



STScI | SPACE TELESCOPE
SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

JWST Joint Proposals

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Joint Programs

Joint programs are programs submitted to one Main Observatory that request time not only from the Main Observatory but also from Partner Observatories.

Rationale

- Some science programs require new observations from more than one observatory to achieve their science goals.
- These programs may be subject to double jeopardy if they are independently evaluated by each observatory.
- These programs require a combined review incorporating expertise from the communities of both the Main Observatory and the Partner Observatory.

Requirements

- A Joint Program may not be submitted to both observatories for simultaneous consideration by the respective TACs
- Joint JWST programs are established by STScI with concurrence from JWST Project Science at GSFC.



Joint proposals with Hubble

Hubble has agreements with several observatories

- Aim to maintain joint time to less than ~5% of total available time
- Chandra
 - Up to 600 ksec for HST proposals
 - Up to 150 orbits for Chandra proposals
- XMM
 - Up to 200 ksec for HST proposals
 - Up to 30 orbits for XMM proposals
- NRAO
 - Up to 3% of the time on North American facilities (GBT, VLA, VLBA) for HST
 - Maximum of 5% in any one configuration
 - Up to 30 orbits for NRAO proposals
- NOIRLab (not reciprocal)
 - Up to 5% of time on available facilities
- Past reciprocal agreement with Spitzer



Example usage from Hubble

CHANDRA			
HST Cycle	Approved Ksecs	Chandra Cycle	Approved Orbits
9	328	3	90
10	345	4	51
11	170	5	43
12	115	6	77
13	85	7	60
14	130	8	25
15	60	9	59
16	89	10	62
17	110	11	99
18	170	12	84
19	0	13	96
20	270	14	66
21	0	15	52
22	120	16	72
23	0	17	75
24	128	18	39
25	255	19	37
26	0	20	99
27	90	21	94
28	275	22	
29	180		

XMM			
HST Cycle	Approved Ksecs	XMM Cycle	Approved Orbits
20	0	11	30
21	172	12	28
22	80	13	58
23	143	14	21
24	0	15	34
25	269	16	30
26	25	17	5
27	40	18	
28	90	19	
29	152.5	20	
		21	

NOAO	
HST Cycle	Approved Nights
11	13
12	17.5
13	4
14	2
17	5
18	6
19	0
20	10.1
21	0
22	31.6
23	6
24	2
25	6
26	0
27	5.4
28	3.6
29	1.1

Joint program allocations seldom exceed allocations

- Observatories can be flexible



JWST as the Main Observatory

The JWST Cycle 2 TAC will have the opportunity to allocate telescope time at ALMA, Chandra, HST, NASA Keck, NOIR Lab, and XMM-Newton.

Process

- This opportunity will be described in the JWST Cycle 2 Call for Proposals to be issued on November 15, 2022.
- JWST Cycle 2 proposals will be due on January 27, 2023.
- As part of the JWST TAC evaluation, Joint Proposals will be reviewed by Expert Reviewers from the Partner Observatory community to assess the science justification.
- In addition, Joint Proposals will be reviewed by the Partner Observatory to assess the technical feasibility of the program and avoid allocation of telescope time to one project via multiple calls for proposals.



JWST as a Partner Observatory

The ALMA, Chandra, HST, and XMM-Newton TACs will have the opportunity to allocate JWST telescope time.

Process

- These opportunities will be announced in each observatory's call for proposals.
- Each opportunity will have a separate deadline.
- Partner Observatories will solicit Expert Reviews from the JWST community to assess the science justification.
- STScI staff will assess the technical feasibility of these programs and ensure that telescope time is not allocated more than once for a single project.



Joint JWST-HST Proposals

Proposals requesting both HST and JWST time can be submitted to either the JWST Cycle 2 review or the HST Cycle 31 review.

Guidelines

- A joint HST/JWST proposal should not be submitted in response to both the JWST Cycle 2 Call for Proposals and the HST Cycle 31 Call for Proposals.
- For joint HST/JWST proposals, the Main Observatory should be the observatory for which the telescope time request is higher, counting 1 HST orbit as equivalent to 1 JWST hour.
- If a JWST-HST proposal is submitted with JWST as the Main Observatory, then the JWST version of APT should be used, the number of HST orbits needed specified in Coordinated Telescopes, the JWST templates filled out, and the HST observations described in the “Coordinated Observations” section of the PDF attachment.



HST Cycle 30 Midcycle Opportunities

- HST Cycle 30 Mid-cycle proposal deadlines are October 21, 2022 and February 17, 2023. We anticipate HST proposals requesting follow-up of JWST discoveries.
- The majority of JWST observations have a 12 month Exclusive Access Period.
- To level the playing field, we recommend that the JWST data directly related to an accepted HST mid-cycle proposal be made public.
 - JWST data will be assessed at the visit level.
 - Appropriate JWST data are set to zero Exclusive Access Period when the first successful HST observation is obtained.
 - HST Midcycle data retain 3-month Exclusive Access Period.



JWST Joint Program Parameters

- JWST-ALMA
 - ALMA TAC may allocate up to 115 hours of JWST time in Cycle 2
 - JWST TAC may allocate up to 115 hours of ALMA observations with each of the 12-metre array, the 7-metre array and the Total Power array (ie 345 hours total)
- JWST-Chandra
 - Chandra TAC may allocate up to 150 hours of JWST time in Cycle 2
 - JWST TAC may allocate up to 300 ksec of Chandra observations
- JWST-Keck
 - JWST TAC can allocate up to ~15 nights per year of NASA Keck time
- JWST-HST (still to be finalized)
 - JWST TAC can allocate up to ~300 orbits of HST time
 - HST TAC can allocate up to ~150 hours of JWST time
- JWST-NOIRLab & JWST-XMM
 - Negotiations still in progress
- All agreements may be subject to additional constraints in terms of Target of Opportunity programs and simultaneous observations



Summary

STScI and the JWST Project are establishing a number of joint programs.

In Cycle 2, we anticipate offering joint programs with

- ALMA
- Chandra
- HST
- XMM
- Keck
- NOIRLab