

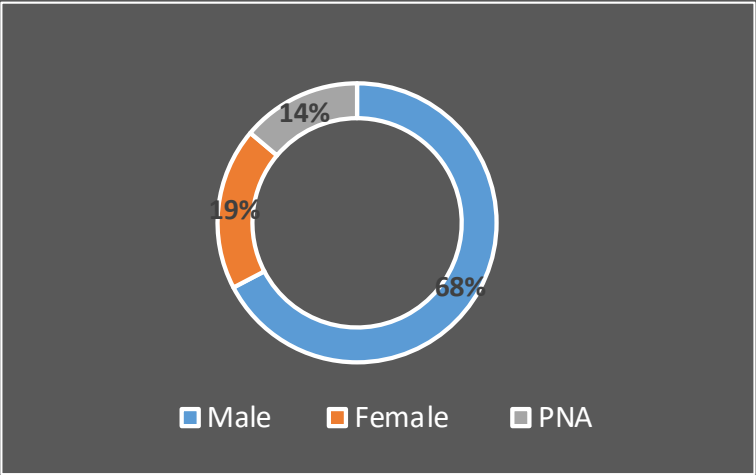
SMD summary demographic data

Louis Barbier
Caroline Wilson
Ankita Kc
NASA / OCS
June 16, 2021

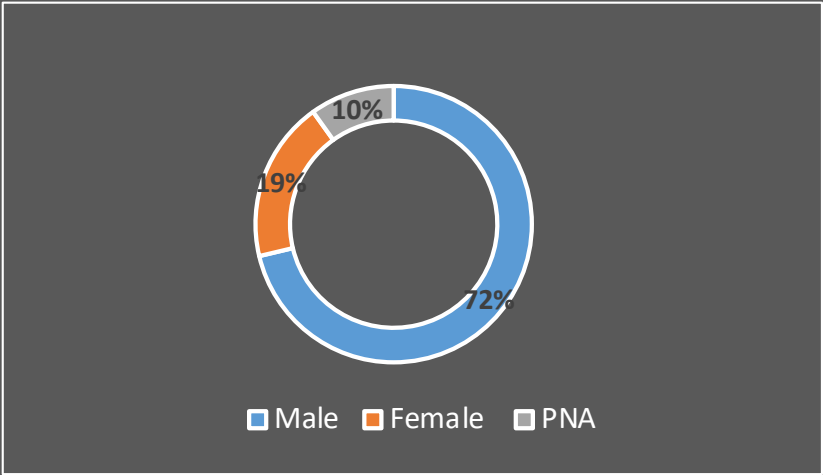
Introduction

- SMD R&A program demographic analysis (non mission data)
- Data collected 2016 – 2020
 - Back-casted from 2016 to 2014 where possible
 - 2020 data is incomplete
- Data was compiled according to EEOC/OMB guidelines
 - Complies with NASA ODEO and Human Capital methodology
- Earth science data not included at this time
- This is an on-going analysis (update), so by no means a finished product.

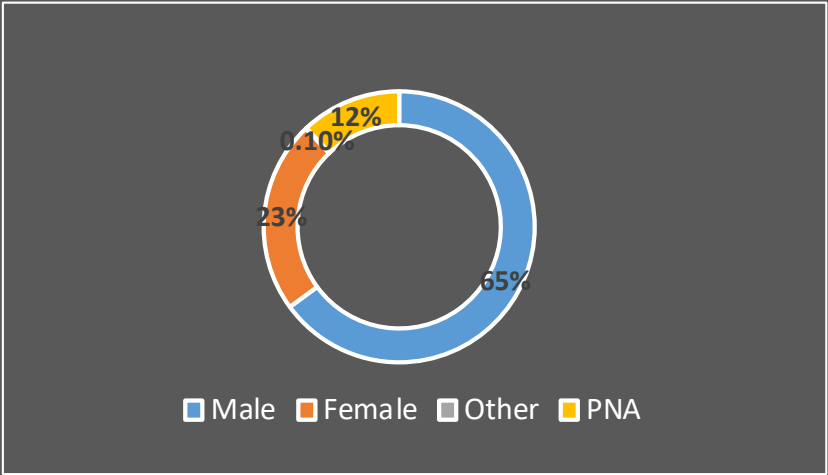
Gender Participation: 2014 - 2020



Heliophysics
N = 11,859



Astrophysics
N = 11,198



Planetary Science
N = 31,172

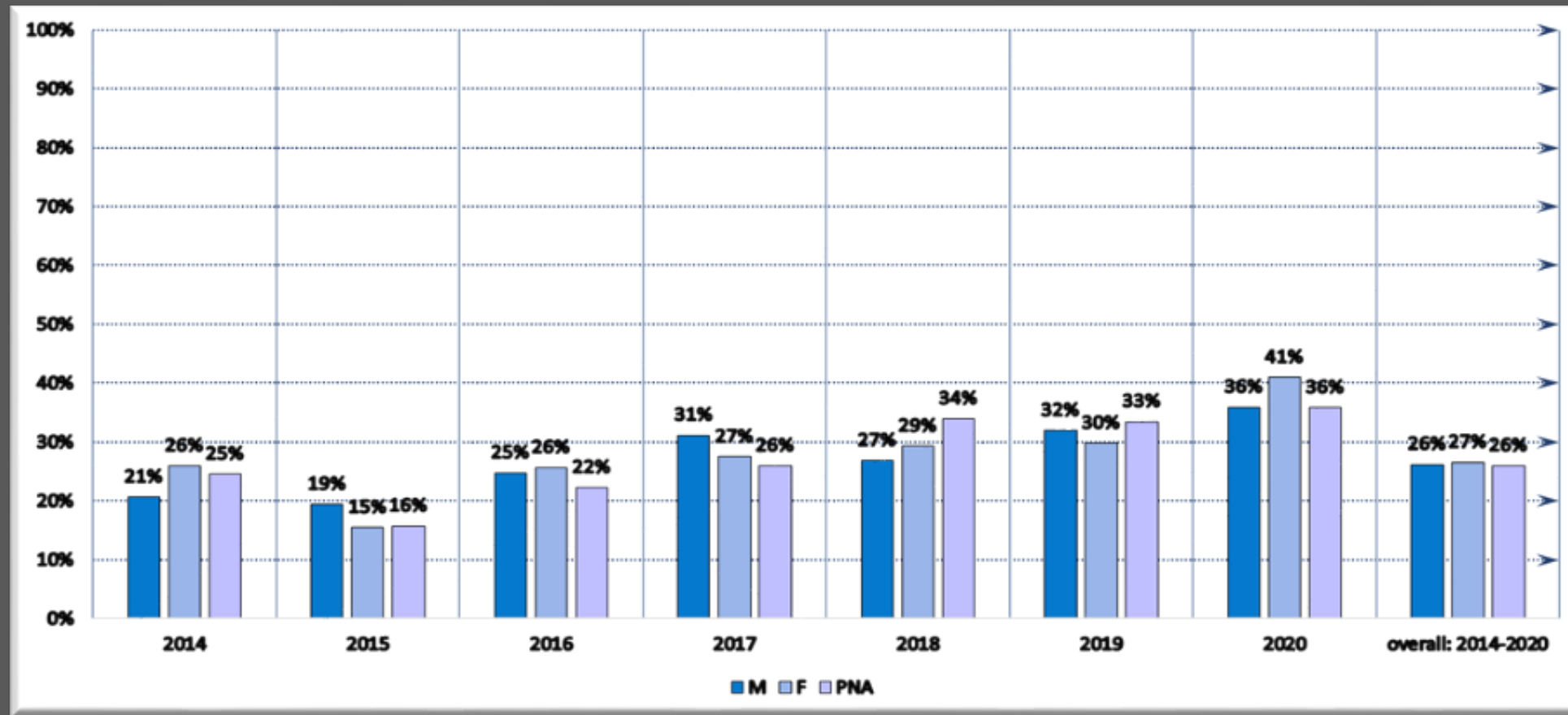
Gender Success By division

Astrophysics



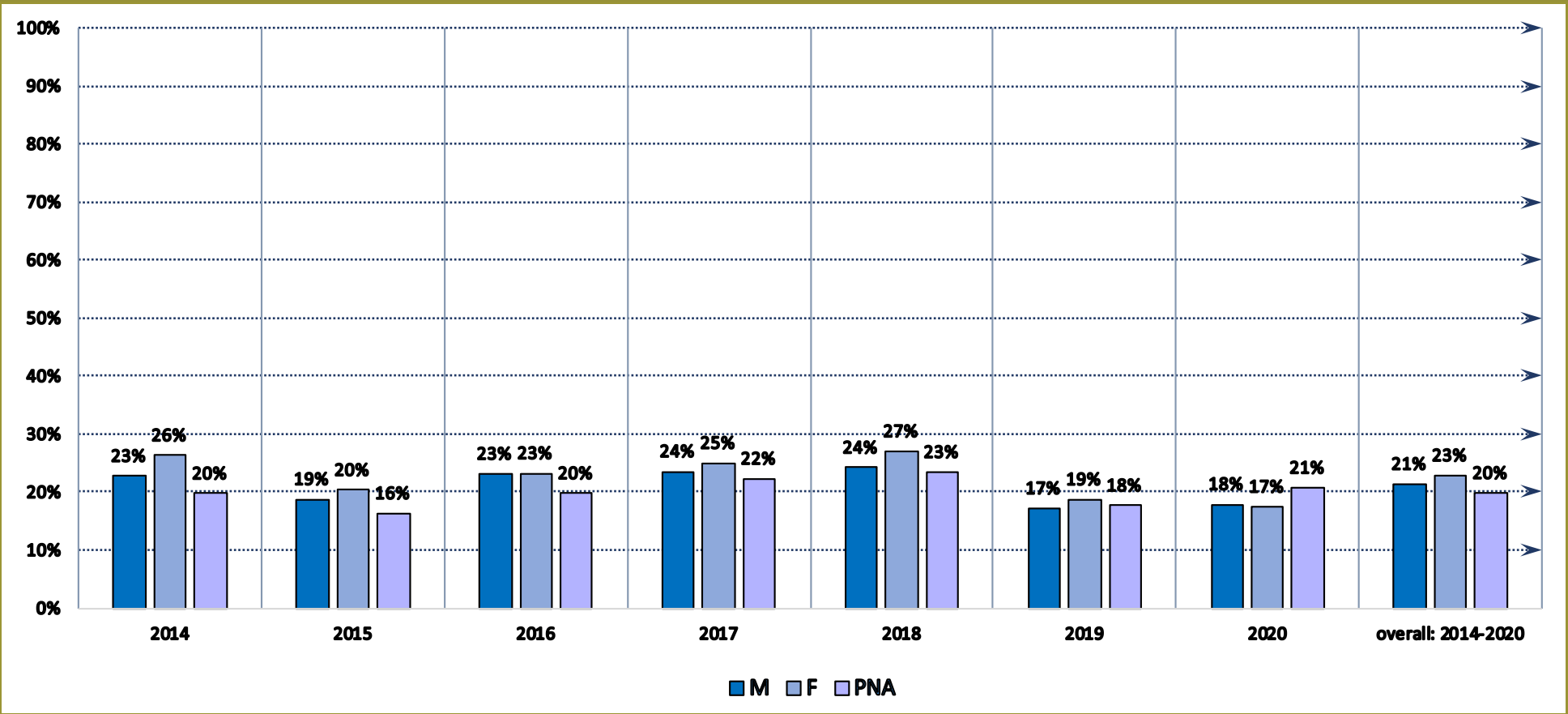
Gender Success By division

Heliophysics

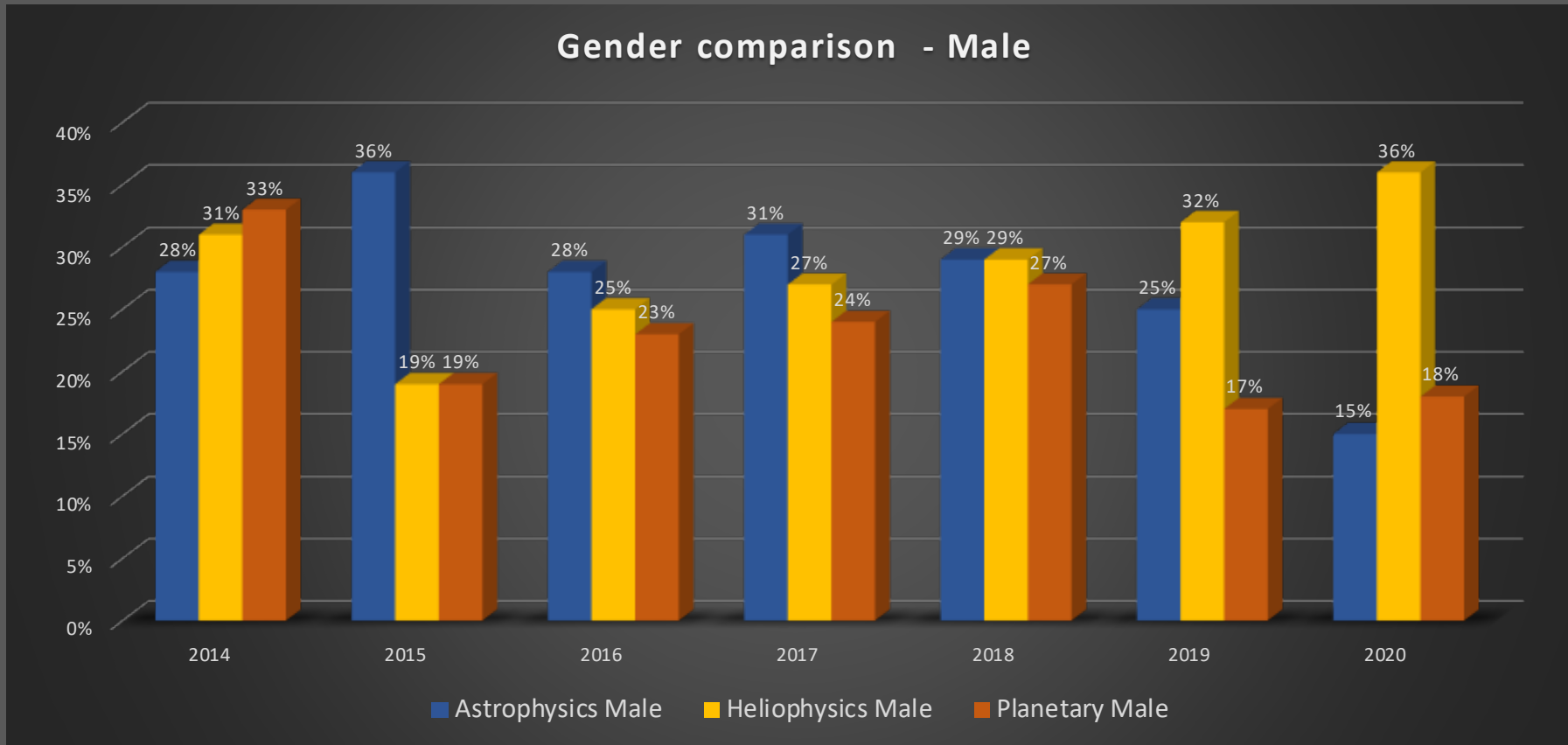


Gender Success By division

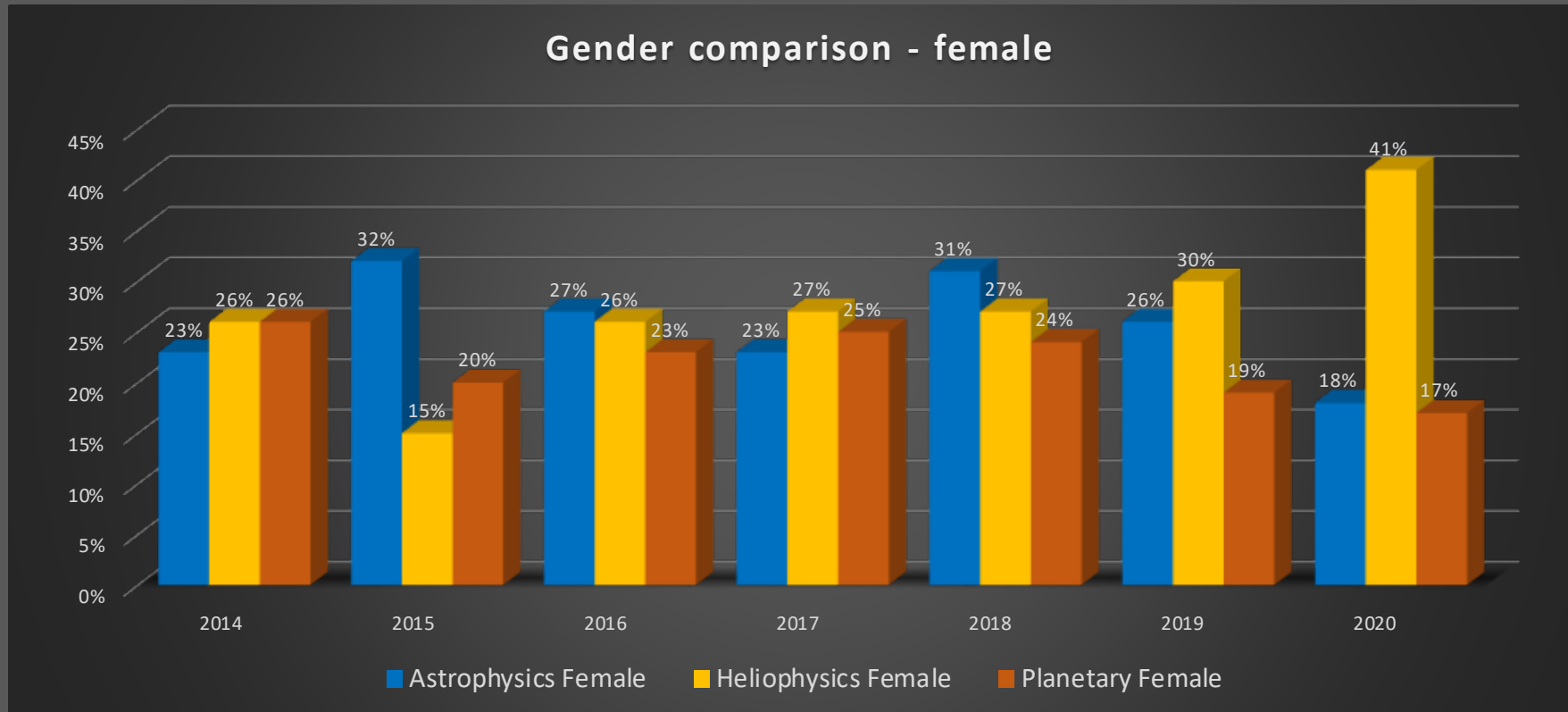
Planetary



Gender Success Combined Divisions

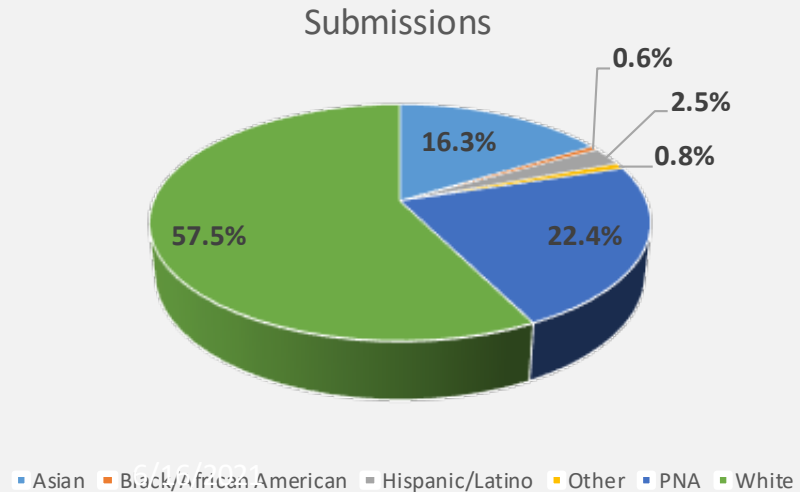


Gender Success Combined Divisions

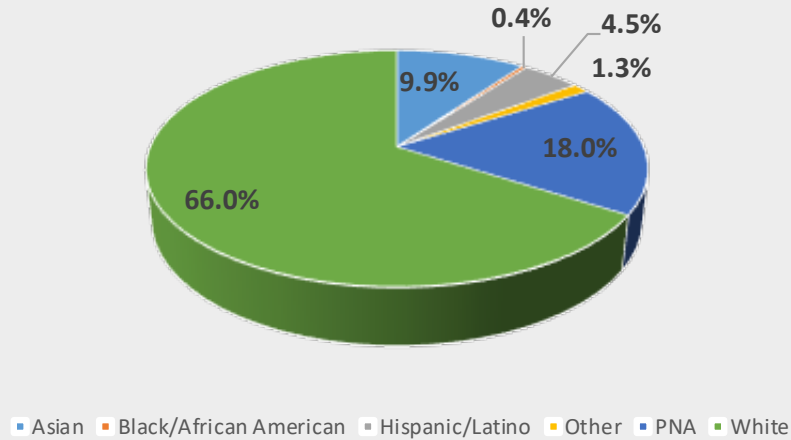


Race/National Origin (RNO) Participation

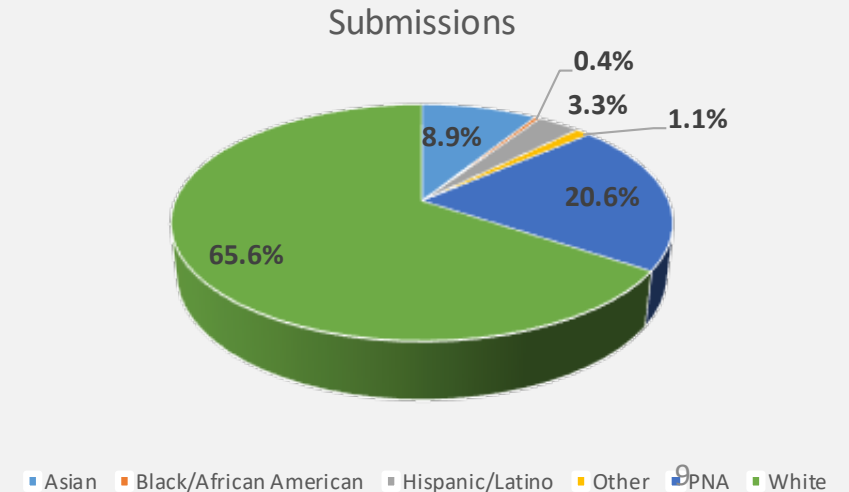
Heliophysics
N = 11,859



Submissions



Planetary Science
N = 31,172

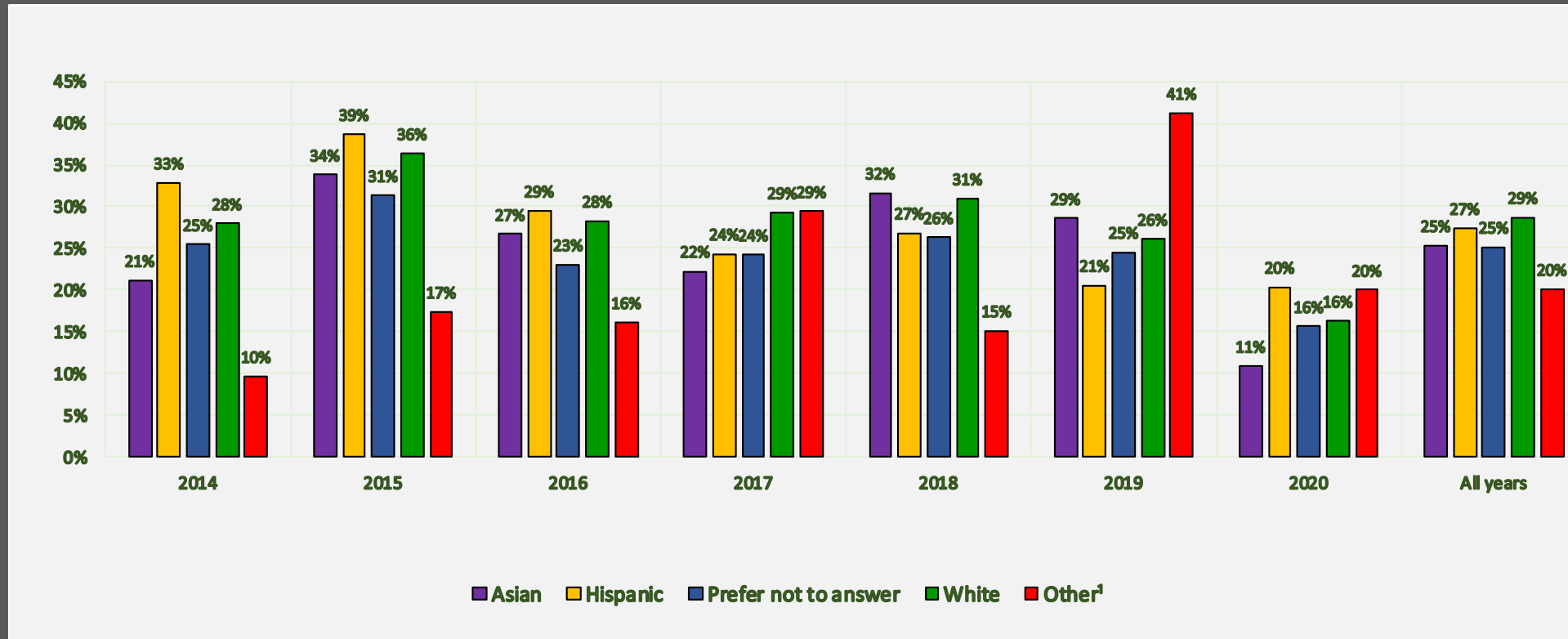


Astrophysics
N = 11,198

NASA Office of the Chief Scientist

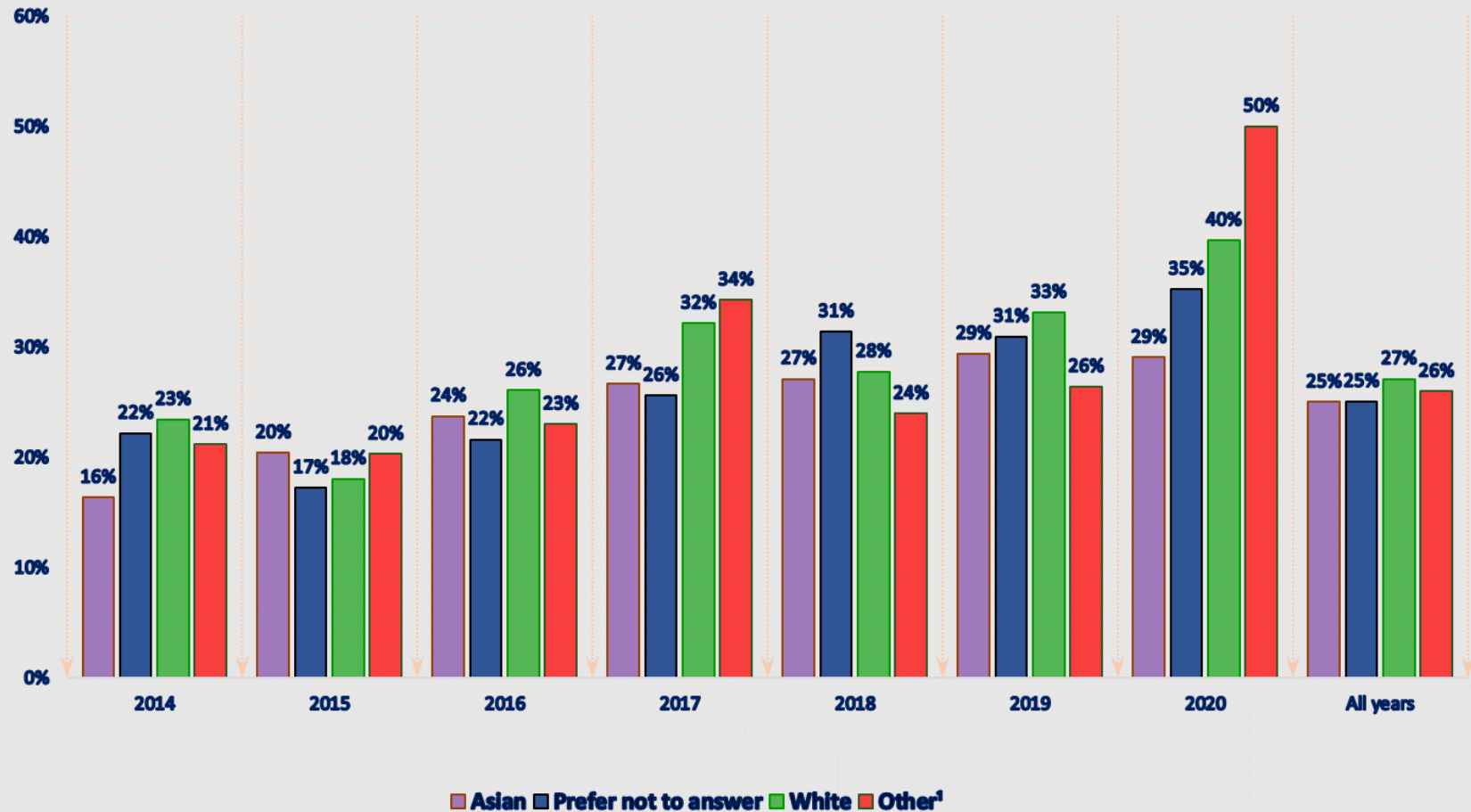
RNO Success by division

Astrophysics



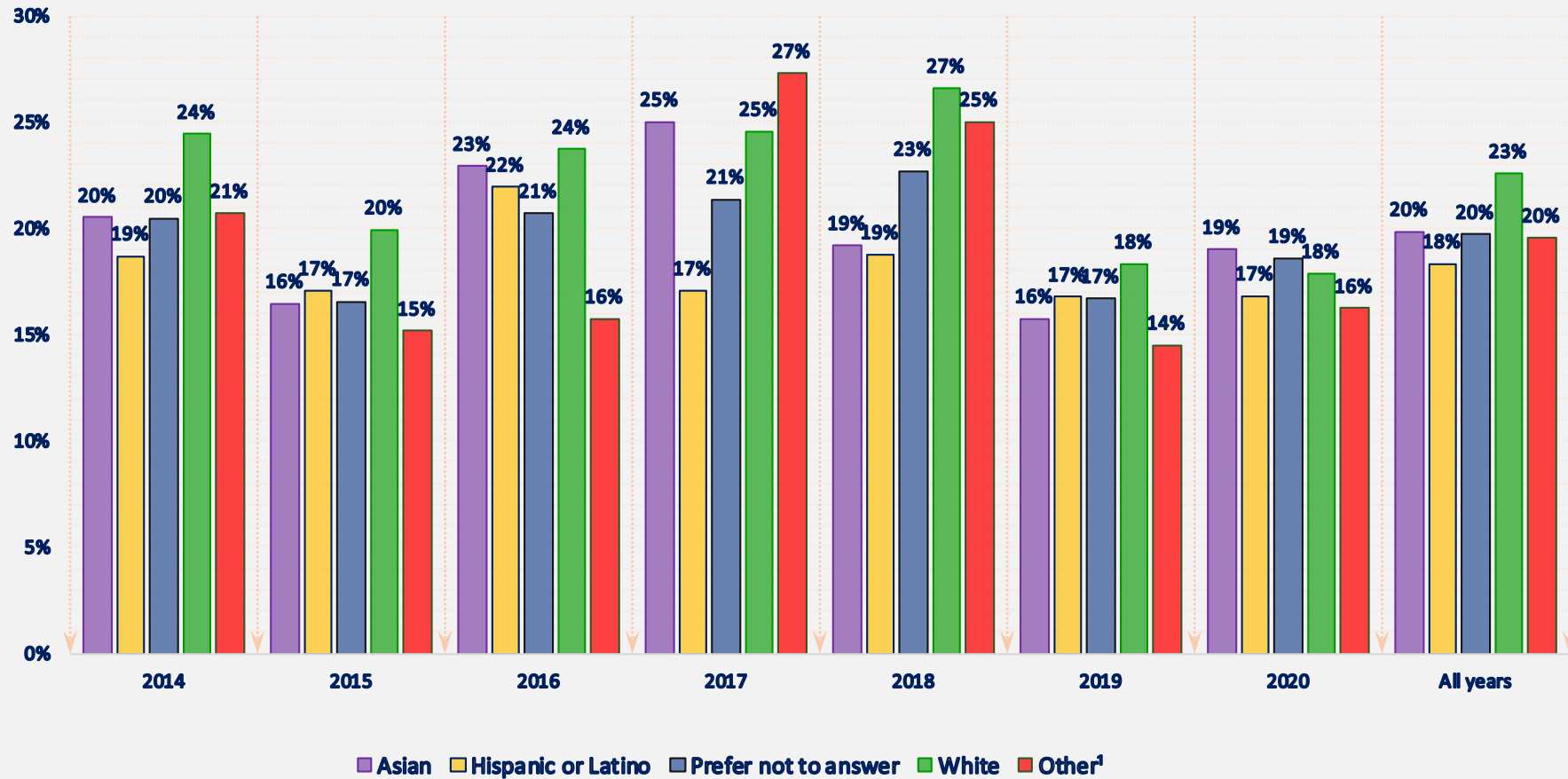
Race/National Origin (RNO) Success by division

Heliophysics



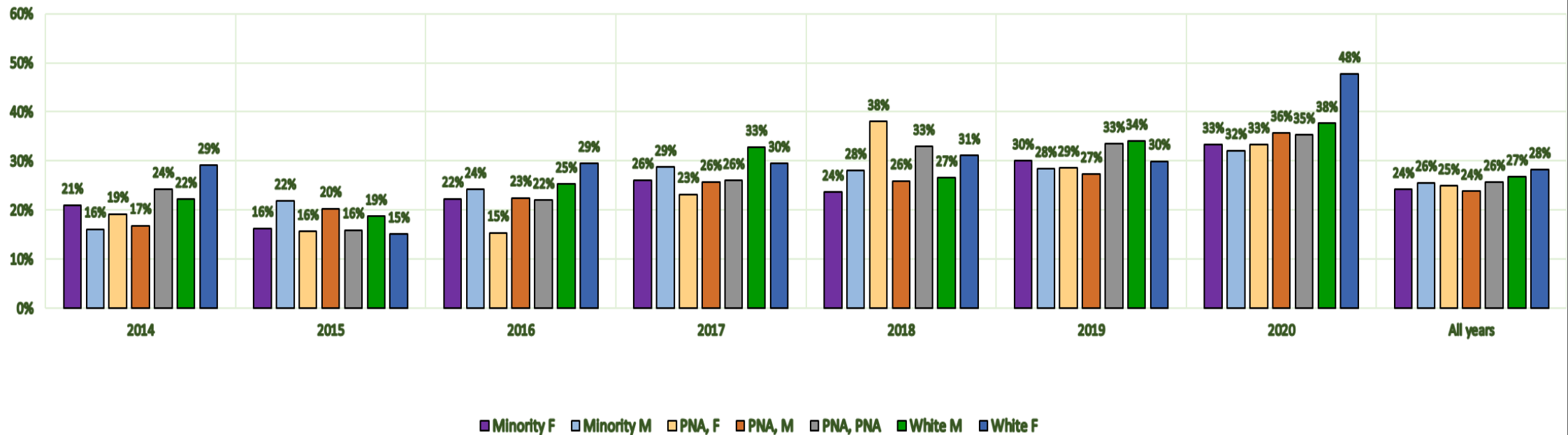
RNO Success by division

Planetary



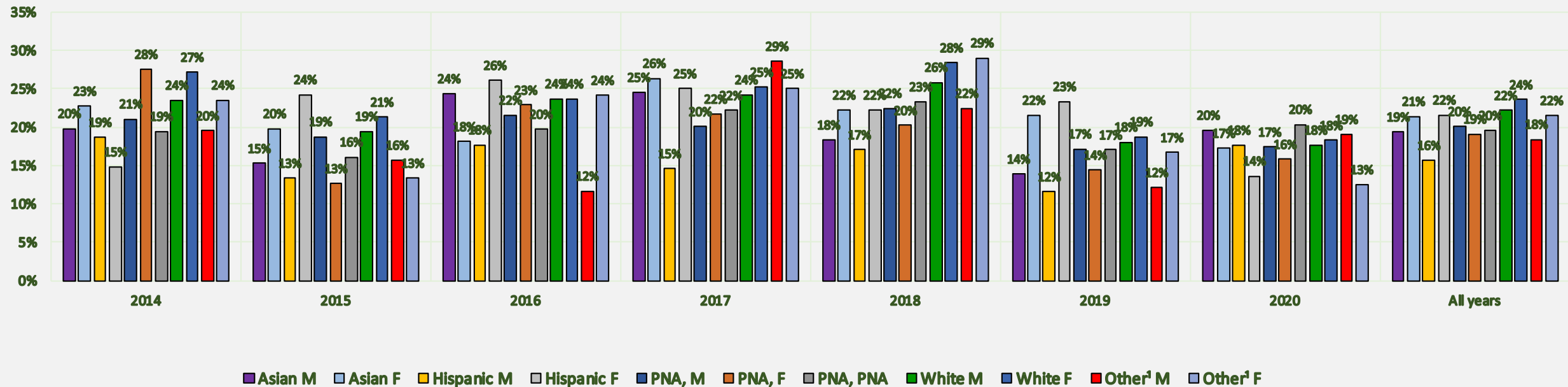
RNO and gender combined

Heliophysics

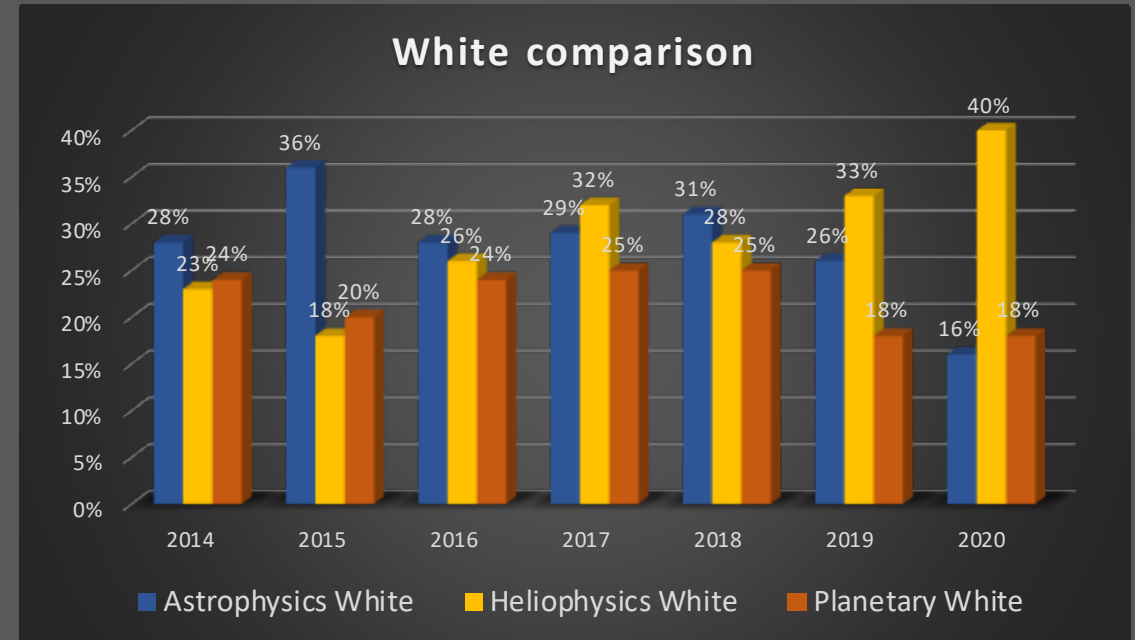
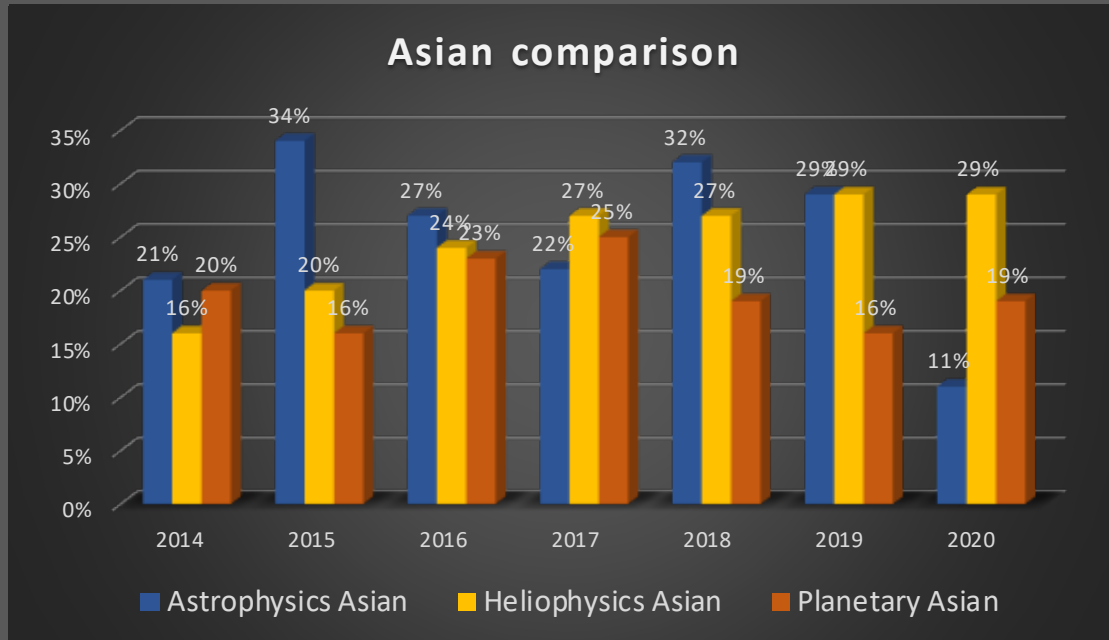


RNO and gender combined

Planetary

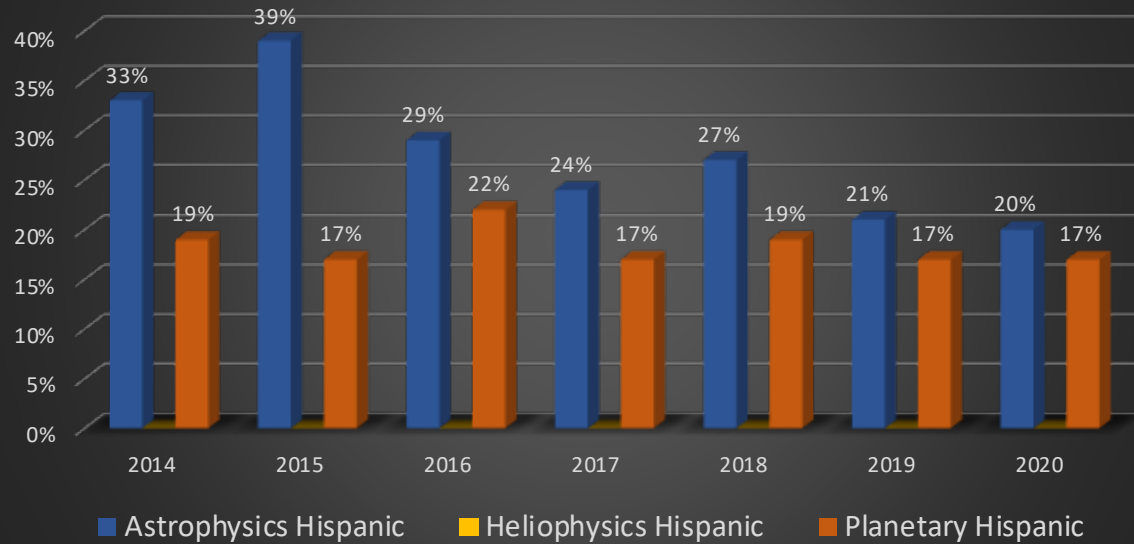


RNO Success Combined Divisions

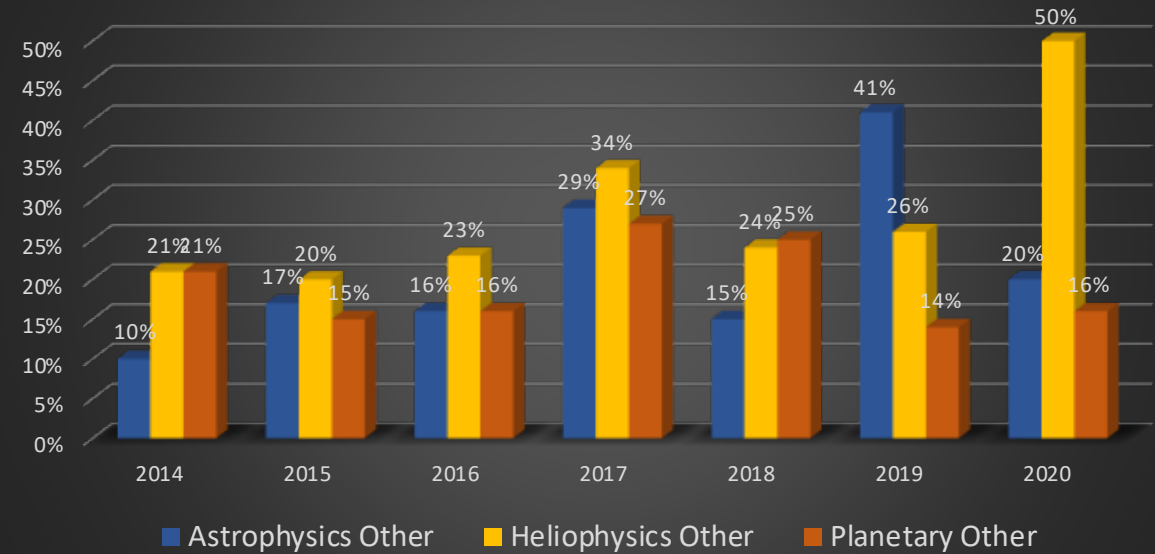


RNO Success Combined Divisions

Hispanic comparison

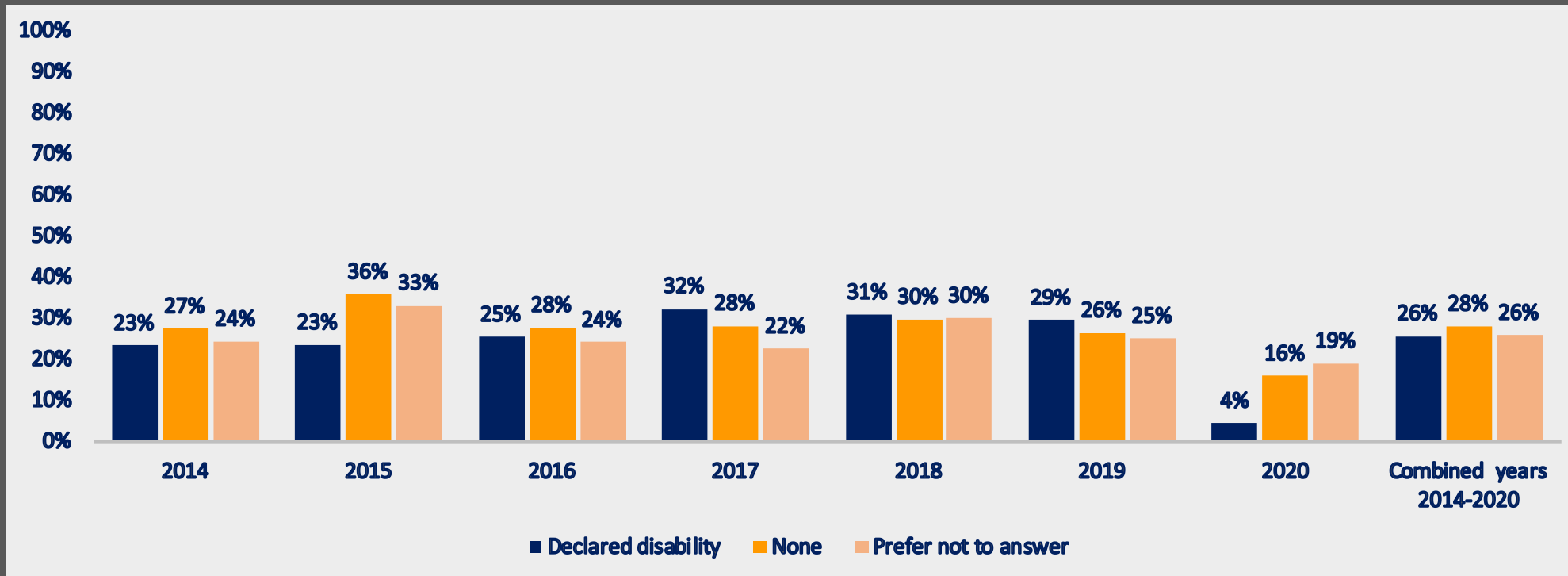


"Other" comparison



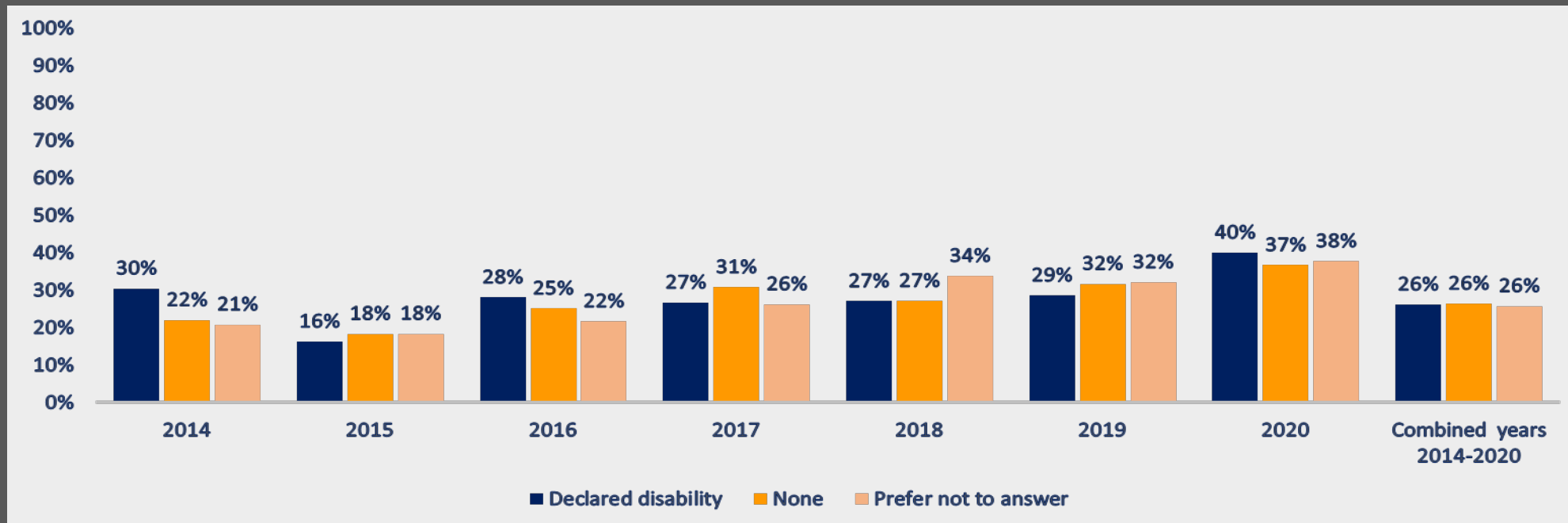
Declared Disability Success by division

Astrophysics



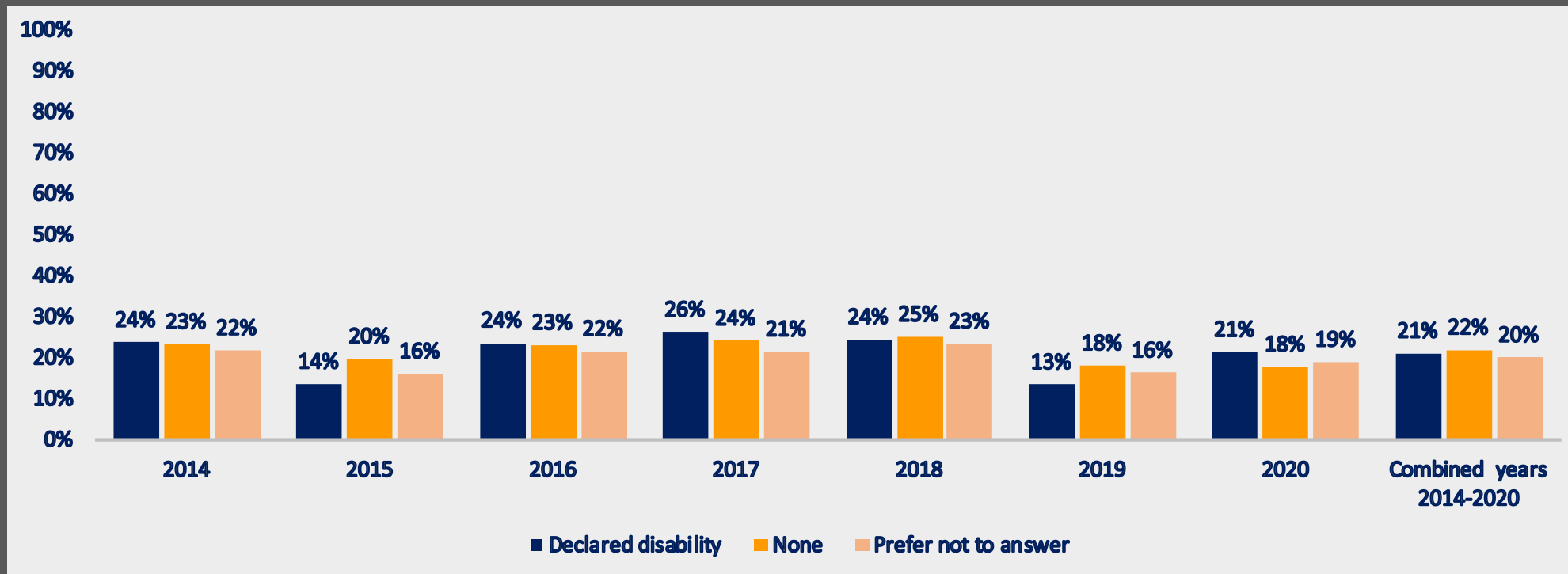
Declared Disability Success by division

Heliophysics



Declared Disability Success by division

Planetary



Relevant Civilian Labor Force (“RCLF”) data

Under-Represented Minorities Among Astronomy Faculty, 2012

Degrees Awarded by Department	African American %	Hispanic American %
Astronomy only	1	2
Physics	2	3

Source: AIP Statistical Research Center (www.aip.org/statistics).

No RCLF data for Heliophysics yet.

Race and Ethnicity for Members of Planetary Science Community*		
	All survey respondents** (n=2,367)	Members of Division for Planetary Sciences*** (n=895)
White	83%	87%
Asian or Asian American	13%	10%
Hispanic or Latinx	5%	5%
American Indian or Alaska Native	1%	*
Black or African American	1%	1%
Native Hawaiian or Other Pacific Islander	<1%	*
Another Race/Ethnicity	4%	2%

*SOURCE: American Astronomical Society’s Division for Planetary Sciences 2020 workforce survey.

** Percent of students unknown

*** 14% of this group are students

Percentage Hispanic, African American, Pacific Islander and/or Native American among Faculty, Researchers, Post Docs

	Faculty	Research Scientists	Post Doc
2011	1.5	3.4	4.4
2018	5.8	1.3	14.7

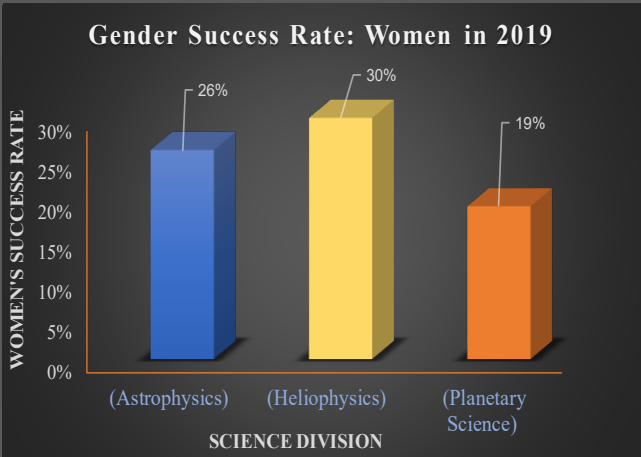
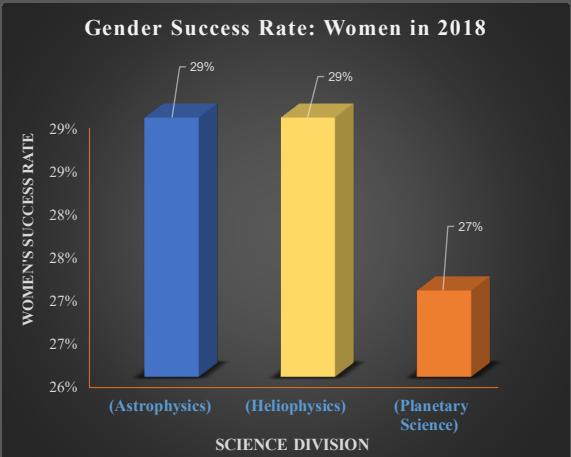
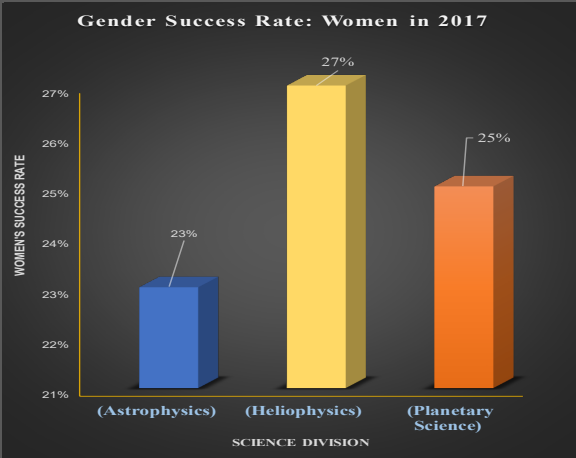
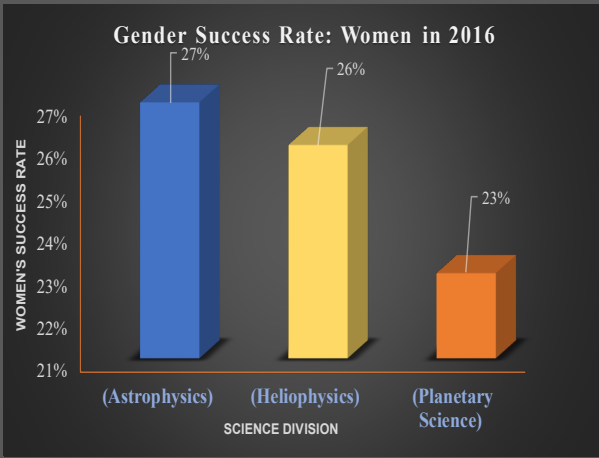
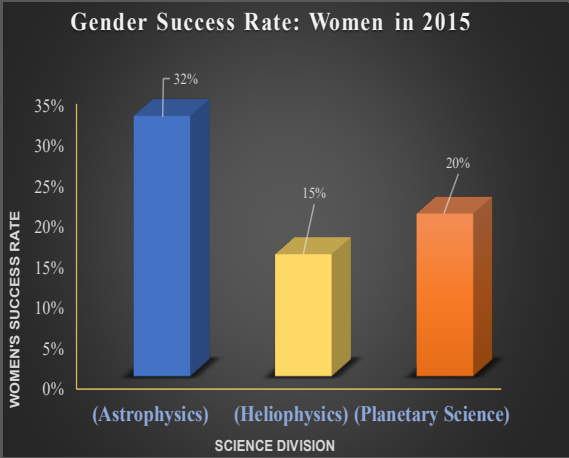
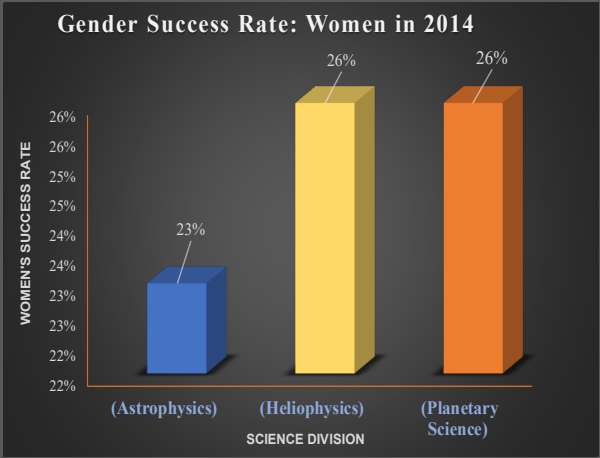
*SOURCE: Survey of US Academic Departments that Include Planetary Science. 2018 data provided by Fran Bagenal, University of Colorado.

Summary

- Data show no consistent bias in gender, RNO, or disability wrt “success”
- Participation – for most underserved minorities is low in all SMD divisions
 - Native Hawaiian/Pacific Islander, American Indian/Alaska native, Black/African American, Hispanic/Latinx – however these communities are also poorly represented in the RCLF
- Heliophysics in particular seems to have lower Hispanic participation
- We still have too large a “PNA” response – we need to increase the willingness to answer the demographic questions
 - Revising questions should help
- Resolving issues with Earth science data
- Currently working on “RCLF” for Heliophysics and Earth science
- Engaged with NASA CIO on the Enterprise Data Platform to make the demographic data available on-line

Backup slides

Gender Success Combined Divisions



Gender Success Combined Divisions

