NSF Atmospheric Sciences Update

October 13, 2009

Sarah Ruth, Division of Atmospheric and Geospace Sciences
Changes in ATM

• Now Atmospheric and Geospace Sciences (AGS)
• Renaming section(s)
• Staff changes:
  – Division Director position advertised (now closed)
  – Steve Nelson acting section head
  – Brad Smull leading Physical and Dynamic Meteorology program
  – Jay Fein retiring from Climate and Large Scale Dynamics – position open
  – Farzad Kamalabadi new Aeronomy Program Director (replaces Cassandra Fesen)
  – Alex Pszenny – Atmospheric Chemistry
  – Eric DeWeaver – Climate & Large Scale Dynamics

• Always opportunities in NSF for program directors
NCAR-Wyoming Supercomputing Center
## NWSC Review Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>2009</th>
<th>2010</th>
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<tbody>
<tr>
<td></td>
<td>Jun</td>
<td>Jul</td>
</tr>
<tr>
<td>65% Design to NCAR</td>
<td></td>
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<tr>
<td>NCAR Proposal to NSF</td>
<td></td>
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<tr>
<td>Preliminary Design Review</td>
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<tr>
<td>95% Design to NCAR</td>
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<tr>
<td>100% Design to NCAR</td>
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<tr>
<td>Final Design Review</td>
<td></td>
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<tr>
<td>Environmental Assessment</td>
<td></td>
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<tr>
<td>NSB Information Item</td>
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<tr>
<td>NSF Review Complete</td>
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GEO Budget

- FY 09 estimated: $807M (+$49/FY 08)
- FY 09 ARRA (American Reinvestment & Recovery Act): $601M (~20% of NSF funds)
  ($347M for Research and Related Activities and $254M for MREFC projects)
- FY 10 request: $909M (+$102/FY 09)
GEO ARRA Funding 2009

Priorities

• Jump-start Climate Research
• Raise overall success rates
• Emphasize early career investigators and graduate research fellows
• Focus on GEO education, IGERT and Earth System Science Education
• Make strategic investments in infrastructure to offset anticipated future costs
  – Maintenance and Upgrade of Academic Fleet
  – Avionics Upgrades
  – IODP Operations
  – EarthScope O&M
• MREFC Projects: ARRV and OOI
• NCAR: $13.2 million ARRA
  + $11.5 million one-time funding
### AGS ARRA Budget

<table>
<thead>
<tr>
<th>ARRA FUNDING IN AGS</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Increase success rate and reduce out-year commitments</td>
<td>$44,000,000</td>
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<tr>
<td>Climate related awards</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>Aircraft Upgrades (to UCAR)</td>
<td>$10,700,000</td>
</tr>
<tr>
<td>Wyoming Supercomputer Project Office (to UCAR)</td>
<td>$2,500,000</td>
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<tr>
<td>Radar Upgrades (to C SWR and Univ. of Wyoming)</td>
<td>$1,000,000</td>
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<tr>
<td>Major Research Instrumentation (MRI) Program</td>
<td>$5,241,573</td>
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<table>
<thead>
<tr>
<th>ARRA FUNDING FROM GEO FRONT OFFICE TO AGS</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>New Investigators or CAREER awards</td>
<td>$10,000,810</td>
</tr>
<tr>
<td>REU sites or young investigators</td>
<td>$1,583,333</td>
</tr>
<tr>
<td>Climate related awards</td>
<td>$9,750,000</td>
</tr>
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</table>

**Total ARRA Funding:** $73,441,573

**Total ARRA Funding from Geo Front Office to AGS:** $21,334,143
Geosciences Funding

![Graph showing Geosciences Funding from FY01 to FY10 for different programs such as AGS, EAR, ICER, and OCE.]
FY 2010 GEO Priorities – additional funds:

- $46.0M NSF’s new Climate Research activity (NSF-wide, interagency):
  - Modeling, scaling, complexity
  - Water
  - Environmental observation
  - Adaptation
- $1.5M for climate change education
- $6.0M GEO/EHR broadening participation and education in the geosciences
- Additional $1.69M to CAREER for total of $12.22M
- $1.0M for graduate research fellowships
GeoVision

• Available Thursday October 15th
• Sequel to GEO 2000
• Comprehensive view of the Geosciences Directorate
Thank you!
GEO Funding Trend

Fiscal Year

$ in millions

ARRA Bump up for FY 09