



*Southern
Analysis Region*

DØ Southern Analysis Region (SAR)

<http://www-hep.uta.edu/d0sar/>

A regional grid consists of a group of DØ Institutions (Institutional Analysis Centers, IAC's) centered around a data and resource hub, Regional Analysis Center (RAC), established through NSF MRI hardware grant at UTA

- Created April, 2003, at the first DØSAR workshop at UTA
- Institutions: UTA, OU, LU, LTU, Tata (India), KU, KSU, Brazil, Mexico, Rice, Ole Miss & UAZ
 - Serves: ~30F + ~20 Postdocs + ~30 Students on DØ
- Goals
 - Empower offsite remote users with desktop data analyses capability as if they are at the experiment
 - Collaborate to maximally utilize cutting edge grid technology for offsite DØ data analyses
 - Communicate and disseminate accumulated experiences to grid community and future experiments
 - Promote interdisciplinary and inter-institutional collaboration
 - Bring in human and computing resources otherwise unavailable to the collaboration
 - Participate in other global grid efforts (e.g. participation in HiPCAT)
- Hardware infrastructure being implemented and improved
 - Form Condor and PBS clusters out of desktop and dedicated farm machines
 - Mass produce DØ MC events utilizing McFarm control software
 - Increase computing resources at IAC hardware from external sources
- Various resource and MC production monitoring: <http://hepfm000.uta.edu/>
- Must work together to develop software to utilize RAC and IAC's for data analyses → DØSAM/Grid provide framework but
 - Not enough to fully implement in SAR utilizing RAC's and IAC's
- Plan to submit an ITR proposal to support the software development activities, **A PHysics Analysis Network at the Tevatron Operation Mode (PHANTOM)**