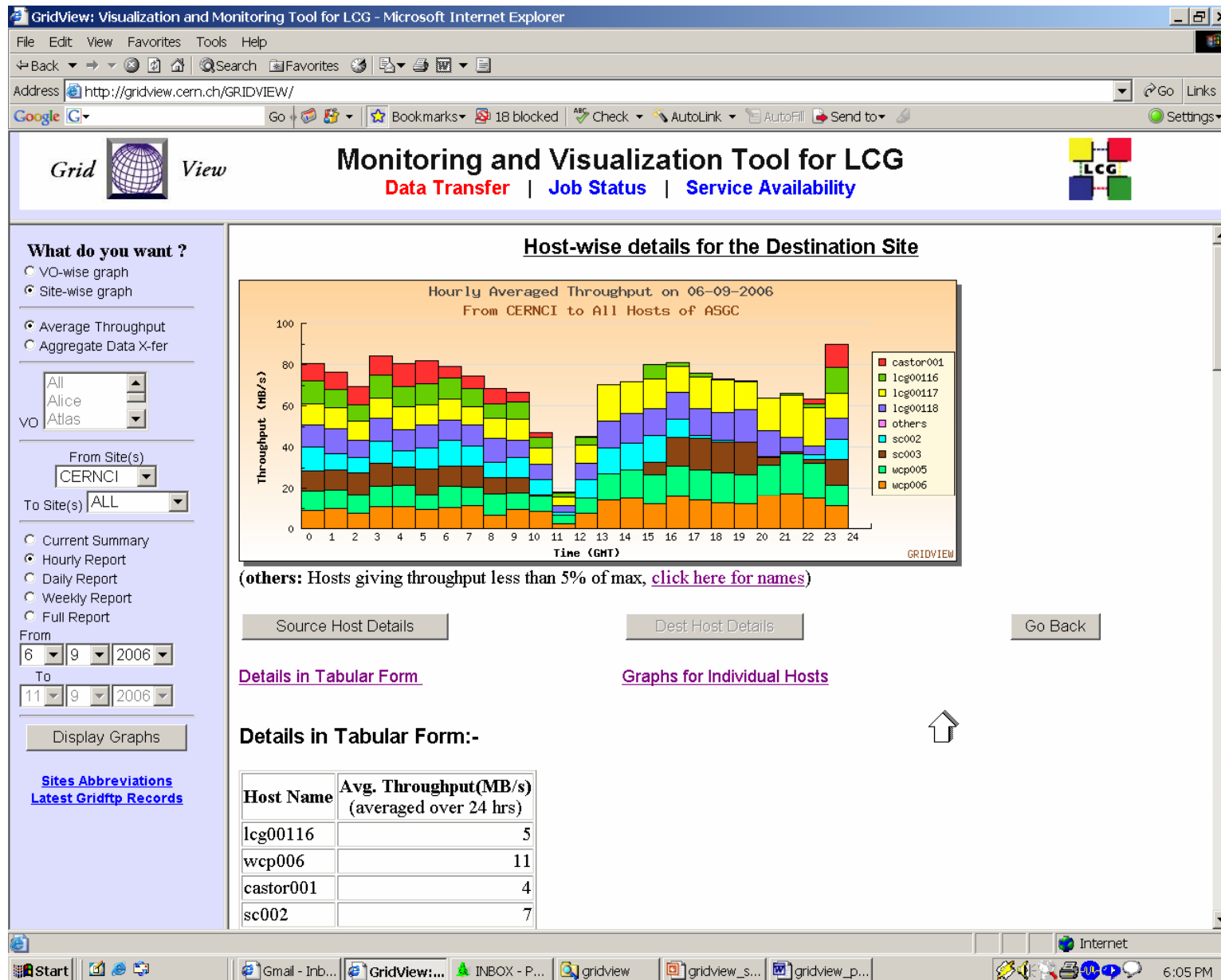
# File Transfer Monitoring : Overall Site-wise details



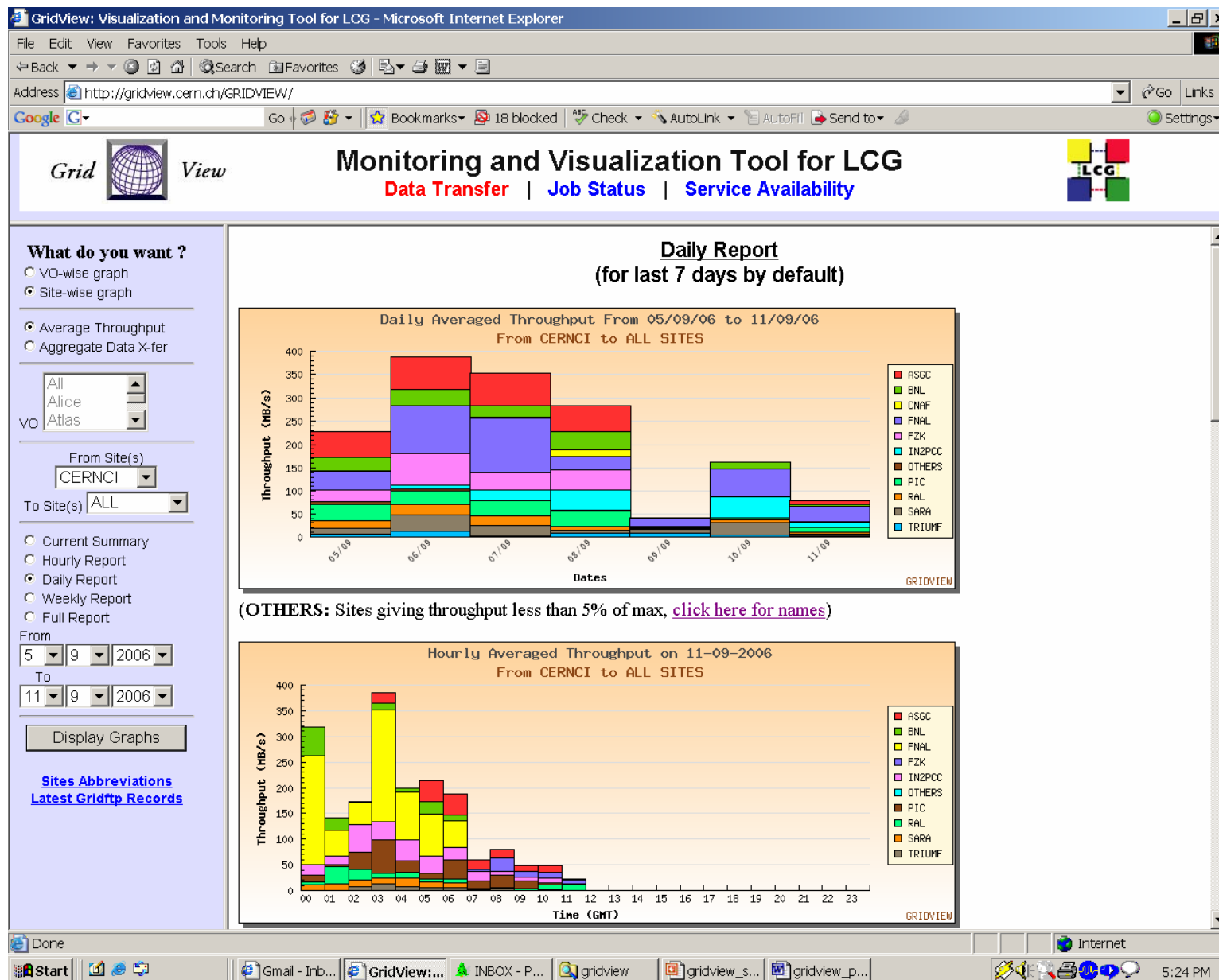
# File Transfer Monitoring : Site-wise details for a particular VO



# File Transfer Monitoring : Host-wise details for a particular Site

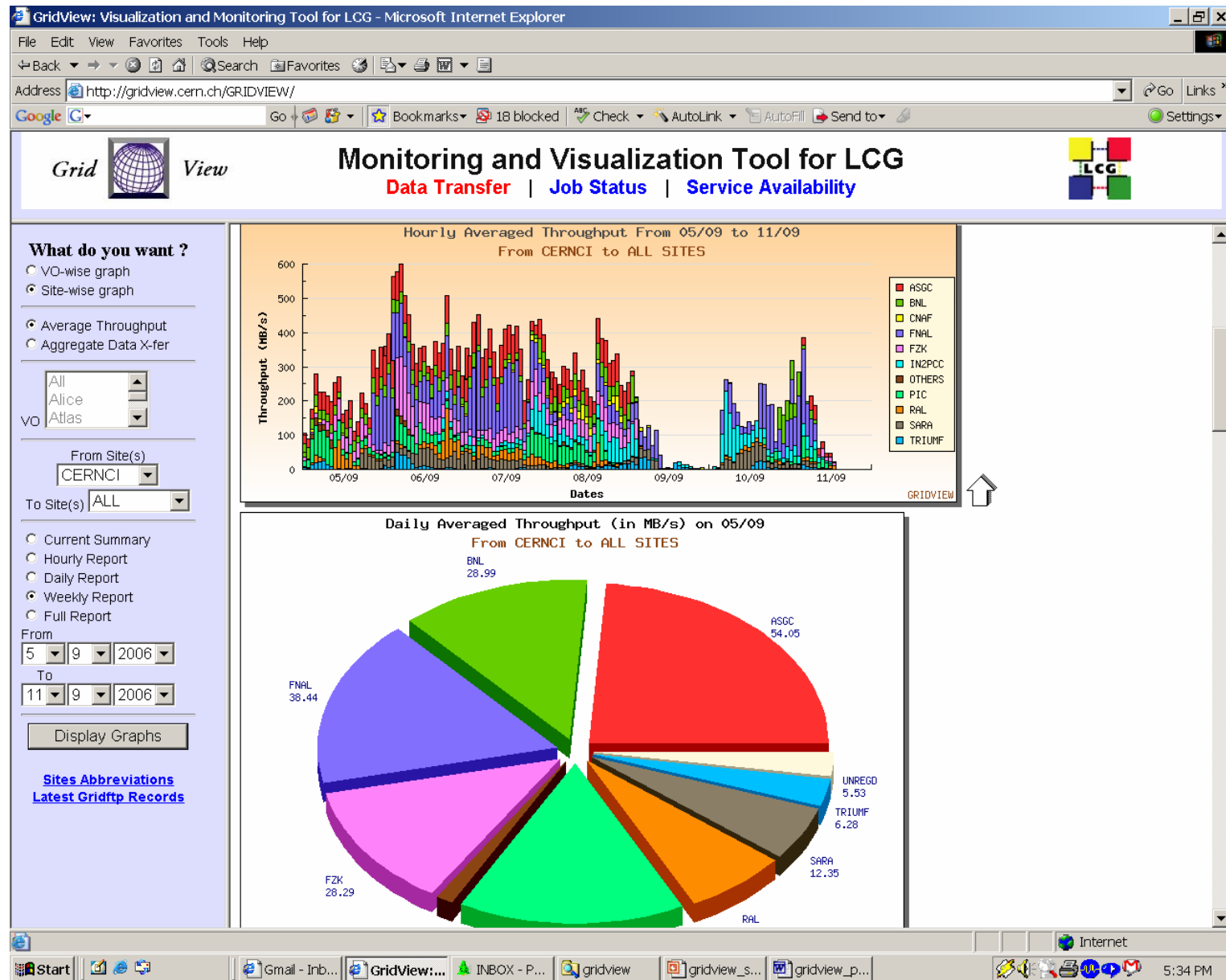


# File Transfer Monitoring : Daily Report





# File Transfer Monitoring : Weekly Report



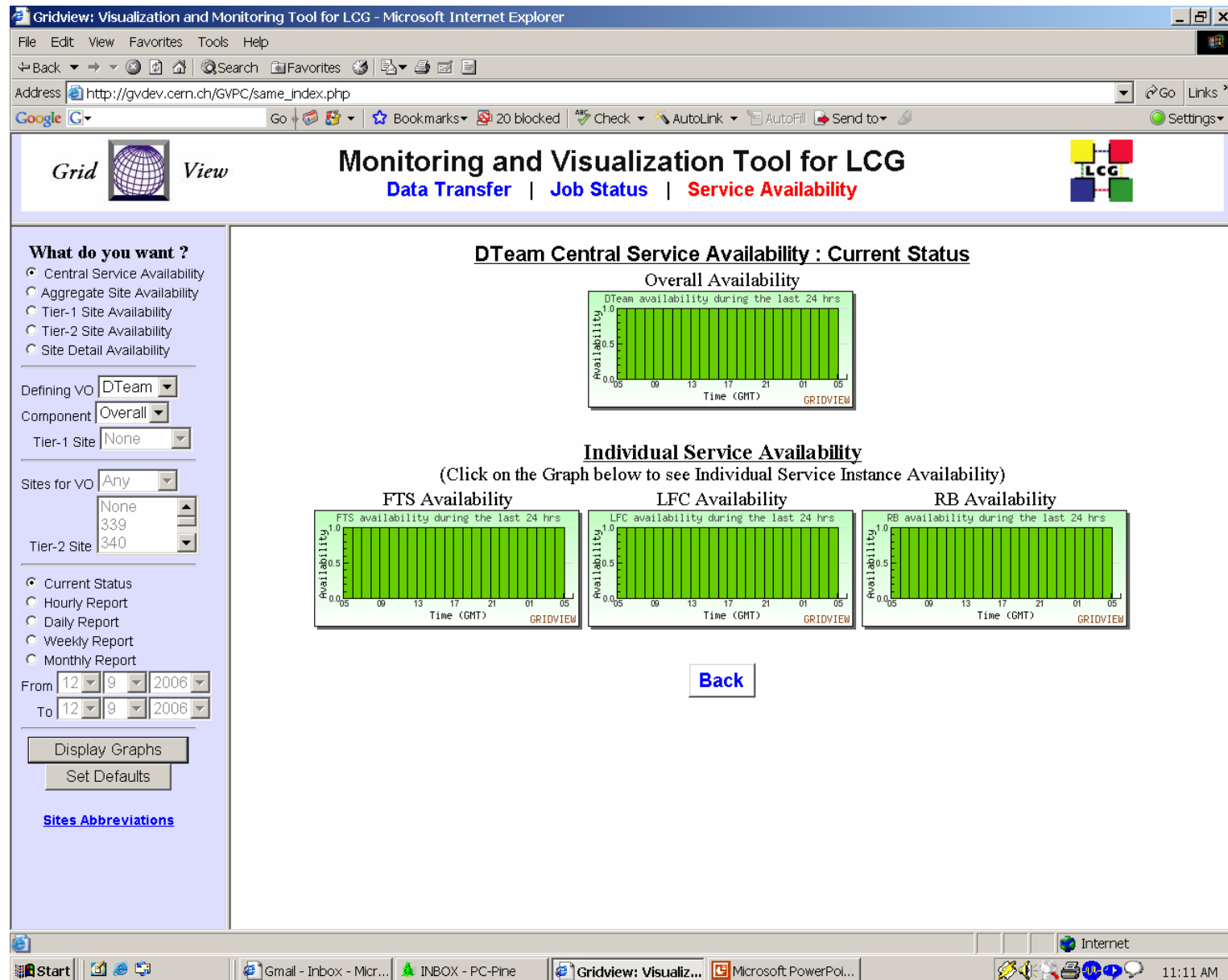
# Service Availability Monitoring

- Gridview computes Availability of Services based on SAM Test Results
  - AND (critical services) or OR (redundant services)
- Displays periodic Graphs and Reports for
  - Central Service Availability (FTS, LFC, RB)
  - Aggregate tier-1 site Availability
  - Site-wise availability for individual tier-1 sites
  - Site-wise service availability of tier-2 sites (grouped by associated VOs)
  - Detailed availability of various services (CE, SE, SRM) and their individual instances running at a particular site

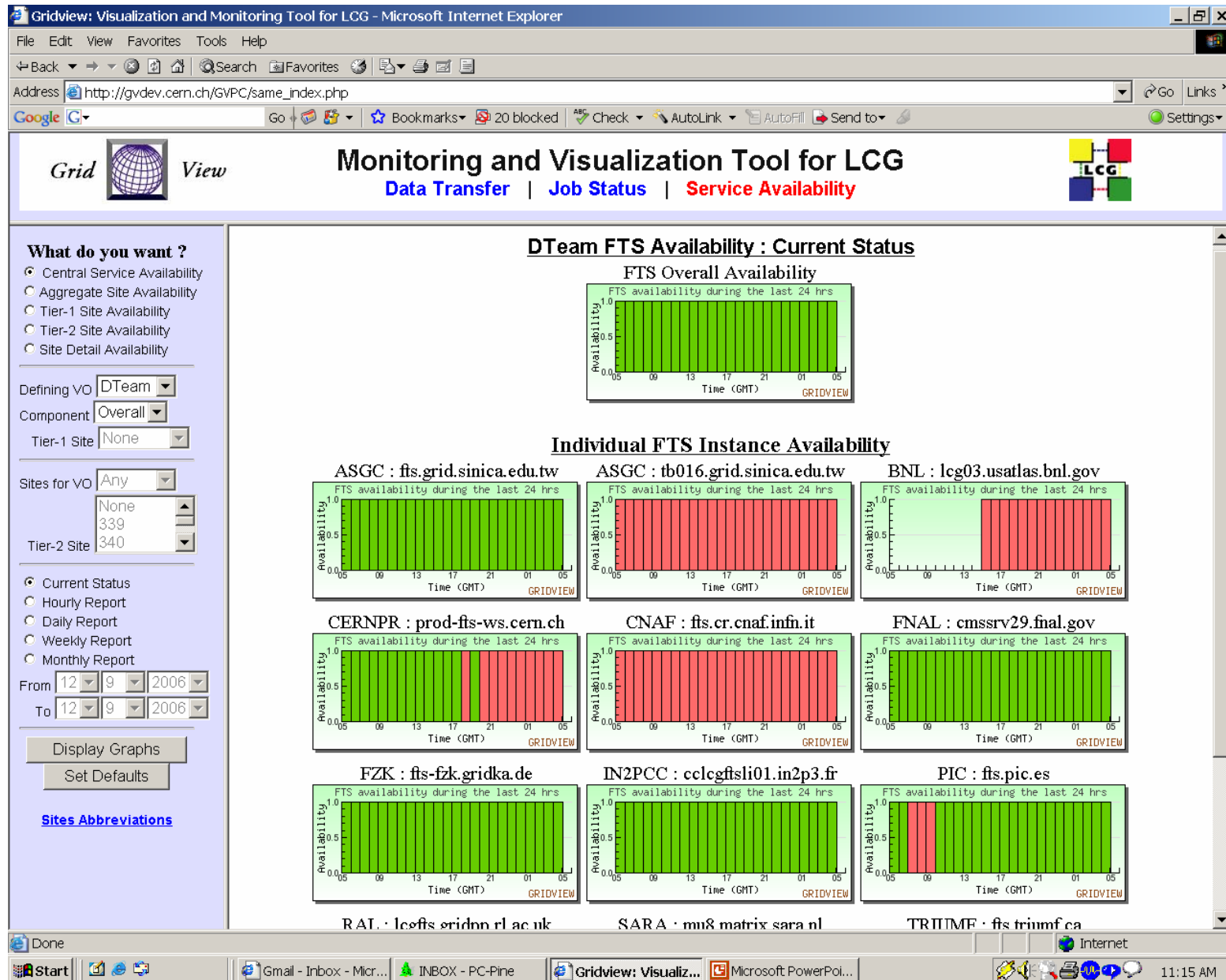
# Service Availability Monitoring (Cont...)

- Displays periodic Graphs and Reports for
  - Detailed SAM test results for tests run for services at a particular site (on-going work)
  - Hourly, Daily, Weekly and Monthly basis
  - Full traceability from aggregate Availability to detailed SAM test results
  - Provision for saving user preferences based on certificates
- Refer <http://gridview.cern.ch/GRIDVIEW/>  
( Live Demonstration )

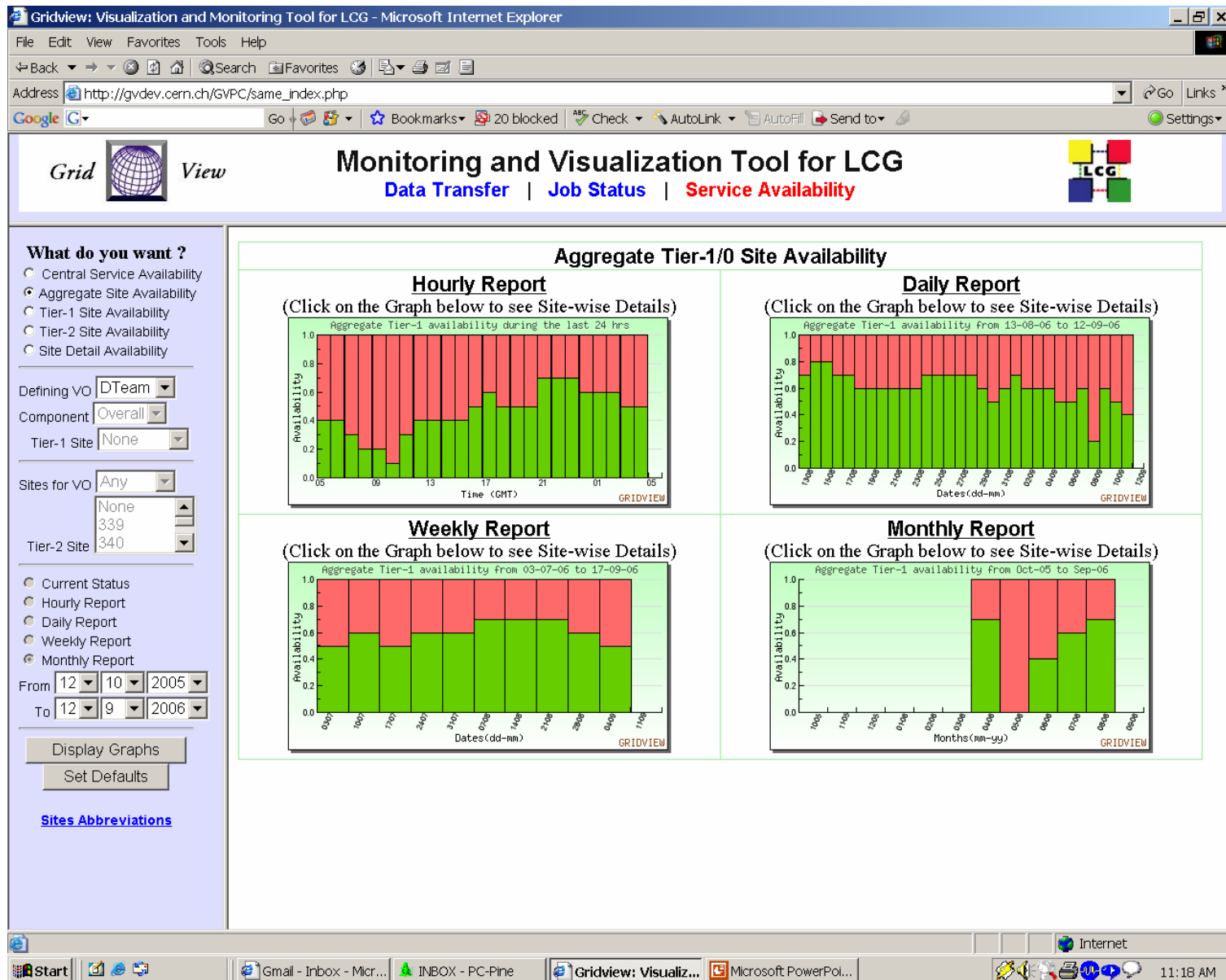
# Service Availability Monitoring : Central Service Availability



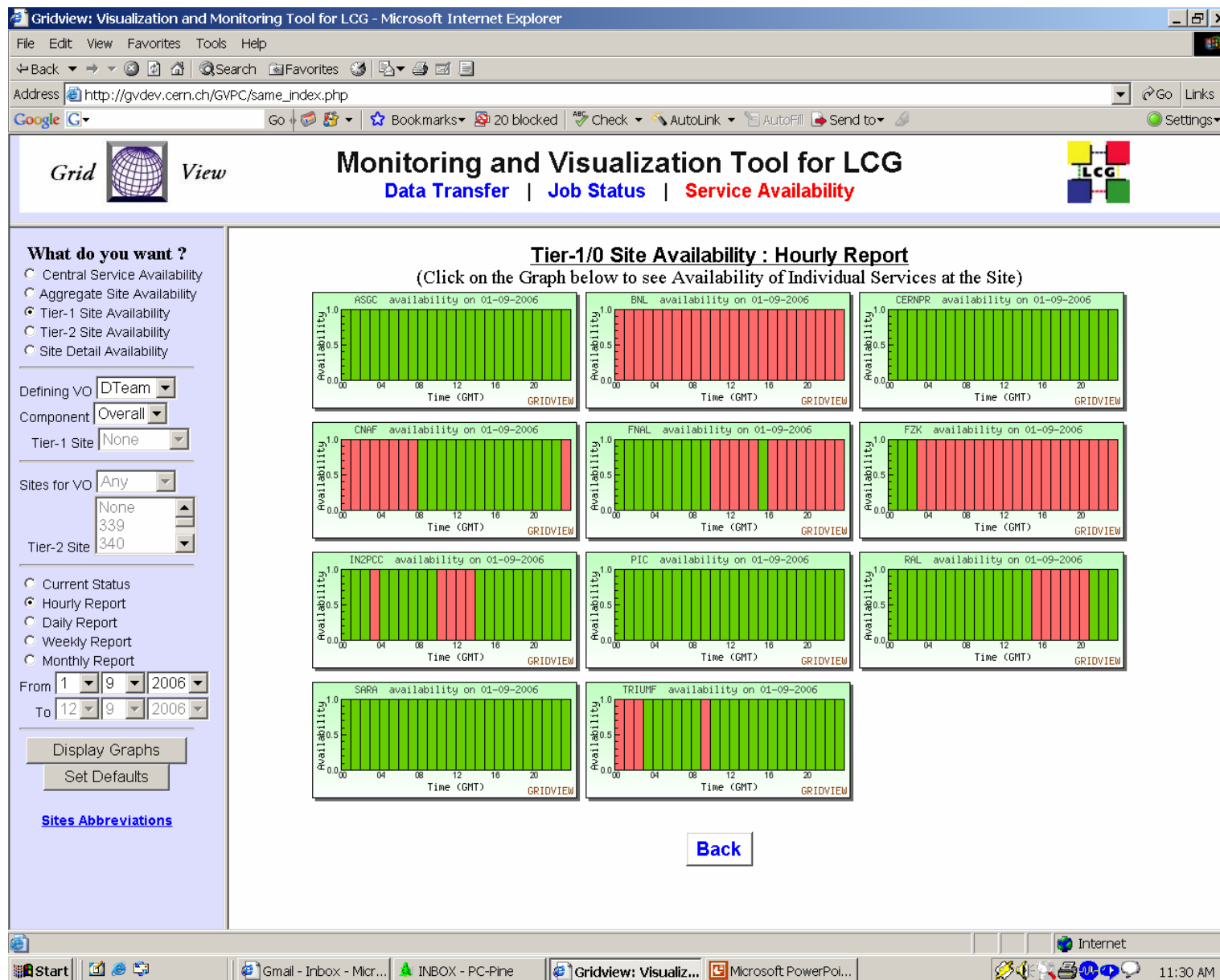
# Service Availability Monitoring : FTS Instance Availability



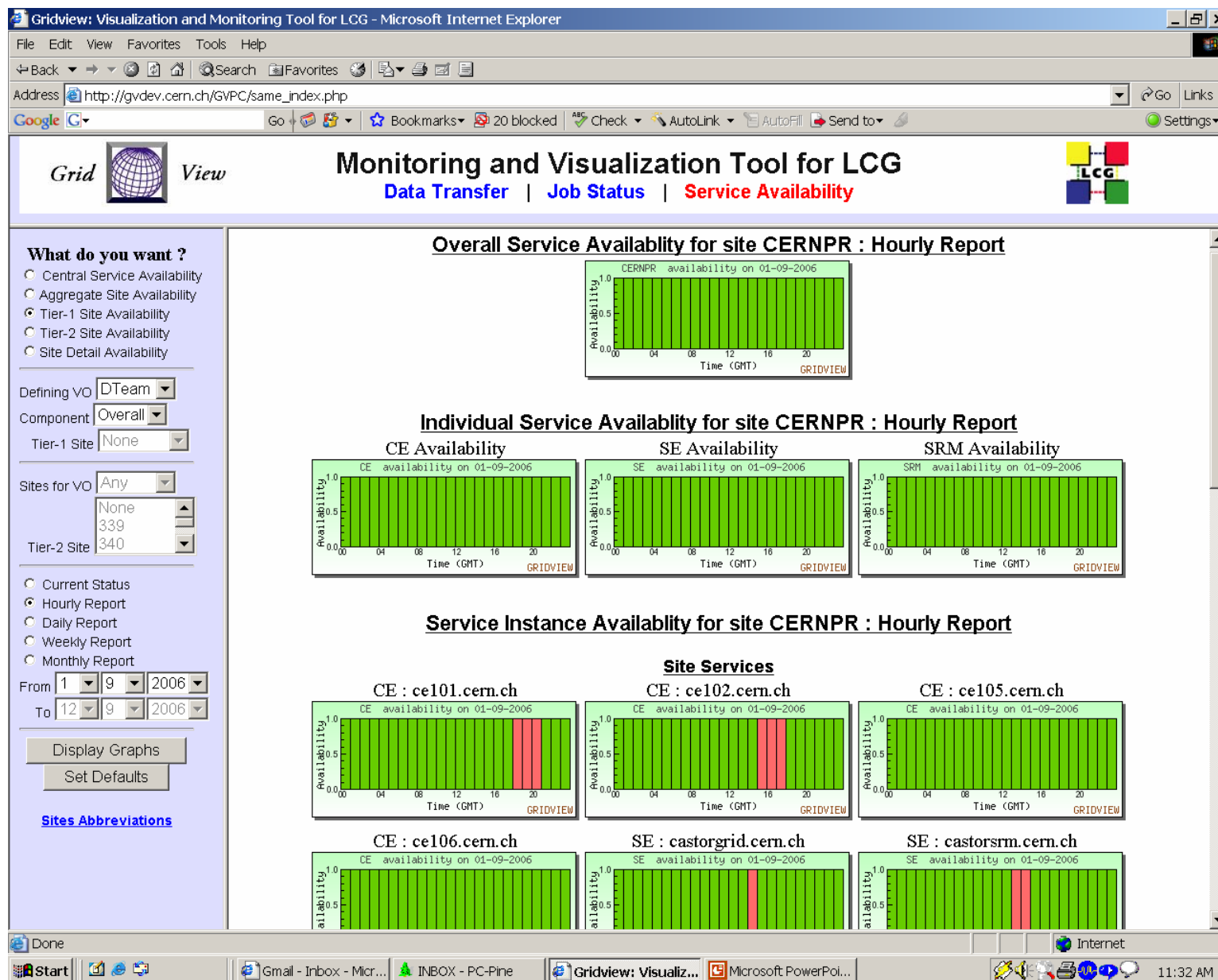
# Service Availability Monitoring : Aggregate T1 Site Availability



# Service Availability Monitoring : Tier-1 Site Availability



# Service Availability Monitoring : Site Detail Availability





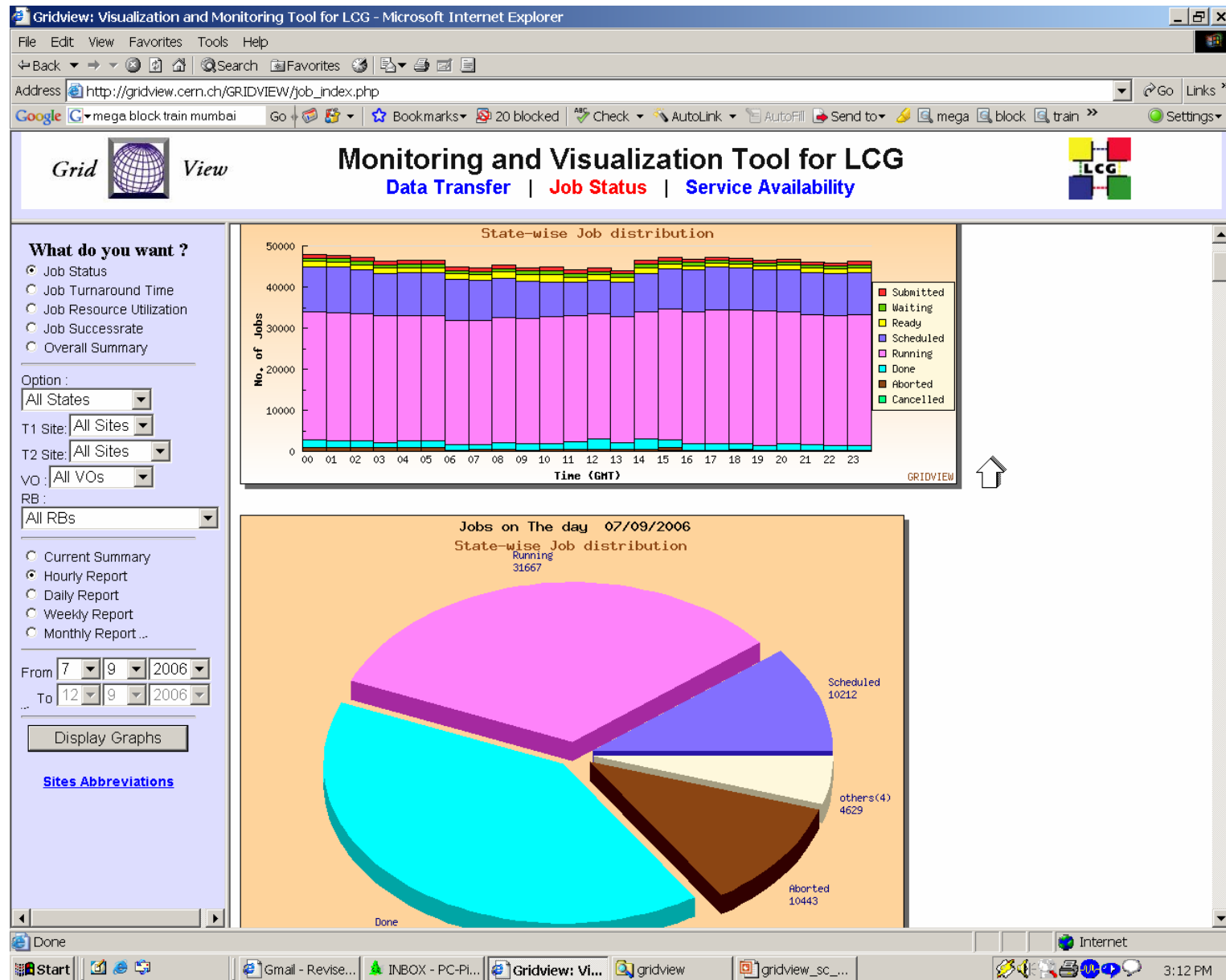
# Job Monitoring

- Gridview computes job statistics based on RB job logs
- Displays periodic Graphs and Reports for
  - Job Status (Total Number of Jobs in various States)
  - Job Success Rate
  - Job Resource Utilization (Elapsed time,CPU, Memory)
  - Average Job Turnaround time (RB Waiting, Site Waiting, Execution Time)
  - Site, VO and RB-wise distribution
  - Hourly, Daily, Weekly and Monthly reports

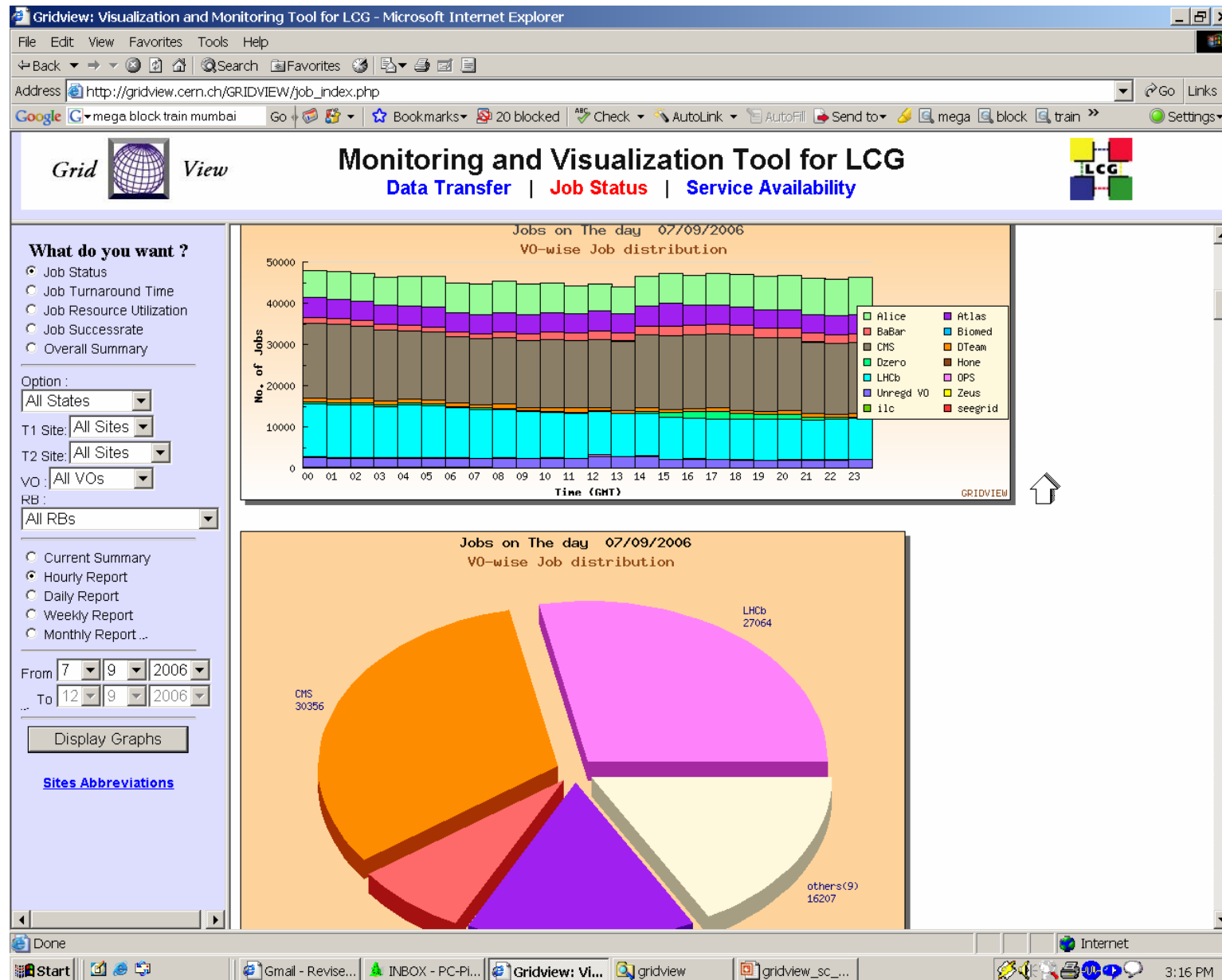
# Job Monitoring (Cont...)

- Displays periodic Graphs and Reports for
  - Overall Summary
    - sites with high/low job execution rate
    - sites with high/low job success rate
    - VOs running more/less jobs etc
  - Possible to view job statistics for any user selected combination of VO, Site and RB
- Refer <http://gridview.cern.ch/GRIDVIEW/>  
( Live Demonstration )

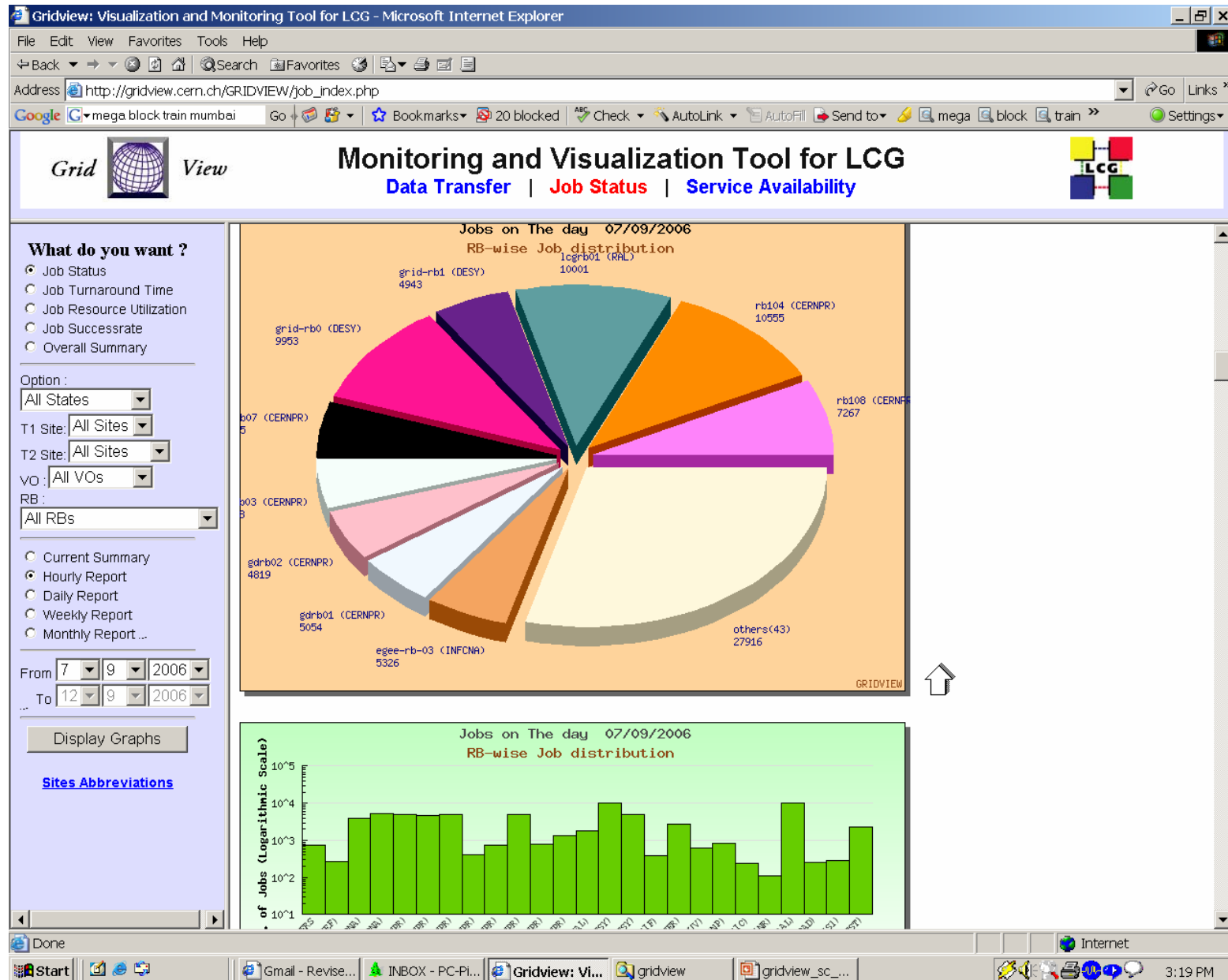
# Job Status : State-wise Distribution



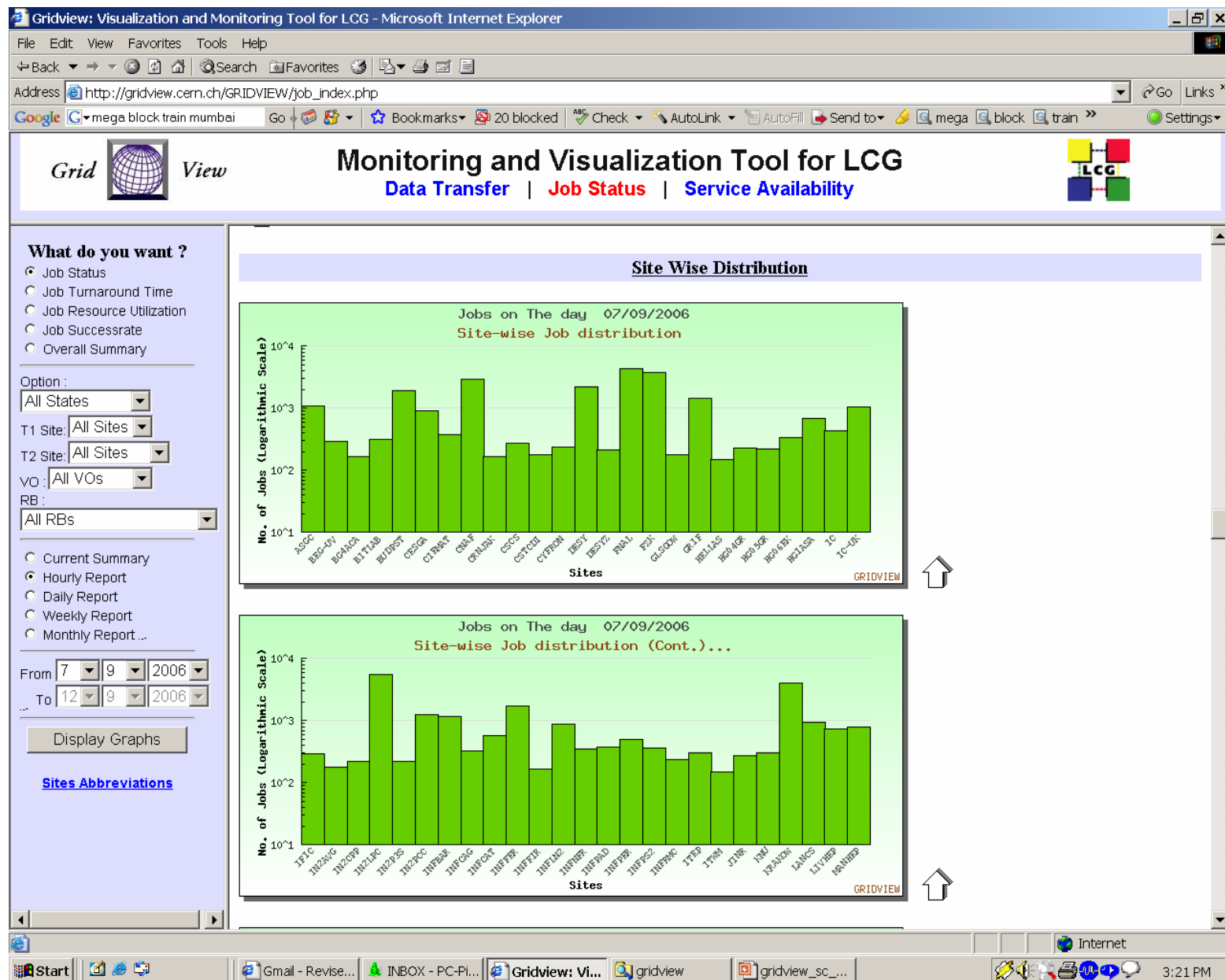
## Job Status : VO-wise Distribution



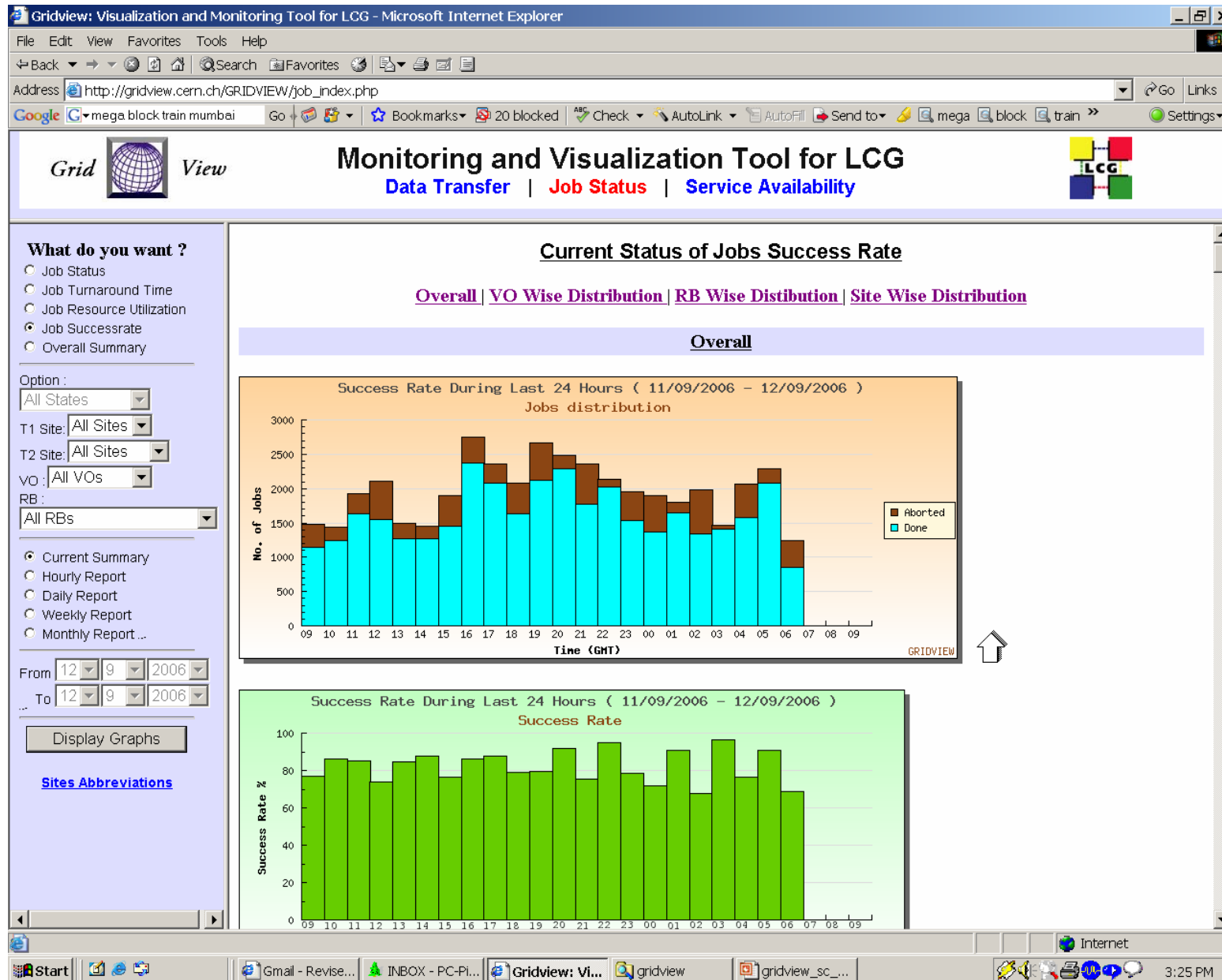
# Job Status : RB-wise Distribution



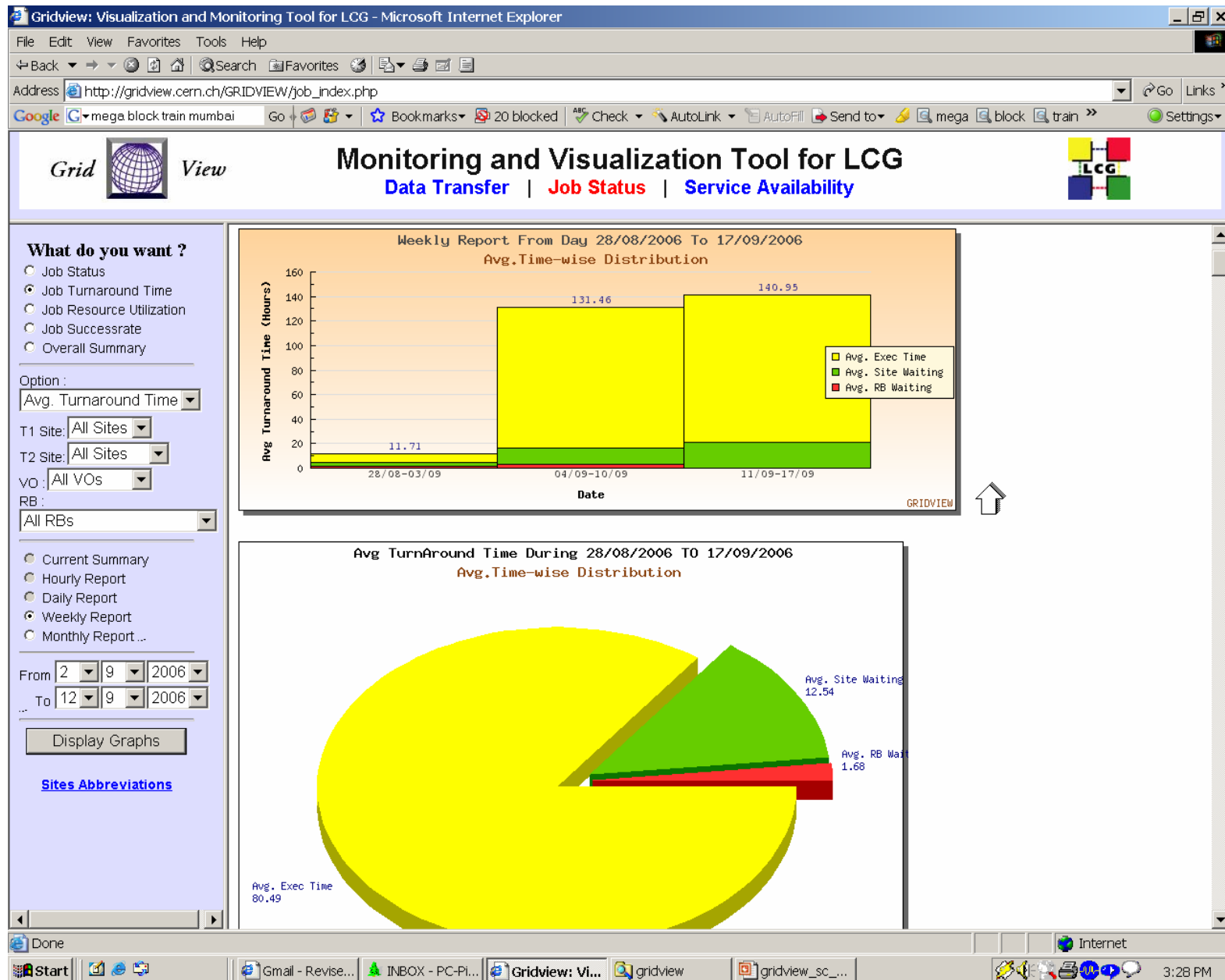
## Job Status : Site-wise Distribution



# Job Monitoring : Job Success Rate



# Job Monitoring : Average Job Turnaround time





# File Transfer Monitoring

## Future Work

- Currently GridView visualizes gridftp data transfer rates across the sites.
- FTS statistics to be visualized include
  - Successful transfers
  - Failure rates
  - VO-wise, FTS server-wise and Channel-wise details of data transfers.

# Thank You

Your comments and suggestions  
please