



STScI | SPACE TELESCOPE
SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

JWST Science User's Committee

Jennifer Lotz, Director

March 18, 2024



thank you Massimo Stiavelli

STScI JWST Mission Office head

Massimo Stiavelli will step down May 1st
for a well-deserved sabbatical.

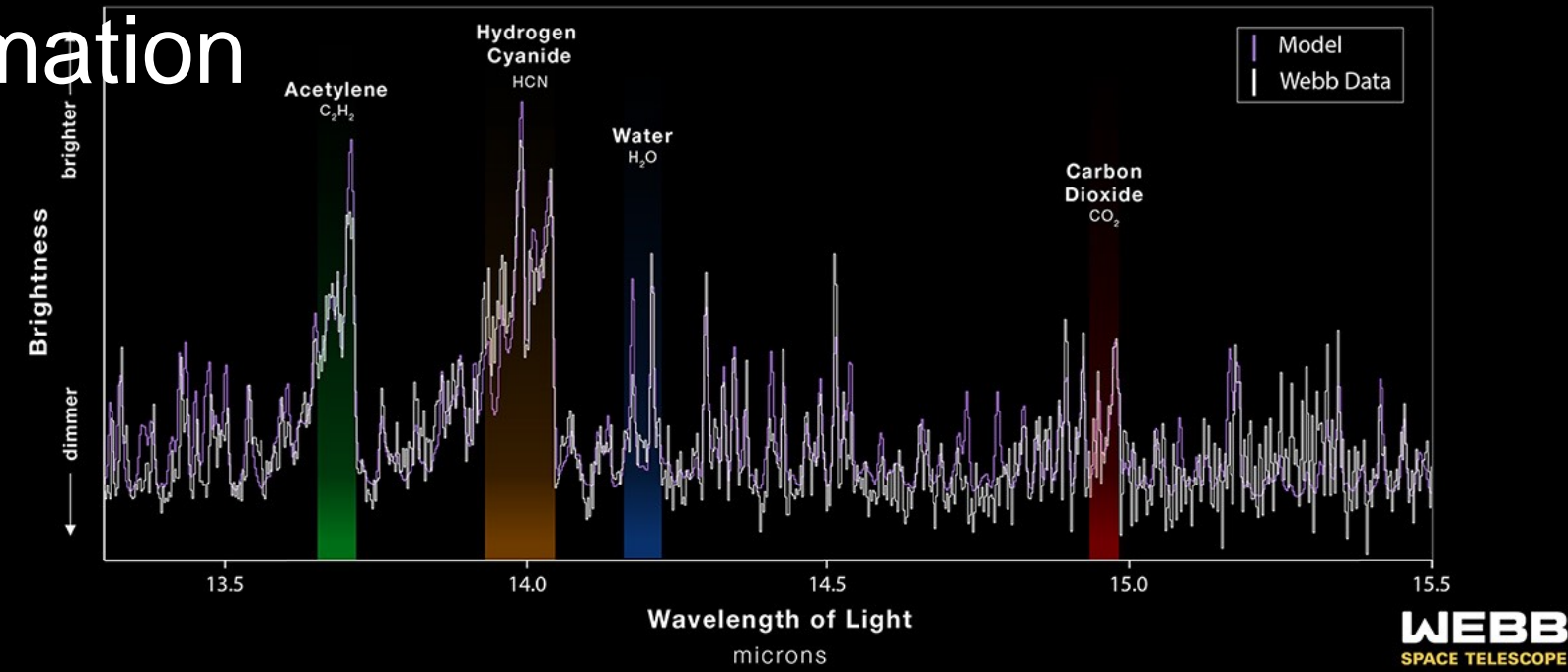
Search for permanent JWST MO head
underway (deadline March 15th).



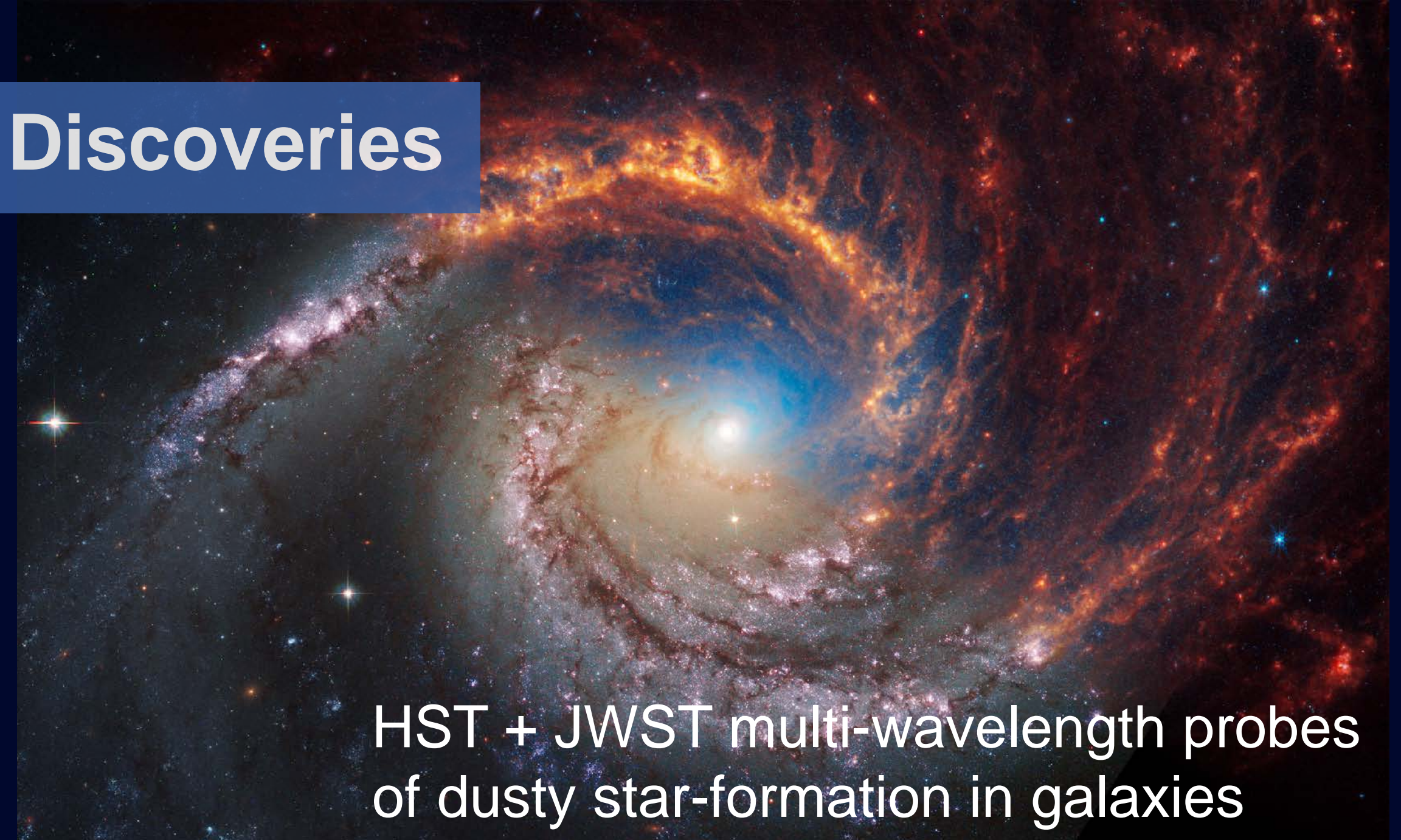
JWST Scientific Discoveries

XUE 1
IRRADIATED PROTOPLANETARY DISK

MIRI | Medium-Resolution Spectroscopy

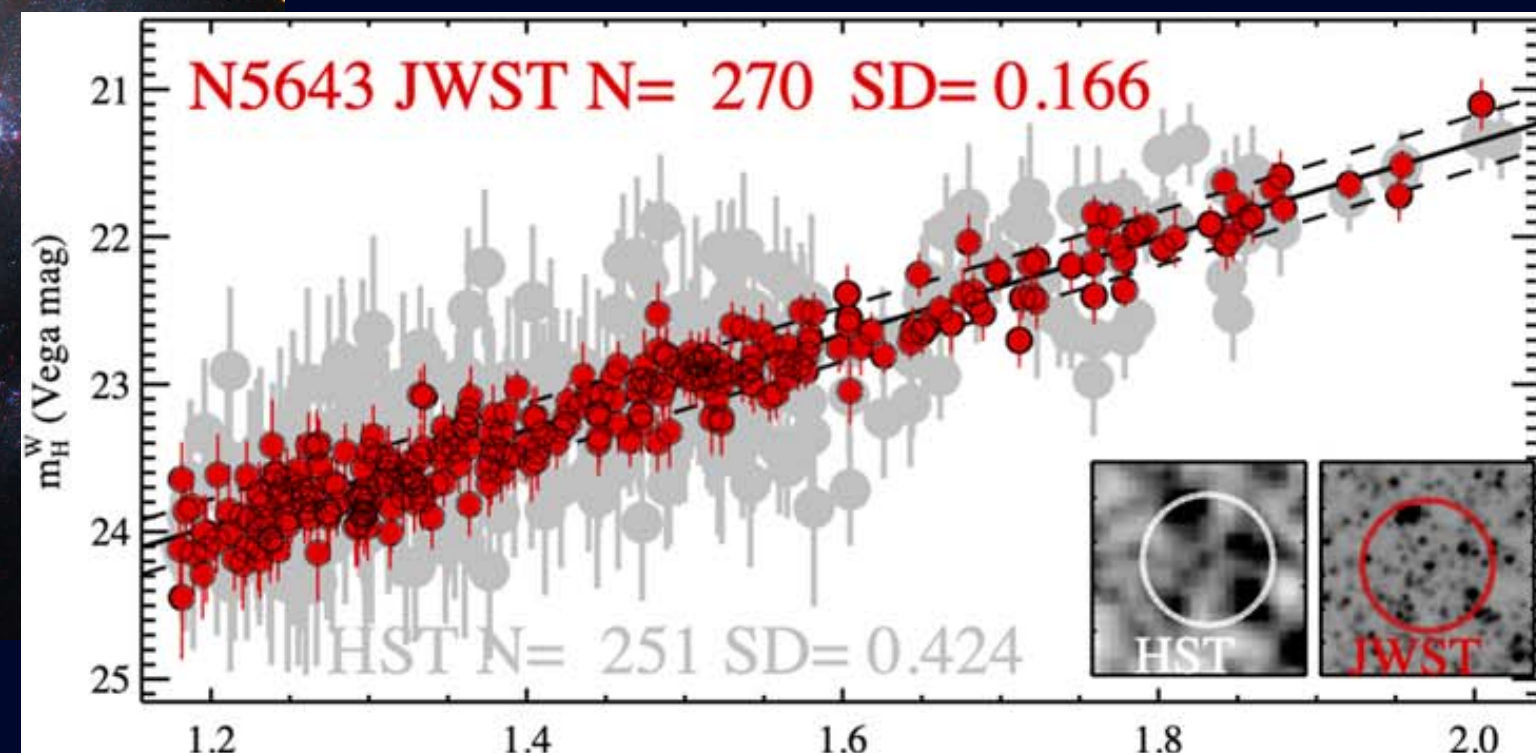


Rocky Planet Formation



HST + JWST multi-wavelength probes of dusty star-formation in galaxies

Nearby Cepheids confirm Hubble tension

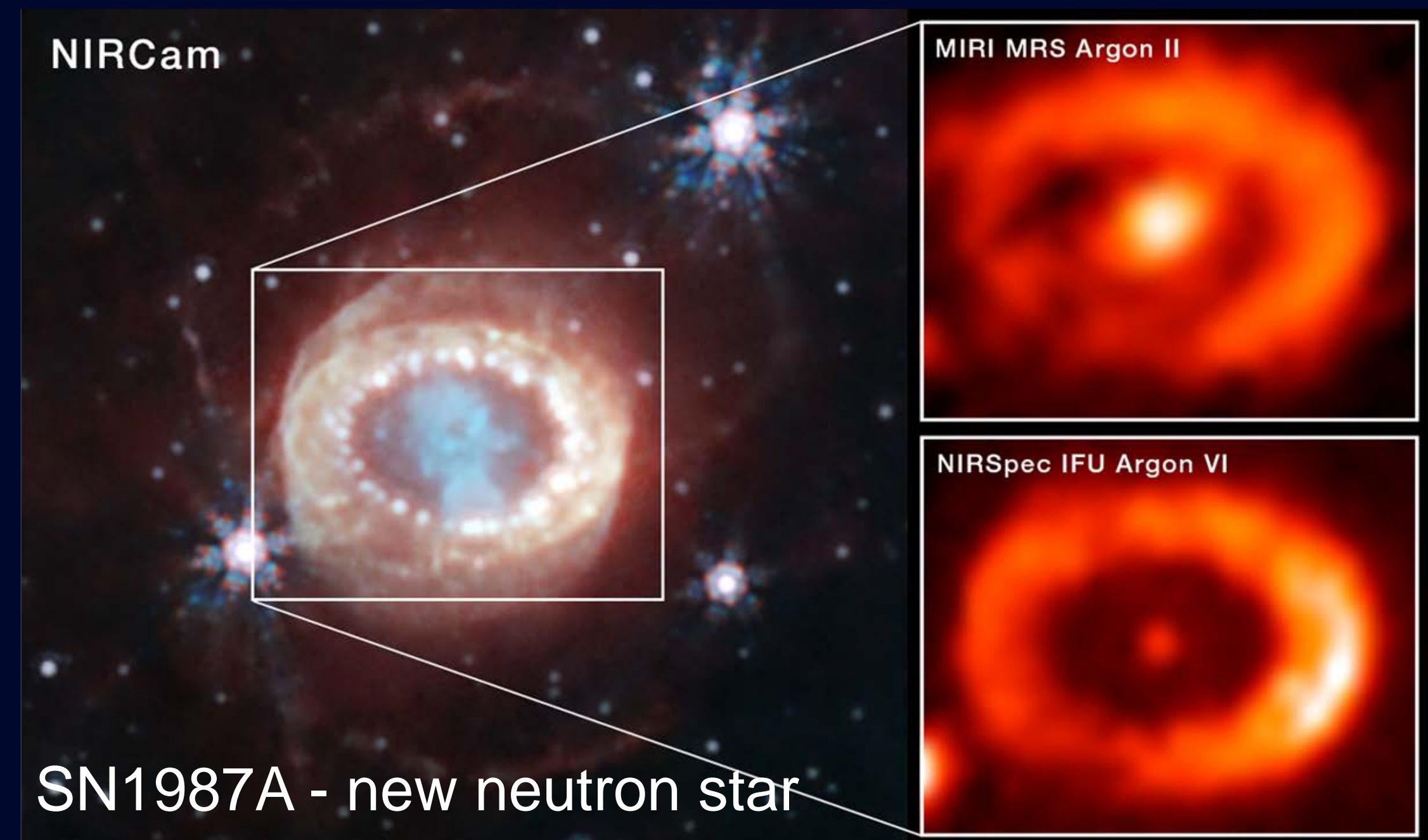


NIRCam

MIRI MRS Argon II

NIRSpec IFU Argon VI

SN1987A - new neutron star





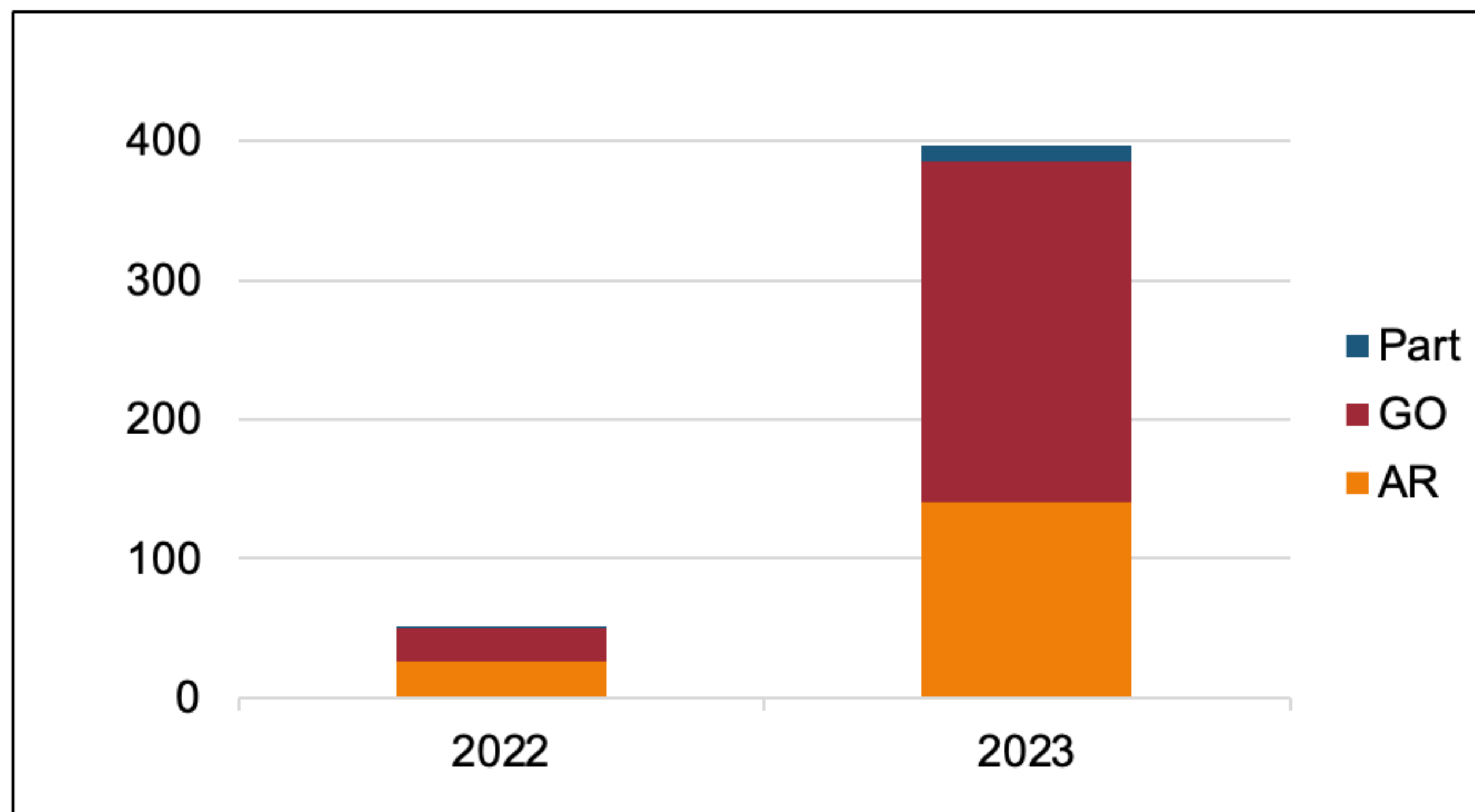
JWST publications rapidly increasing for all instruments

JWST Publications by Archival Flag

Year of Publication	AR	GO	Part	Grand Total
2023	141	244	12	397
2022	26	24	1	51

JWST Publications by Instrument

Year of Publication	FGS	MIRI	NIRCam	NIRISS	NIRSpec
2023	1	110	253	43	123
2022	0	15	33	9	9



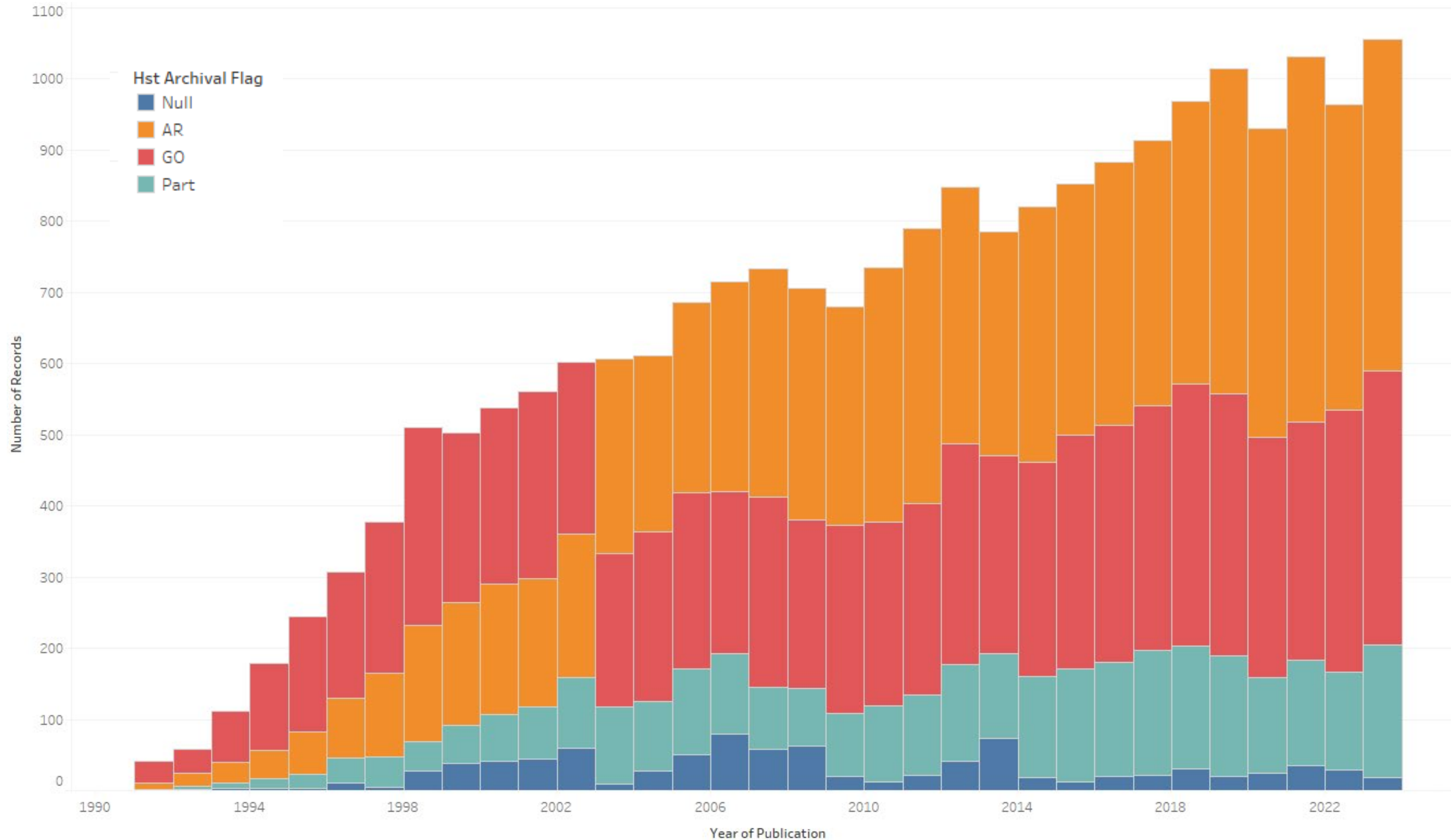
improvements to data reduction pipeline should further accelerate JWST publication rate



Hubble publications still going strong; many joint HST-JWST papers

HST 2023:

1056 total
384 GO
467 AR
187 Part
18 other





Funding Outlook for FY2024 & beyond

final FY2024 appropriations:

- Strong support for JWST, HST, Roman missions

\$187M for JWST; \$98.3M* HST; \$407.3M Roman

- \$10M allocated to Habitable Worlds Observatory

to "establish a Habitable Worlds Observatory project office at Goddard Space Flight Center to leverage existing expertise in astrophysics and segmented mirror technology".



Funding Outlook for FY2024 & beyond

FY2025 Presidential Budget Request:

- Continued strong support for JWST, Roman
- \$50M for Habitable Worlds Observatory technical maturation
- HST budget request drops to \$88.9M in FY2025, with drop in FY2029 to \$64.7M (current budget includes Goddard, STScI, grants, & Hubble Fellows)

“NASA proposes to reduce the Hubble budget by approximately 5 percent compared to the FY 2023 operating plan level. Savings will be achieved through efficiencies in the joint operations of Hubble and the James Webb Space Telescope (Webb), which are managed by the same contractor in the same location. “



JWST science and publications are quickly ramping up.

STScI is working to address concerns about data reduction and calibrations.

The community are using JWST and HST data together, with HST at peak scientific impact. *Out of all 397 JWST science papers published in 2023, 197 of them are also considered HST science papers.*

Funding outlook is promising for JWST, Roman, and HWO, but potential funding cuts to Hubble on horizon.