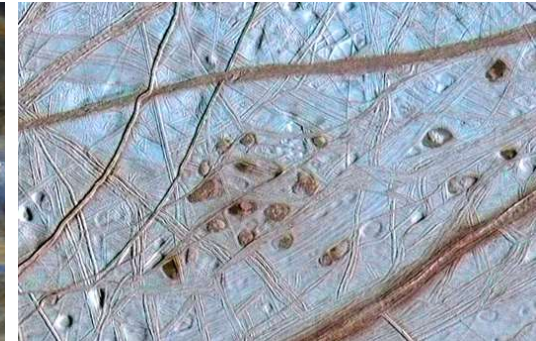
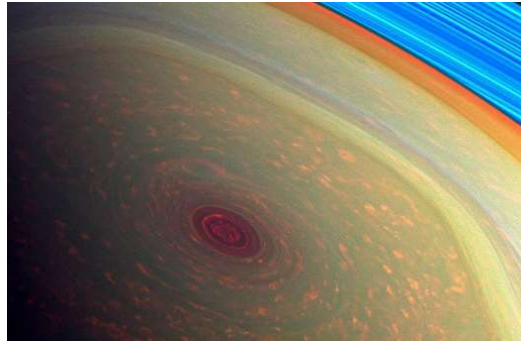


SCIENCE

National Aeronautics and
Space Administration



PLANETARY SCIENCE DIVISION Research & Analysis

Stephen Rinehart

Planetary Research Director
Planetary Science Division
Science Mission Directorate, NASA
Stephen.A.Rinehart@nasa.gov

September 23, 2019

Research & Analysis Program Outline

- Introduction
- Program Updates
- Program Due Dates (ROSES 2018 & 2019)
- FINESST (NESSF) Update
- Selection Stats
- Speed of Money
- Templates

Who is this guy?

- Senior Astrophysicist at NASA GSFC (Civil Servant since 2004)
 - Associate Project Scientist for HST
 - Project Scientist for TESS
 - PI for the Balloon Experimental Twin Telescope for Infrared Interferometry
 - Lots of other R&A programs (out of Astro)
- Yes, I'm an instrument guy
- Involved with PSD Technology programs as a reviewer for many years
- Joined PSD on detail in May 2018
 - Lead for XRP
 - Lead for PICASSO
- Appointed as Acting Director of R&A for PSD September 3, 2019

General R&A Updates

ROSES 2019 released on March 14, 2019

National Academies Study on Investments in Instrumentation & Facilities:

- Report completed <https://www.nap.edu/catalog/25312/strategic-investments-in-instrumentation-and-facilities-for-extraterrestrial-sample-curation-and-analysis>

National Academies Study on R&A Restructuring

- Report completed <https://www.nap.edu/catalog/24759/review-of-the-restructured-research-and-analysis-programs-of-nasas-planetary-science-division>

Archiving manuscripts – policy for all NASA funded work to be put into PubSpace (part of PubMed)

<https://www.nasa.gov/open/researchaccess/pubspace>

General R&A Update

Impacts to R&A due to 35-day Government Shutdown

- ROSES 2019 rollout delayed by ~1 month, impacting earliest program element due dates
- Proposal due dates for 2018 Habitable Worlds and Solar Systems Workings delayed ~2 months, LDAP ~1 month
- Review panels for five 2018 programs delayed (PICASSO, HW, SSW, LDAP, KPLO), puts pressure on 2019 reviews
- SSERVI panel review delayed
- Backlog of NSSC has delayed grants for up to 4 months

Planetary Science Division - ROSES 18

Program Name	Step-1 Due Date	Step-2 Due Date	Panel Occurred	Selections/Submissions (Selection rate%)	Selection Date	Days from Step-2 to Select
Exobiology (EXOB)	04/16/2018	05/24/2018	Yes	23/156 (15%)	10/17	146
Exoplanets (XRP)	03/29/2018	05/30/2018	Yes	16/117 (14%)	10/03	126
Exoplanets (XRP) 2	03/29/2019	05/29/2019	Yes	XX/184		
Emerging Worlds (EW)	04/12/2018	06/01/2018	Yes	29/110 (26%)	10/18	139
Development & Advance of Lunar Instruments (DALI)	04/03/2018	06/05/2018	Yes	10/48 (17%)	10/26	143
Solar System Obs. (SSO)	04/05/2018	06/07/2018	Yes	10/66 (15%)	03/11	277
MatISSE	04/18/2018	06/20/2018	Yes	8/56 (14%)	11/09	142
Laboratory Analysis of Returned Sample (LARS)	05/24/2018	07/26/2018	Yes	12/26 (46%)	04/30	278
Planetary Data Archiving, Restoration, Tools (PDART)	05/10/2018	07/12/2018	Yes	16/91 (18%)	11/19	130
Cassini Data Analysis (CDAP) C. 10	06/01/2018	08/14/2018	Yes	18/61 (30%)	03/18	216
Cassini Data Analysis (CDAP) C. 26				2/7 (29%)	03/31	114
New Frontiers Data Analysis Program (NFDAP)	06/12/2018	08/23/2018	Yes	10/25 (40%)	03/08	197
Apollo Next Generation Sample Analysis (ANGSA)	06/22/2018	08/21/2018	Yes	9/26 (35%)	03/11	202
Planetary Major Equipment/Facilities (PMEF)	07/17/2018	09/17/2018	Yes	XX/11	TBD	
Mars Data Analysis (MDAP)	08/23/2018	10/25/2018	Yes	24/103 (23%)	05/19	206
Discovery Data Analysis (DDAP)	08/30/2018	11/01/2018	Yes	6/22 (27%)	06/14	225
Rosetta Data Analysis Program (RDAP)	08/30/2018	11/01/2018	Yes	7/23 (30%)	06/19	230
PICASSO	09/20/2018	11/20/2018	Yes	11/91 (12%)	04/29	160
Habitable Worlds (HW)	11/15/2018	03/29/2019	Yes	XX/60	TBD	
Solar System Workings (SSW)	11/15/2018	04/02/2019	Yes	XX/338	TBD	
Lunar Data Analysis (LDAP)	11/29/2018	03/29/2019	Yes	XX/37	TBD	
Korean Pathfinder Lunar Orbiter (KPLO)	04/11/2019	06/11/2019	No	XX/26	TBD	
Planetary Protection Research (PPR)	04/12/2019	05/10/2019	Yes	XX/35	TBD	

Program Name	Step-1 Due Date	Step-2 Due Date	Panels Held	Selections/ Proposals	Selection Dates
Exoplanets (XRP)*	N/A	N/A	Yes	TBD	TBD
Planetary Protection Research (PPR)	N/A	N/A	No	TBD	TBD
Emerging Worlds (EW)	04/16/2019	06/12/2019	Yes	XX/100	TBD
Development & Advance of Lunar Instruments (DALI)	04/16/2019	06/12/2019	Yes	XX/44	TBD
Solar System Obs. (SSO)	04/16/2019	06/12/2019	No	XX/49	TBD
MATISSE	N/A	N/A	No	TBD	TBD
Laboratory Analysis of Returned Sample (LARS)	04/24/2019	06/25/2019	No	XX/23	TBD
Planetary Data Archiving, Restoration, Tools (PDART)	05/09/2019	07/11/2019	Yes	XX/112	TBD
Exobiology (EXOB)	05/13/2019	06/12/2019	No	XX/159	TBD
Cassini Data Analysis (CDAP)	05/16/2019	07/18/2019	No	XX/61	TBD
New Frontiers Data Analysis Program (NFDAP)	05/30/2019	08/01/2019	No	XX/27	TBD
Planetary Science and Technology Through Analog Research (PSTAR)	07/25/2019	10/10/2019	No	TBD	TBD
Planetary Major Equipment/Facilities (PMEF)	08/20/2019	10/22/2019	No	TBD	TBD
Mars Data Analysis (MDAP)	08/22/2019	10/24/2019	No	TBD	TBD
Discovery Data Analysis (DDAP)	08/29/2019	11/01/2019	No	TBD	TBD
Rosetta Data Analysis Program (RDAP)	N/A	N/A	No	TBD	TBD
PICASSO	09/20/2019	11/20/2019	No	TBD	TBD
Early Career Award (C.19)	N/A	12/02/2019	No	TBD	TBD
Habitable Worlds (HW)	11/15/2019	01/17/2020	No	TBD	TBD
Solar System Workings (SSW)	11/15/2019	01/30/2020	No	TBD	TBD
Lunar Data Analysis (LDAP)	11/26/2019	02/27/2020	No	TBD	TBD

* Amended into ROSES 2018 as a second round

Slide 7

TM(STS18 This needs to update, talk to LaJuan

Thompson, Meagan (HQ-DG000)[Arctic Slope Technical Services, Inc.], 9/10/2019

TM(STS124 Meagan updated

Thompson, Meagan (HQ-DG000)[Arctic Slope Technical Services, Inc.], 9/16/2019

ROSES 20 Look Ahead

- What's old
 - Apollo Next Generation Sample Analysis
 - LunaTech (never got started)
 - KPLO (next presentation)
- What's new
 - DART PSP
- Changes to XRP
 - Cross-divisional now – contributions from all four science directorates
 - Joint review and selection

Interdisciplinary Consortia for Astrobiology Research (ICAR)

ICAR replaces the NASA Astrobiology Institute (NAI)

Published: Aug 15, 2019

C.23 ICAR Schedule Update

[C.23 Interdisciplinary Consortia for Astrobiology Research](#) will be updated to note that final text of that program element will be released by October, 2019. Step-2 proposals will be due no fewer than 90 days after release of the final text. Questions regarding this program element may be directed to Mary Voytek at mary.voytek-1@nasa.gov.

Future Investigators in NASA Earth and Space Science and Technology (FINESST)

- Significant increase in proposal submissions over the past years – 300 submitted March 11, 2019 (delay due to shutdown)
- + • Starting in 2019, major change to bring more in line with other grants programs
 - Change does not impact renewal NESSF awards
- In 2017, award amount increased to \$45K (\$35K stipend + \$10K for travel to conferences and seminars, health insurance policy, books, tuition and fees, etc.)
 - Funding change impacts existing renewal NESSF awards
- Overall budget for awards has not changed

Early Career Awards

Scope

- To support research, professional development, and community involvement of outstanding early-career scientists, in areas supported by the Planetary Sciences Division.
- Approximately five awards per year, each up to \$200K (made one time, must be used within five years)

Main Eligibility Requirements

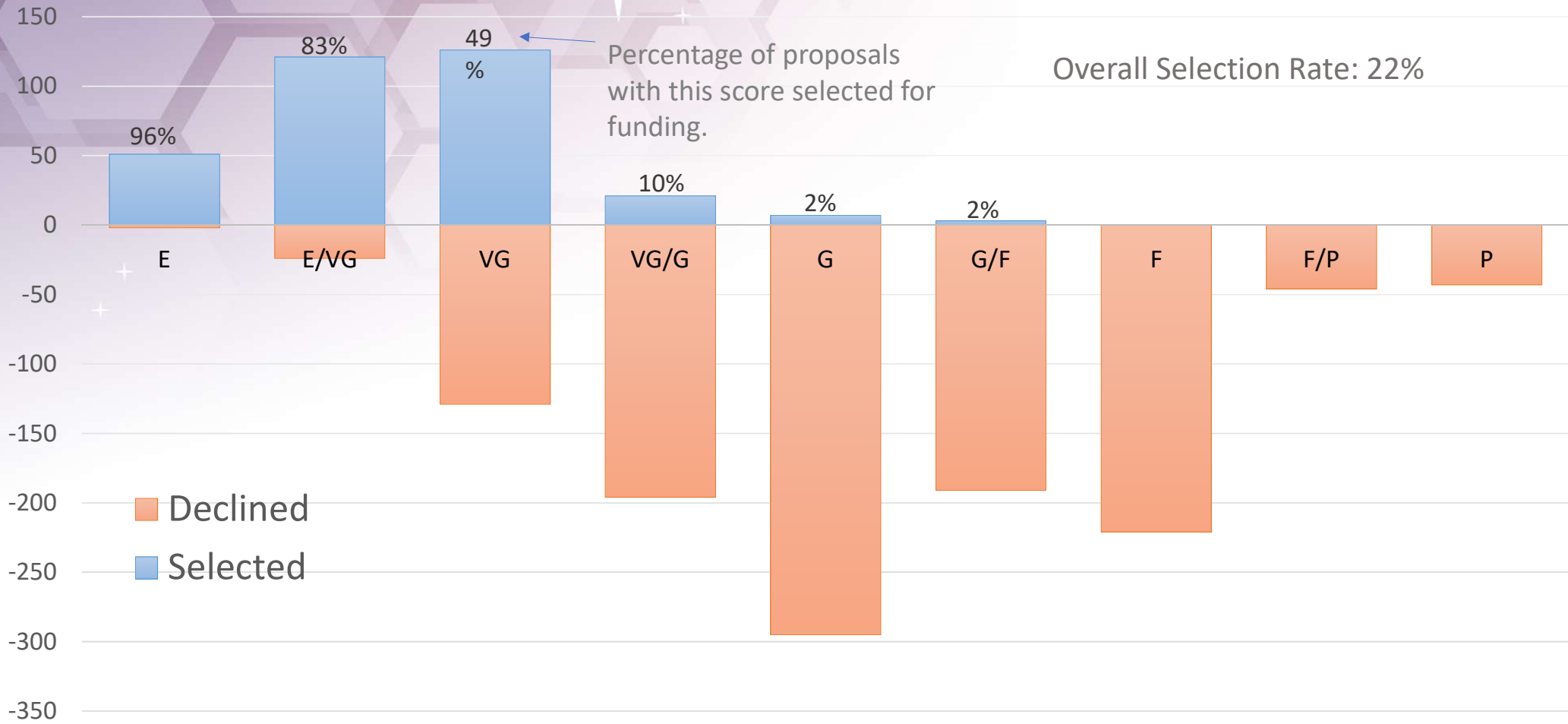
Applicant must:

- Be PI (or Science-PI) on a 'parent award' from a participating program element in ROSES-2017/ROSES-2018
- Have received Ph.D. no earlier than January 1, 2009
- Be affiliated with a U.S. institution
- Only submit one proposal to the Early Career Award (ECA) program per ROSES year
- Not be previous recipient of NASA Early Career Fellowship funds (previously-named Fellows who have not received funds may apply to the ECA program if otherwise eligible)

Submission Package

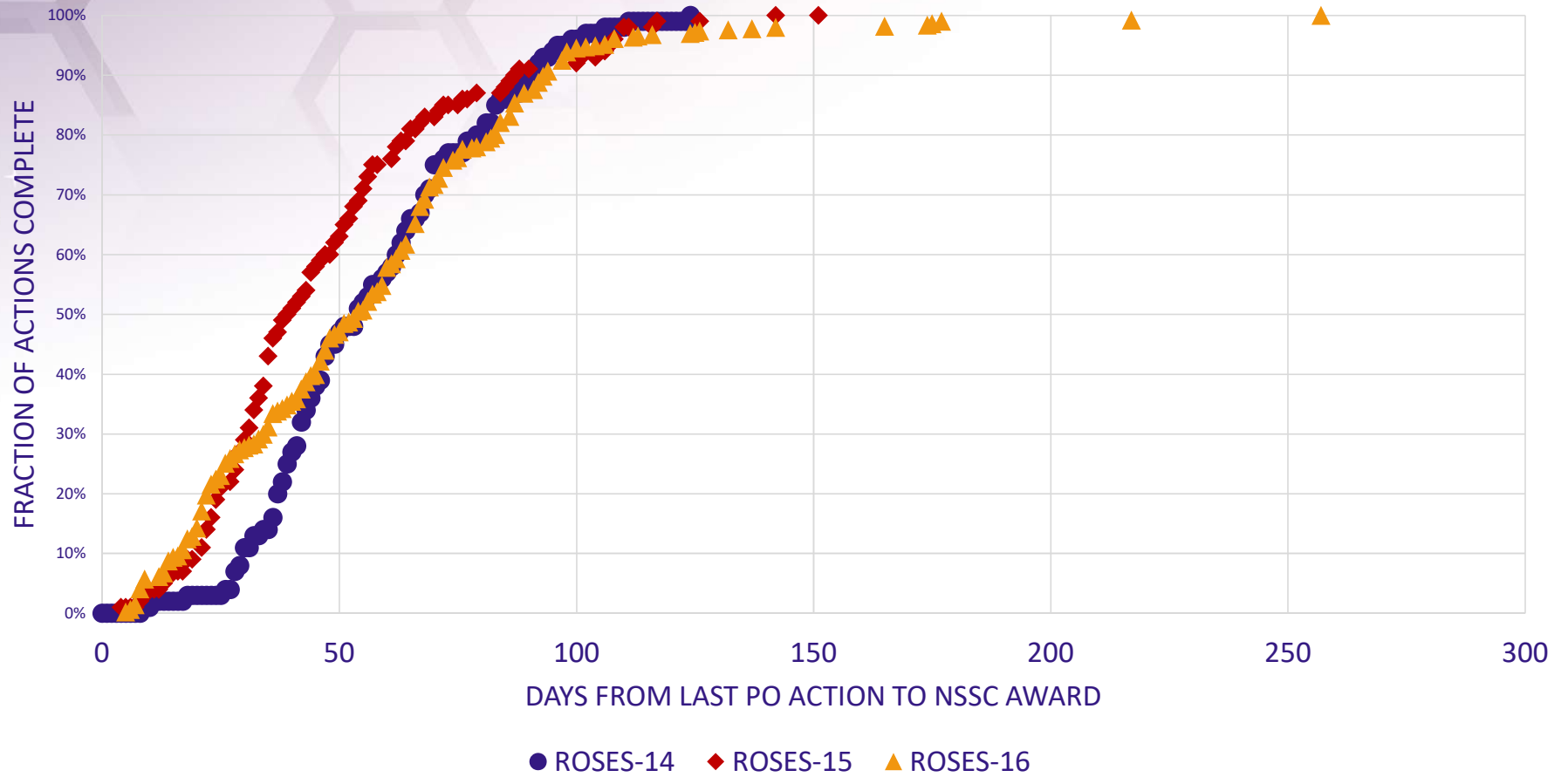
- December 2019 deadline for ROSES-19
- (1) Parent proposal information, (2) Personal statement, (3) CV, (4) Publication history, (5) Outline of intended use of funds (full budget will be required for selected proposals), (6) Letters of support
- Full details in ROSES-2019 (C.19)
- Point of Contact: Shoshana Weider (shoshana.z.weider@nasa.gov)

PSD R&A SELECTIONS – ROSES 2017



Metrics for proposals submitted to ROSES 2017, including all core programs (EW, EXO, HW, PPR, SSO, SSW), all DAPs (CDAP, DDAP, LDAP, MDAP, NFDAP(2016), RDAP), technology/laboratory/data/tools (LARS, PICASSO, PDART, PSTAR) and participating scientist (InSight, OREx) ¹²

Speed of Money



Slide 13

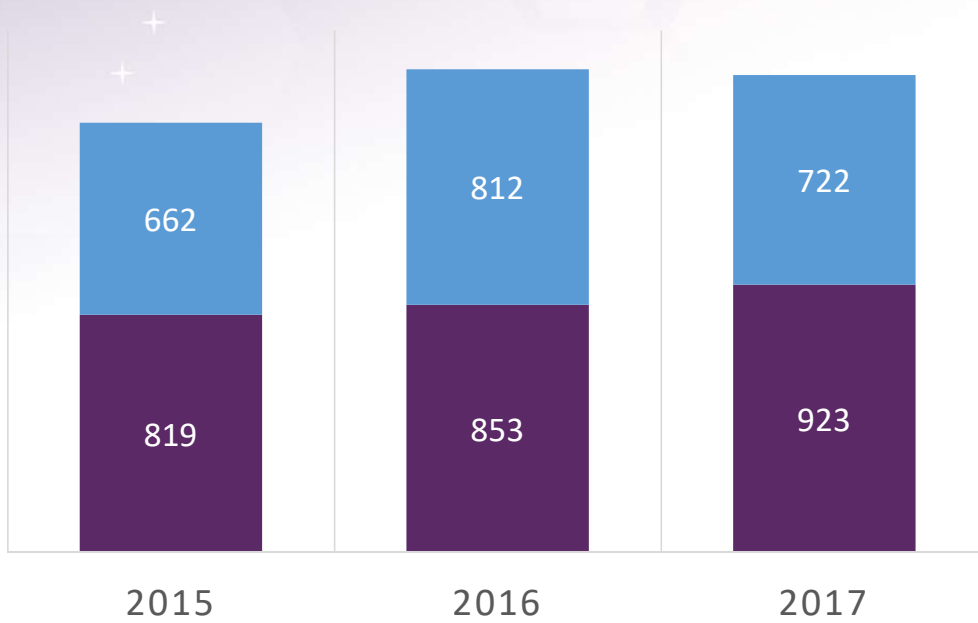
TM(STSI16 Meagan working on update for 2018 and 2019

Thompson, Meagan (HQ-DG000)[Arctic Slope Technical Services, Inc.], 9/10/2019

PSD R&A Reviewers

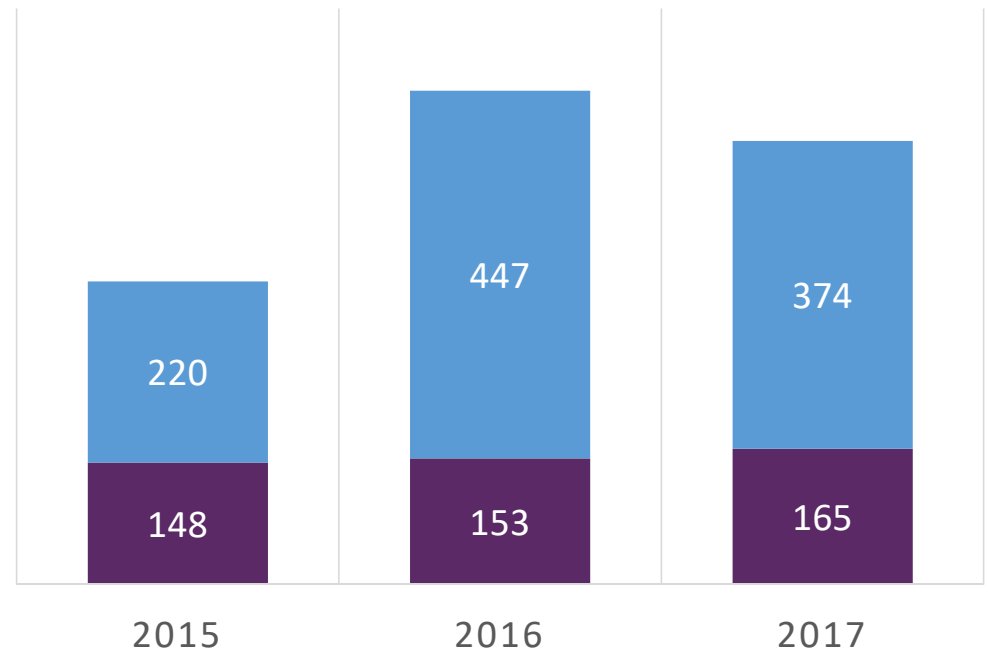
REVIEWER PARTICIPATION BY ROSES YEAR – ALL PSD

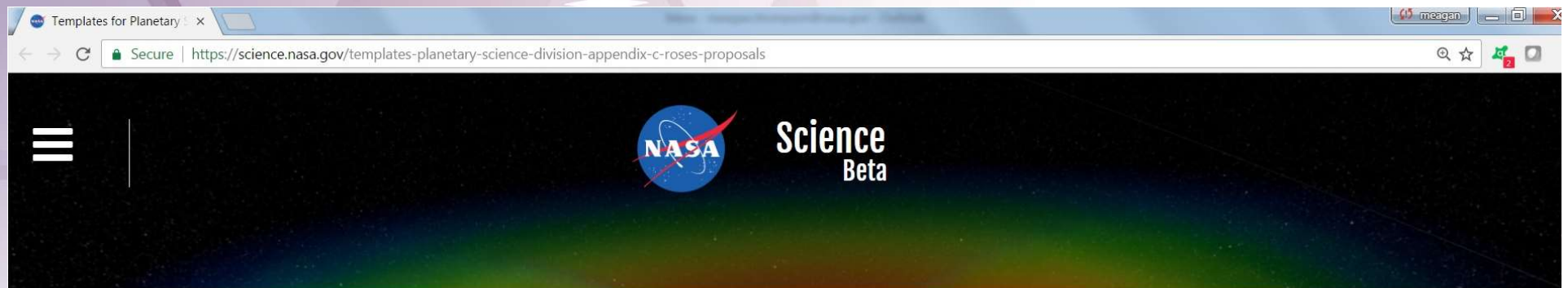
■ external reviewers ■ panelist



SSW PANELIST ACCEPTANCE RATE

■ panelists accepted ■ panelists declined





Templates for Planetary Science Division (Appendix C) ROSES proposals

Updated Templates for both Data Management Plan and Table of Work Effort.

- Microsoft Word
- LaTeX

<https://science.nasa.gov/templates-planetary-science-division-appendix-c-roses-proposals>

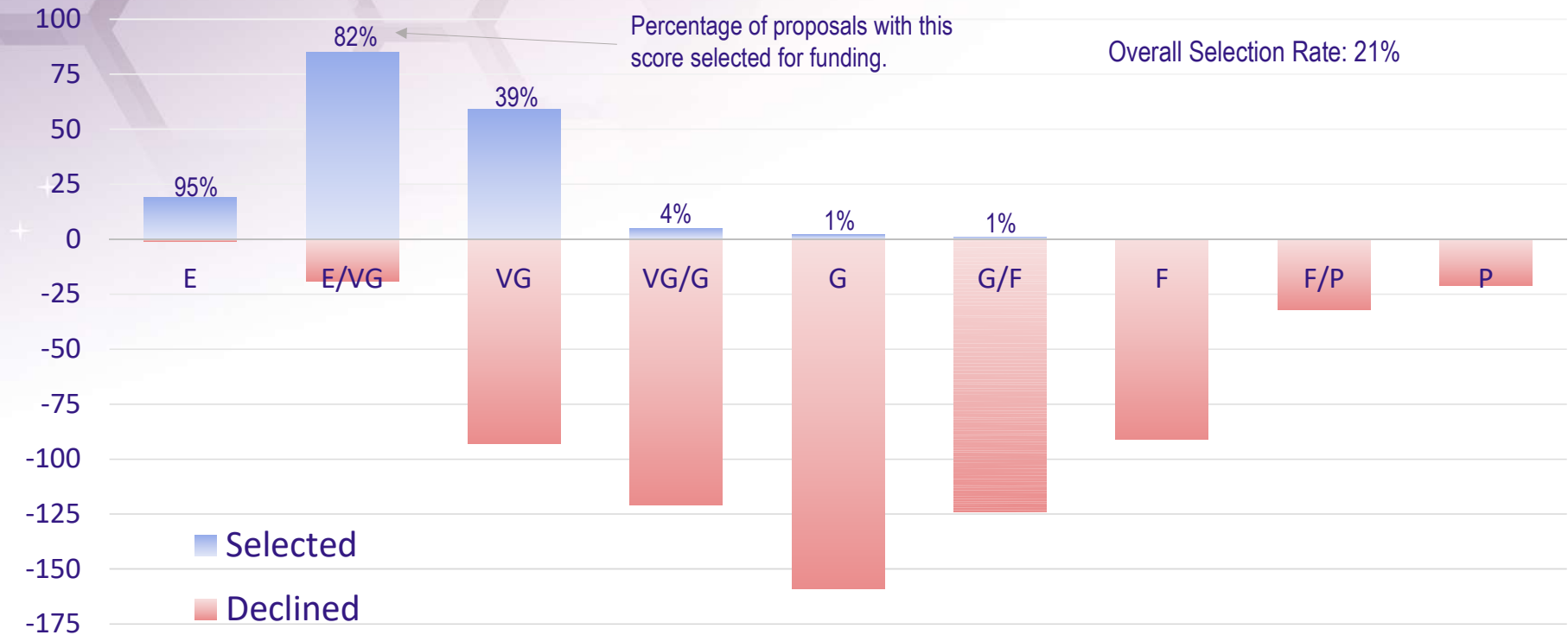
TM(STSI19 remove for PAC

Thompson, Meagan (HQ-DG000)[Arctic Slope Technical Services, Inc.], 9/10/2019

Questions?

Backup slides

PSD R&A Selections – ROSES 2016



For proposals submitted to ROSES 2016, including all core programs (EW, SSW, HW, SSO, EXO) and all DAPs (MDAP, DDAP, LDAP, CDAPS).

Slide 18

TM(STSI15 put this one in backup

Thompson, Meagan (HQ-DG000)[Arctic Slope Technical Services, Inc.], 9/10/2019