



NSF Astronomy Program Status

CAA Briefing

November 4, 2013

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Outline

- General AST News
- FY13 Operating Plan/Budget
- Impacts of Lapse in Federal Appropriations
- FY14 Budget Outlook
- Portfolio Review and Decadal Survey Status
- OIR System Study



Key AST Events Since March 2013

- March: Deputy Div. Director, Patricia Knezek arrived
- March: ALMA inauguration
- June: Mid-Scale Innovations Program (MSIP) solicitation released
- June: NSF FY 2013 Operating Plan approved
- July: Dr. France Cordova named new NSF director
 - Confirmation still pending
- July: NSF TCAN awards made
- August: ATST rebaseline approved
- August: ALMA Chilean employees strike
- September: Last ALMA antenna accepted
- October: Federal government lapse in appropriations



Telescopes and Science

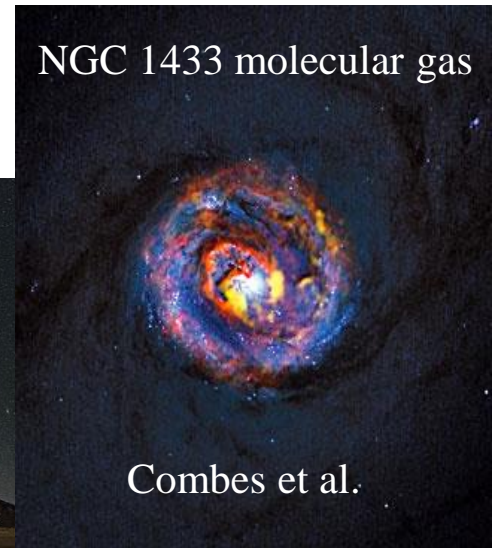
Coude lab rotator
assembly, in
Rockford, IL



ATST Coude pier, Haleakala



ALMA and Galactic Center



NGC 1433 molecular gas

Combes et al.



FY 2013 NSF Budget Description

- NSF FY 2013 budget had 2.5% cut to Research and Related Activities relative to FY 2012
 - Resulted in 4.5% reduction to Directorate for Mathematical and Physical Sciences (MPS)
- NSF stated early in 2013 that early career programs, research infrastructure, and existing awards would be protected
 - Because of large facilities, AST budget had only 0.9% reduction relative to FY 2012
 - PHY and DMS (Math) were hit very hard



Budget History/Future

	FY11	FY12	FY13 Req	FY13 Plan	FY14 Req
MPS	1312.4	1308.7	1345.2	1249.5	1386.1
AST	236.8	234.7	244.6	232.5	243.6
CHE	233.6	234.0	243.9	229.0	253.7
DMR	294.9	294.4	302.6	290.7	314.6
DMS	239.8	237.7	245.0	219.2	244.5
PHY	280.3	277.4	280.1	250.7	289.0
OMA	27.1	30.4	29.1	27.4	40.6

- All quantities given in millions of then-year dollars
- At 2.5%/yr inflation, the AST FY13 budget used by Astro2010 would have been \$297.8M.



More Details of AST FY13 Plan

- Facilities decreased as in the President's FY13 request (except NOAO, which decreased in FY12)
- No new mid-scales
- Executed some forward-funding actions to help clear space for MSIP in FY14
- Kept future commitments in Individual Investigator Programs at conservative levels

	FY11	FY12	FY13 Req	FY13 Pln	FY14 Req
AAG	48.1	44.5	~43	42.4	~42
ATI	10.4	10.5	8.5	8.7	8.5
Natl. Obs.	133.9	136.3	132.6	132.6	137.0



AAG Now and Future

- FY13 saw 637 projects proposed, 90 awarded, for a 14% funding rate
 - Accounting for collaborative proposals, 112 proposals were funded primarily through AAG, with a 15% funding rate for proposals
- Anticipate possibility of funding rates near 10% in near future
 - Need ~20% funding rate for best merit review
 - Considering options



Impacts of Lapse in Appropriations

- LSST Final Design Review postponed from October to December
 - Delayed National Science Board action from February 2014 to May 2014
- NRAO-North America shut down because of lack of FY 2014 funds, several other facilities were close to depleting FY 2013 funds
- Mid-Scale Innovations Program schedule will be delayed approximately one month
 - Expect invitation letters to be issued in January, full proposals due in March 2014
- Delayed closure on plans for CAA O/IR study
- Minor delays in deadlines, rescheduled one panel



FY14 Request/Markups

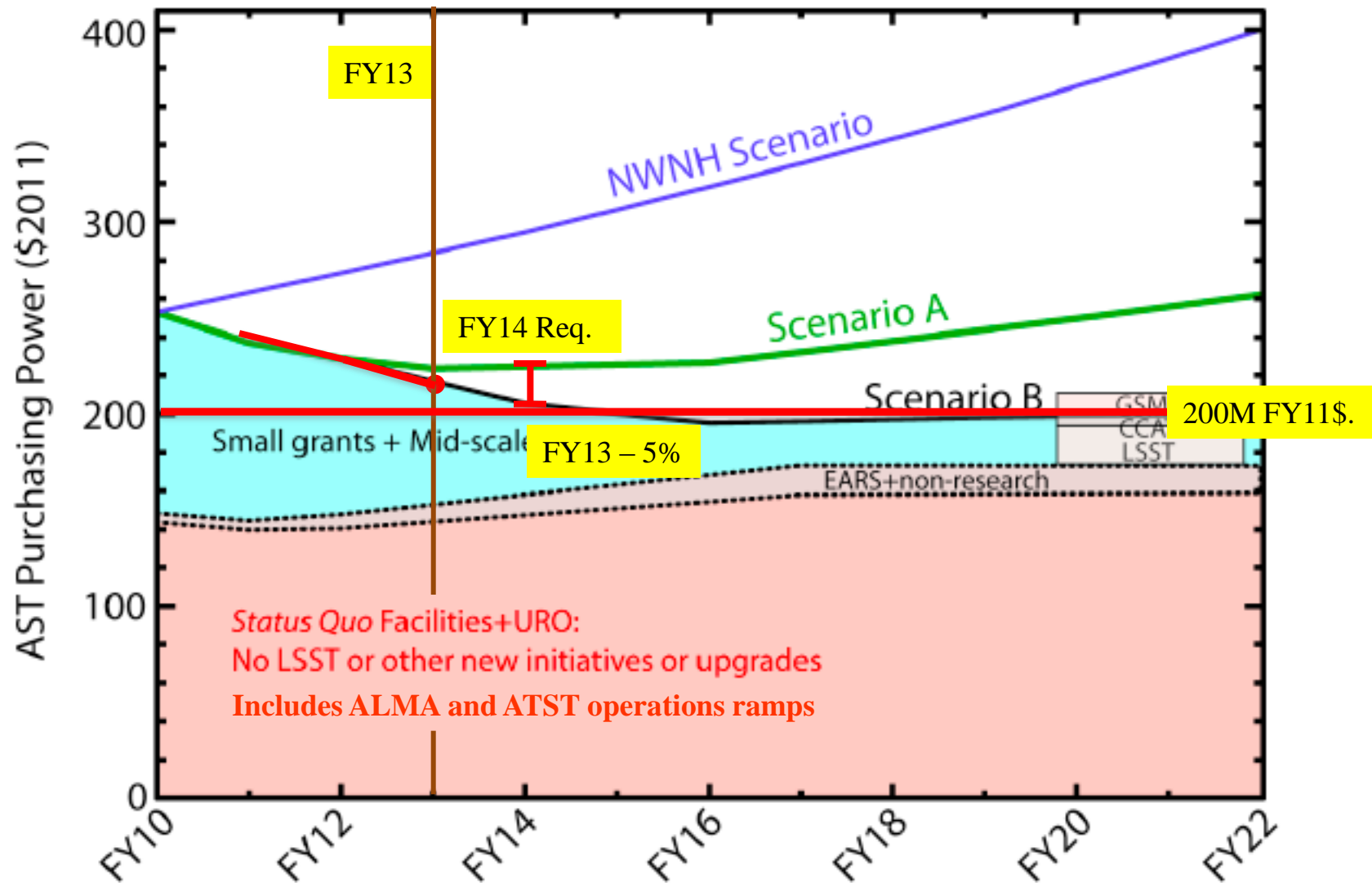
- Good news in President's FY14 Request
 - Strong support of NSF overall
 - LSST funding is requested in MREFC line
 - Mid-Scale Innovations Program start
- House and Senate committees used different funding assumptions, and thus produced different budgets for NSF
 - Outcome remains in doubt



FY14 Expectations

- In FY 2013 sequester budget, NSF Director set priorities that provided full support for early-career scientists, existing awards, and research infrastructure
 - Consequence: new individual investigator awards bore a disproportionate share of sequester cuts
- NSF hopes that Congress fully supports the FY 2014 NSF budget request, which we are prepared to execute
- In the event of sequester, or a Continuing Resolution near sequester levels, expectations are that the protections of research infrastructure at the expense of individual investigators would not be repeated
 - Research facilities would share at least proportionately in any budget reductions
 - For AST, this could mean a 5%-10% budget reduction relative to FY 2013 levels

Portfolio Review Budget Scenarios





Portfolio Review Status

- AST advertised that divestment decisions will be made “near the end of CY 2013”
 - Decisions will require consideration of alternatives according to NEPA, NHPA, and ESA
 - Preparing Dear Colleague Letter to community
- Note the context of management competitions
 - NOAO solicitation has been issued, telescopes on Kitt Peak are not in primary scope of work, although allowance is made for partner funding
 - Announced that GBT and VLBA would be separated from NRAO competition
- Many partnership discussions with other agencies, universities, etc., but funding is tight everywhere



Decadal Survey (NWNH) Status

- LSST is in FY 2014 President's request, Final Design Review re-scheduled
- MSIP is in FY 2014 President's request, solicitation was released, and proposals are in
- NSF and community participating in TMT Board, Science Advisory Committee, via planning award
- Only CTA opportunity is through MSIP
- Only CCAT opportunity is through MSIP
- “Small” recommendations: TCAN (Theoretical and Computational Astrophysics Network) started with NASA, no funds available for other recommended increases



O/IR System Study

- Multiple telecons and discussions among NSF, NRC, and CAA chairs since March
 - Focused on statement of work and desired outcomes
- Proposal received in September
 - Telecon in early October lost to the shutdown, delayed to October 28
- Complex points have included definition of O/IR system, output expected/desired by NSF, method for establishing realistic boundary conditions regarding funding, and relatively short timescale
 - Aiming for convergence this month



Questions / Discussion

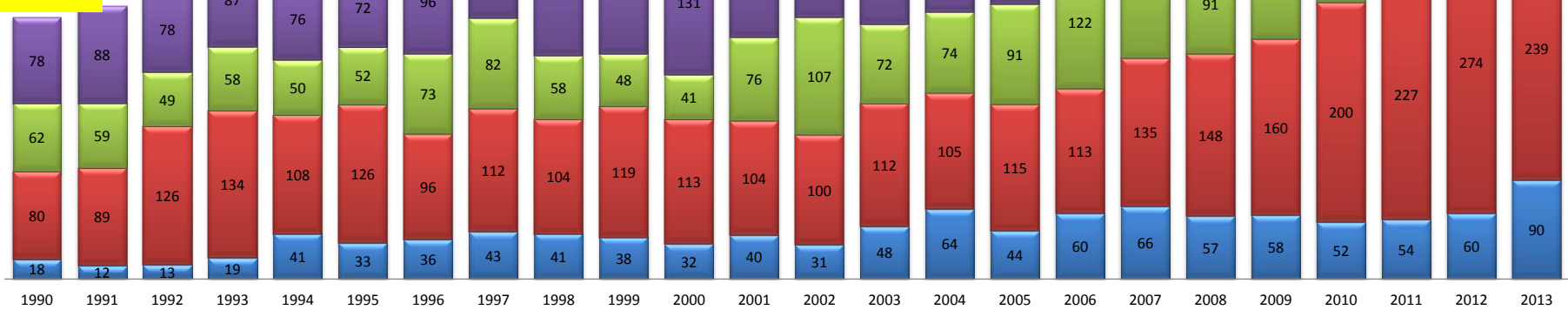


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Proposals Reviewed in AAG

PLA SAA
GAL EXC

238

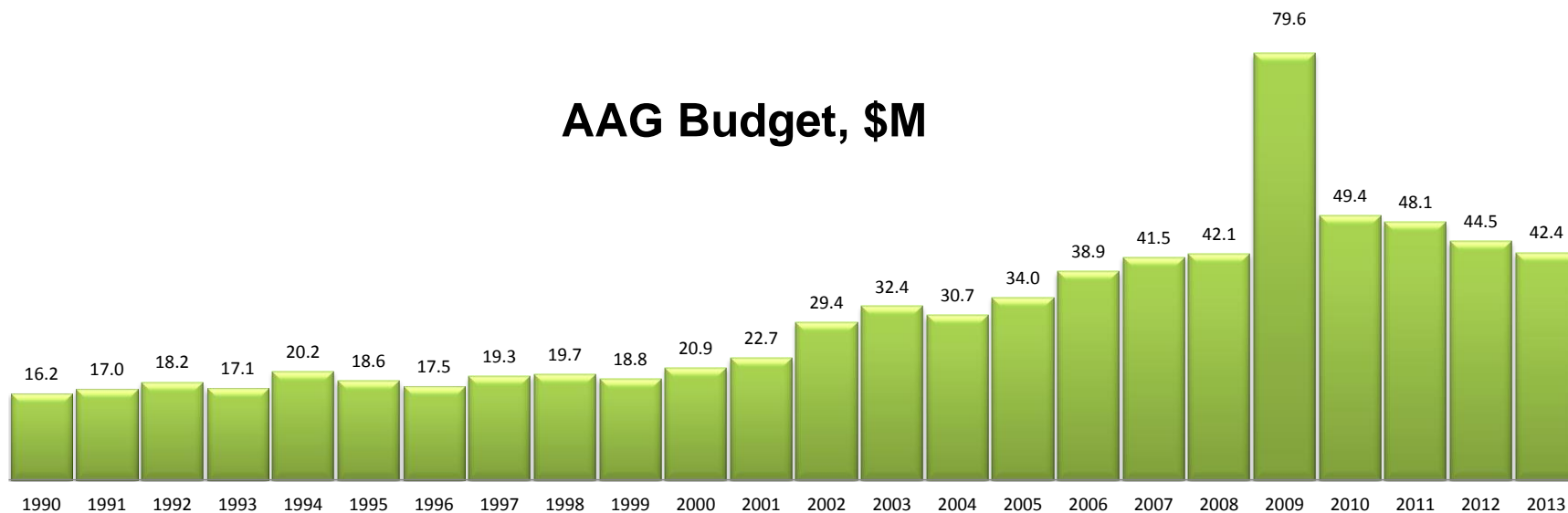


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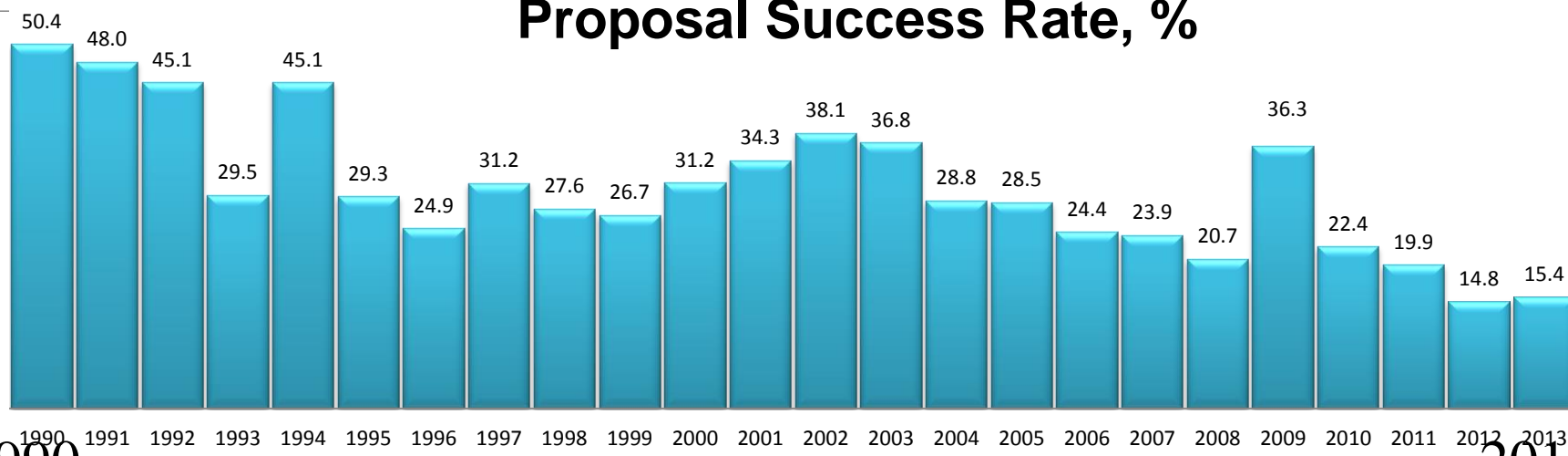
2013



AAG Budget, \$M



Proposal Success Rate, %



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2013