Introduction and Overview
Historically, Hubble and JWST science policy regarding exclusive data access has been a balancing act between both the needs of and the benefits to the full community.

For Hubble, the default EAPs are currently:

- **Large** (≥ 75 orbits) Programs: Zero, since Cycle 21 (2013)
- **Treasury** Programs: Zero, since introduction in Cycle 11 (2001)
- **Small** (≤ 34 orbits) and **Medium** (35 - 74 orbits) Programs: 6 months, since Cycle 25 (2017), previously 12 months.
- **Mid-Cycle** Programs: 3 months.
- **DDT** (Director’s Discretionary Time) Programs: Zero.

For JWST, the default EAPs are currently:

- **GTO** (Guaranteed Time Observer), **Small** (≤ 25 hours), and **Medium** (26 - 75 hours) Programs: 12 months.
- **Large** (≥ 75 hours) Programs: Zero.
- **DDT**, including **DD-ERS** (Early Release Science) Programs: Zero.

For both Hubble and JWST, the EAP is per dataset, not per program, meaning that some data in a program can be public before all observations are completed. Proposers may voluntarily waive any EAP.
The survey was prepared by Molly Peeples, with inputs from the STScI Science Policies Group, and from both the STUC and JSTUC.

The survey was released on **Monday November 28, 2022** and was open for 79 days before closing on **Wednesday February 15, 2023**.

The survey was advertised broadly, including:

- >15k astronomers via STScI mailing list
- publicised at AAS
- circulated by NEXSci via their mailing list
- posted on social media

We received a total of **1171** responses by the deadline.
Survey Structure and Content

- The survey was split into 5 sections:
  - **Section 1: Demographic Information**
    - Demographic information to ensure voices from across the astronomical community are represented and heard.
  - **Section 2: Past Experience**
    - Past experience with accessing or analyzing data either with or without exclusive access periods.
  - **Section 3: Effects of changing the Hubble or JWST Exclusive Access Periods**
    - Anticipated possible impacts of eliminating the exclusive access period for Hubble and/or JWST data.
  - **Section 4: Potential processes for implementing a default Zero Exclusive Access Period**
    - Possible implementation strategies for handling requests for exclusive access if Hubble and/or JWST were to move to a default of zero exclusive data access.
  - **Section 5: Final Thoughts**
    - Potential benefits and potential downsides of a Zero EAP policy, and space for open-ended feedback on the broad topic of open access to Hubble and JWST data.
Survey Processing

- Removed two entries:
  1) Had selected every option when more than one selection allowed, and the first answer when only one selection allowed. (Undergraduate, mentor of undergrads, grads, postdocs.)
  2) Bogus text in one write-in box.
- Produced overall results for all questions.
- Sliced some questions by some demographic groups to see how responses varied for different groups.
- Processed demographic write-ins into existing boxes where possible.
- All long text responses provided as appendices.
Section 1
Demographic Information
Section 1: Questions

- What type of institution are you primarily affiliated with?
- What geographic region is your primary institution located in?
- If you are located in the United States, are you eligible to receive grant funding from Hubble or JWST programs?
- What sub-field(s) do you do most of your work in?
- What is your career stage?
- Are you a mentor to junior researchers, or do you work at a Minority Serving Institution (MSI)?
- When did you get your PhD?
- What is your gender identity?
- What do you identify as your race and/or ethnicity?
Institution Type

What type of institution are you primarily affiliated with?

- Doctoral degree granting university: 692 (59.2%)
- Other four-year university or college: 56 (4.8%)
- Two-year college or community college: 1 (0.1%)
- Observatory, Laboratory, or National Facility: 194 (16.6%)
- Research institution: 214 (18.3%)
- Other: 12 (1.0%)
What geographic region is your primary institution located in?

- **Africa**: 1 (0.1%)
- **Asia**: 19 (1.6%)
- **Australasia**: 18 (1.5%)
- **Central or South America**: 25 (2.1%)
- **Europe**: 347 (29.7%)
- **North America, not US**: 97 (8.3%)
- **United States**: 662 (56.6%)
If you are located in the United States, are you eligible to receive grant funding from Hubble or JWST programs?

- Yes: 603 (51.6%)
- No: 12 (1.0%)
- I don't know: 44 (3.8%)
- No Response: 3 (0.3%)
- Not in the USA: 507 (43.4%)
Fields of Research

What sub-field(s) do you do most of your work in?

- Solar System: 97 (8.3%)
- Exoplanets: 343 (29.3%)
- Stellar Physics: 340 (29.1%)
- Local Interstellar Medium: 145 (12.4%)
- Resolved Stellar Populations: 153 (13.1%)
- Galaxy Evolution: 383 (32.8%)
- Black Holes and AGNs: 237 (20.3%)
- Circum- or Intergalactic Medium: 91 (7.8%)
- Cosmology: 136 (11.6%)
- Transients: 137 (11.7%)
What is your career stage?

- Undergraduate Student: 11 (0.9%)
- Graduate Student (PhD/Masters): 167 (14.3%)
- Postdoc: 190 (16.3%)
- Research Scientist / Long-Term: 243 (20.8%)
- Non Tenure-Track Faculty: 47 (4.0%)
- Tenure-Track Faculty: 120 (10.3%)
- Tenured Faculty: 357 (30.5%)
- Emeritus / Retired: 18 (1.5%)
- Other or No Response: 16 (1.4%)
Mentor to Junior Researchers or Affiliated with an MSI

Are you a mentor to junior researchers? Do you work at a Minority Serving Institution?

- Primary supervisor or mentor to Undergraduates: 636 (54.4%)
- Primary supervisor or mentor to Grad Students: 551 (47.1%)
- Primary supervisor or mentor to Postdocs: 446 (38.2%)
- Primary affiliation is a Minority Serving Institution: 81 (6.9%)
Gender Identity

What is your gender identity?

- Woman: 364 (31.1%)
- Man: 710 (60.7%)
- Non-binary: 26 (2.2%)
- Prefer not to say or No Response: 69 (5.9%)
Section 2
Past Experience
Section 2: Questions

- Have you ever used archival Hubble data in a project? “Archival” data here is defined as publicly available data for which you did not specifically apply for time, and includes both raw data and public high-level science products.
- If you ever used archival Hubble data in a project, how long of an EAP did those data initially have?
- Although JWST is much newer, some of its early data is already publicly available. Regarding publicly-available data for which you were not an Investigator on the original proposal, have you …
- Have you ever decided to not do a project because some of the data were unavailable owing to an EAP?
- Have you ever had access to and analyzed data from Hubble or JWST with a non-zero EAP during the EAP?
- If yes, how do you think the timeline to analyze and publish your results was influenced by the EAP?
- Do you have experience being an Investigator on an approved Hubble or JWST program with a zero EAP?
- If yes, how do you think the timeline to analyze and publish your results was influenced by the lack of an EAP?
- Do you have any experience using data from an observatory for which all data were immediately publicly available (e.g., TESS, Kepler's Extended Mission, Swift, Fermi, Gaia, etc.)?
- Do you have any experience applying for, and receiving, data from an observatory for which all data were immediately publicly available (e.g., TESS, Kepler's Extended Mission, Swift, Fermi, etc.)?
Section 3
Effects of Changing the Hubble or JWST EAPs
Section 3: Questions

- How do you expect a Zero Exclusive Access Period would affect ...
  - Students working on projects based on purely archival HST or JWST data
  - Other junior researchers working on projects based on purely archival HST or JWST data
  - Senior researchers working on projects based on purely archival HST or JWST data
  - Students working on specific GO programs
  - Other junior researchers working on specific GO programs
  - Senior researchers working on specific GO programs
  - Researchers at liberal arts / teaching universities
  - Public interest in Hubble and JWST data and results
- How would more data with Zero Exclusive Access Period affect your research plans or those of your research group's?
Impact of a Zero EAP on Community Groups

How do you expect a Zero EAP would affect...

- Students working on GO data
  - Mostly Positively: 5.2%
  - Somewhat Positively: 6.8%
  - No Impact: 18.6%
  - Somewhat Negatively: 63.4%
  - Mostly Negatively: 1.5%

- Junior researchers working on GO data
  - Mostly Positively: 4.4%
  - Somewhat Positively: 3.6%
  - No Impact: 9.0%
  - Somewhat Negatively: 21.4%
  - Mostly Negatively: 60.9%

- Senior researchers working on GO data
  - Mostly Positively: 5.9%
  - Somewhat Positively: 4.9%
  - No Impact: 18.0%
  - Somewhat Negatively: 30.0%
  - Mostly Negatively: 37.5%

- Students working on Archival data
  - Mostly Positively: 5.1%
  - Somewhat Positively: 10.5%
  - No Impact: 9.4%
  - Somewhat Negatively: 34.4%
  - Mostly Negatively: 34.4%

- Junior researchers working on Archival data
  - Mostly Positively: 14.5%
  - Somewhat Positively: 39.4%
  - No Impact: 30.2%
  - Somewhat Negatively: 10.0%
  - Mostly Negatively: 13.0%

- Senior researchers working on Archival data
  - Mostly Positively: 10.0%
  - Somewhat Positively: 13.6%
  - No Impact: 19.7%
  - Somewhat Negatively: 19.7%
  - Mostly Negatively: 44.3%

- Researchers at liberal arts or teaching universities
  - Mostly Positively: 8.8%
  - Somewhat Positively: 13.9%
  - No Impact: 13.3%
  - Somewhat Negatively: 13.9%
  - Mostly Negatively: 49.5%

- Public Interest in Hubble and JWST
  - Mostly Positively: 12.8%
  - Somewhat Positively: 12.1%
  - No Impact: 12.1%
  - Somewhat Negatively: 8.3%
  - Mostly Negatively: 61.0%

Percentage of Respondents
# Impact of a Zero EAP on Community Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>How do you expect a Zero EAP would affect...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students working on GO data</td>
<td>Mostly Positively: 52%</td>
</tr>
<tr>
<td>Junior researchers working on GO data</td>
<td>Mostly Positively: 48%</td>
</tr>
<tr>
<td>Senior researchers working on GO data</td>
<td>Mostly Positively: 52%</td>
</tr>
<tr>
<td>Students working on Archival data</td>
<td>Somewhat Positively: 22%</td>
</tr>
<tr>
<td>Junior researchers working on Archival data</td>
<td>Somewhat Positively: 20%</td>
</tr>
<tr>
<td>Senior researchers working on Archival data</td>
<td>Somewhat Positively: 20%</td>
</tr>
<tr>
<td>Researchers at public institutions</td>
<td>No Impact: 16%</td>
</tr>
<tr>
<td>Public interest in Hubble and JWST</td>
<td>No Response: 6%</td>
</tr>
</tbody>
</table>

![Bar chart showing the impact of a Zero EAP on various groups](chart.png)

## How do you expect a Zero EAP would affect...?

- Mostly Positively
- Somewhat Positively
- No Impact
- No Response

### Source

[STScI SPACE TELESCOPE SCIENCE INSTITUTE](https://www.stsci.edu)
Impact of a Zero EAP on Research Plans

How would more data with Zero EAP affect your research plans or those of your research group(s)?

- Mostly Positively: 114 (9.8%)
- Somewhat Positively: 103 (8.8%)
- No Impact: 174 (14.9%)
- Somewhat Negatively: 281 (24.0%)
- Mostly Negatively: 434 (37.1%)
- I Don't Know: 56 (4.8%)
- No Response: 7 (0.6%)
Section 4
Potential Processes for Implementing a default Zero EAP
Section 4: Questions

- If Hubble and/or JWST transition to a *default* zero EAP, should requests for a non-zero EAP be granted automatically?
- Should the science of the program or the team composition (e.g., if students are expected to work on the data) be taken into account when granting requests for non-zero EAPs?
- Have you ever served as a proposal reviewer for either HST or JWST?
- Who, if anyone, should review the requests for non-zero EAPs?
- What, if any, operational or administrative changes would be helpful to you or your research group to mitigate potential negative impacts of eliminating EAPs?
Common themes among the responses:

- No administrative changes would alleviate the negative impact of Zero EAP.
- Funding:
  - More funding.
  - Receiving funding earlier.
  - Receiving all funding at once, not in portions.
  - Funding outside US.
  - Funding for writing proposals, preparing Phase IIs.
  - Funding for teaching course buy-outs.
- Pipeline should deliver fully-reduced “science-ready” data.
- Mature, robust, easy to use analysis tools.
- Make proposals and/or data citable so proposers receive credit.
- Papers cannot be published (shared in talks, posted to the arXiv) using Zero-EAP data within the first few months.
- There are no negatives, go to Zero EAP.
Section 5

Final Thoughts
Section 5: Questions

- What do you see as the potential benefits to reducing or eliminating the exclusive access period for Hubble and/or JWST data?
- What do you see as the potential downsides to reducing or eliminating the exclusive access period for Hubble and/or JWST data?
- You are invited to use this space for any additional thoughts regarding open data access and the futures of Hubble and JWST.
Potential Benefits and Downsides of Reduced or Zero EAP

What do you see as the potential benefits to reducing or eliminating the EAP for Hubble and/or JWST data?

- Faster multiwavelength follow-up and better synergies with other facilities: 483 (41.3%)
- Better and more informed science proposals for future cycles: 386 (33.0%)
- Levels the playing field for observers at institutions with less representation among the proposing community: 377 (32.2%)
- Faster science results: 338 (28.9%)
- Accelerates new ideas: 294 (25.1%)
- Increased opportunities for citizen science using facility data: 235 (20.1%)
- Increased public engagement and support for science and observatories: 199 (17.0%)
- Write In: 160 (13.7%)
- No Response: 247 (21.1%)

What do you see as the potential downsides to reducing or eliminating the EAP for Hubble and/or JWST data?

- Increases number of rushed publications with less careful data analysis: 1016 (86.9%)
- Increases pressure on junior scientists: 972 (83.1%)
- Creates unequal playing field for junior and less experienced observers in getting publications out: 938 (80.2%)
- Increases pressure on scientists at smaller institutions: 860 (73.6%)
- Disincentivizes submission of proposals from groups and institutions with fewer resources: 800 (68.4%)
- Disincentivizes submission of proposals with creative new scientific ideas: 579 (49.5%)
- Write In: 177 (15.1%)
- No Response: 39 (3.3%)
Write In Responses for Potential Benefits
Write-In Responses for Potential Benefits

- Helps researchers with language barriers.
- It will make the field much more diverse, equitable, and inclusive. It breaks up the [groups] who gatekeep access to datasets required to be a successful astronomer. In my field the gatekeepers are mostly senior white men and women, and this obviously has a cascading effect in terms of who gets to do astronomy.
- Those who don’t have access to a supportive community of mentors and resource analysts would have access to the data at the same time as their more well resourced colleagues.
- Countries/communities that are less successful in obtaining data could work on the data. For instance, the Ethiopian community is trying to improve their astronomical skills and they are doing it thanks to facilities like SLOAN so they can play with state-of-the-art data without being able to get a proposal approved yet. JWST will benefit from a broader community accessing the data and getting ready for new proposals.

- Reduces the 'matthew effect' of someone getting lucky to get time and then getting the next thing, etc. by no one being able to compete.
- There is too much "momentum" or accumulation of privilege entailed by winning a proposal in the current system (especially when multiple groups compete for the same thing). Having the telescope run the program and funding the researchers should be plenty.
Write-In Responses for Potential Benefits

- More papers.
- Eliminate papers based on partial availability of relevant data.
- Increase number of analysis/interpretation of the same dataset.
- Reproducible, transparent non-secretive research.
- Increases transparency, which is a key value in an honest scientific endeavor.
- More and more independent scrutiny of important datasets.
- Encourages collaboration (rather than competition), which is what produces the best science.
- People will be more prepared to do science with future observatories that have already built-in a zero EAP.
- Saving proposal writing and using exclusively data becoming public.
- More uniform calibration of data products, as was achieved with TESS and K2.
- It will incentivise more creative and novel fellowship proposals from junior researchers who won't be able to use access to proprietary data as a selling point for their science cases. It will also somewhat reduce the impact of politics in these proposals, as using connections to get to be "on point" for analysis on big programs will no longer necessarily be an advantage for fellowship applications.
• A *lot* of my work is in citizen science and I recognise there are some amateur professional scientists who could do interesting things with no proprietary period, but I can very easily count them on two hands, and they should not sway policy against the opinion of the rest of the community. Larger-scale citizen science projects, e.g. running a Galaxy Zoo like project from JWST, still take substantial professional involvement and are best when they are done collaboratively with the team that proposed for the data, which is *far* more likely when the proposing team doesn't feel like they are going to be scooped at any second in their first year of analysis. So while I did tick the box, I believe *most* citizen science actually benefits from a reasonable proprietary period on raw data.
Write-In Responses for Potential Benefits

• I don't see any benefits. Rushed science is bad science.
• I really don't see any benefits. There is no need to share the photons right away.
• There are no benefits. That should have been an option we could check.
• The community already benefits from no EAP for large and treasury programs. Removing EAP from smaller programs does not help.
• I see zero benefits whatsoever. None of the above items will/would actually happen, and certainly not by making results or analyses that stand the test of time.
• None. I see only negatives for the community.
• The list provided are hoped for benefits -- not sure any will be realized.
• I don’t think there will be any. Field becomes even more cut throat.
• I see no major benefits. Elimination of the EAP creates rushed science with higher chances of erroneous results.
• None. This gives more pressure to smaller groups.
• None really, academic environment will be more hostile to young researchers as there will be more competition when analyzing the data. This will severely affect small universities, minority and teaching institutions.
• I see no or very little benefits. The slight increment of the currently available archive is not worth extreme negative consequences.
Write In Responses for Potential Downsides
Write-In Responses for Potential Downsides

- Increases pressure on all scientists and encourages poor work-life balance.
- Increases pressure on scientists with heavy teaching loads, who are on leave (parental, health,...), who may not have time/staff resources to jump on data and need to plan their workload over the year.
- Unfair for caregivers who can't find the time to work evenings and weekends to rush out a paper.
- Increases pressure on scientists with care responsibilities and/or health problems who can't work 12h for 7d a week.
- Causes trauma and loss of wellbeing.
- Unequal playing field for part-time workers due to care responsibilities.
- Significant negative mental health impacts due to increased publication pressure.
- Creates unequal playing field for researchers with caring responsibilities.
- The increased pressure to work fast will contribute to the already incredibly unhealthy (lack-of) work-life balance in astronomy.
- Increases pressure on parents and caretakers, increases pressure on those that are disabled or have ongoing medical (physical and mental) challenges.
- Tremendously negative impact on mental health, driving junior researchers, especially those from marginalized groups, out of the field.
- [I know several junior scientists] who have felt burnt out or experienced undue stress due to feeling like they need to get a result out quickly, and this was even for data that still had a 6-month proprietary period. Given that the field of astronomy already has problems with burnout and mental health (especially in grad students and postdocs), it seems like a ridiculous idea to *choose* to make that situation worse. I think ultimately it will force many talented people out of the field.
Write-In Responses for Potential Downsides

- Encourages a culture of haste and scooping.
- Invites "scooping" to be a regular thing.
- PROPOSING TEAM GETS SCOOPED!
- Creates negative culture of competition and scooping.
- Creates an incentive to scoop other teams, poach other people's ideas.
- Incentivizes bad actors to scoop results and not properly credit proposers.
- It encourages a competitive, rather than collaborative, culture.
- Encourages hostile competition between research groups.
- Increases community conflict and decreases community collegiality.
- Produces far more competition and less collaboration.
- Encourages aggressive practices in an already competitive field.
- Increases unethical behavior and abuse. Why bother putting a proposal together when you can just take the data from your competitors.
- It’s a lot of work to put in a science proposal and schedule the observations. To do all that work and then get scooped while doing the analysis seems like a terrible policy.
- Increases unhealthy competition in the field [...], enables more unethical researchers to "get ahead" due to shoddier science and research practices becoming necessities, disincentivizes observational astronomy as a career field due to the sharply increased cutthroat nature.
• Less open source code.
• Results in lots of private software to maintain a scientific advantage.
• Makes it less likely people will release software publicly, eroding confidence in results.
• Encourages theft of intellectual property, including ideas, methods, and analyses.
• Promotes science as a gold rush. No time for critical thinking, just mining data.
• Increases rate of people proposing for one thing while actually intending to do another with their data.
• Devalues the skill and effort required to design cutting edge projects and write good proposals.

• Disincentive for programs with long timescale.
• Disincentivizes senior scientists' mentorship of students (or new-to-research-area postdocs) who are likely to be slow to publish.
• Disincentivizes building instruments for guaranteed observing time.
• Disincentivizes scientists from participating in mission studies and proposals that help define the next set of observatories.

• Confuses the general public with contradictory/outrageous announcements (due to rushed publications), and further reduces their trust in scientific publications, and science in general.
• Unable to curate scientifically validated information to public; opportunity to spread a lot of misinformation.
• Promotes a message to the public (and to our junior researchers) that science should be done quickly.
Write-In Responses for Potential Downsides

- Increases pressure on non-US scientists with no access to "immediate" funding after proposal is accepted.
- Favor US research over other institutions which don't have HST/JWST grants for accepted proposals.
- It would *really* negatively impact UK and European groups who often have no guaranteed funding to support analysis after winning time.
- A unilateral decision by NASA is disrespectful to non-US collaborators on these large space projects.
- Strongly biases the field in favour of institutions with substantial financial resources.
- Damaging the career prospects of marginalized students or researchers at smaller schools, liberal arts schools, HBCUs, etc., if they cannot publish data they have proposed for.
- Minority-serving institutions are also going to be more likely to negatively affected by this, as they are less likely to have resources to speed up analysis.
- It will HARM equity in the field, not improve it.
- ELIMINATING EAPs IS INEQUITABLE and will only do harm.
- Leaky pipeline will be even leakier. ... This will lead to prosperity of most privileged people and loss of diversity.
- A zero EAP will ultimately hurt the communities that it is trying to help.
Write-In Responses for Potential Downsides

- None. just look at all the public HST programs - CANDELS, HDF, etc - students published many papers from the main teams with no problem.
- All the above, but all at insignificant levels.
- I see no downside.
- It’s just a positive action towards a free science.
- As a Junior Scientist, I strongly believe zero proprietary time is the way to go. All potential downsides are overblown. Junior and less experienced observers can gain experience through all the public datasets they can hone their skills on. Submission of proposals comes with huge amounts of grant funding -- JWST is only set to be massively oversubscribed Cycle after Cycle. The community self-corrects for rushed publications that are *wrong*, rushed publications that are *right* are great for efficient scientific returns and follow-up opportunities.
Write In Responses for Additional Thoughts on Data Access Policies
Additional Thoughts on Open Data Access for Hubble and JWST

• Please don’t do this. (Very many of these.)
• You should have done this years ago. (A handful of these.)

• Cons outweigh the pros. (A lot of these.)
• Pros outweigh the cons. (Fewer of these.)

• EAP Policies:
  › Current policies work well, don’t change them.
  › Change Hubble back to 12 months. (Often because some folks can only do research in the summer.)
  › JWST would benefit from longer EAPs.
  › Shorter EAPs would be ok, but not Zero.
  › EAP changes for JWST might be appropriate in future cycles when it is less new.
Accident, injury, pregnancy, bereavement, are all things that can occur between making a proposal and the successful awarding of time. Without a suitable buffer period there is pressure to work through these things, which may not be healthy. Mental illness is rife in our industry and a lot of that has to do with pressure to publish and do so on timelines not suitable to the trials of life in general.

As a researcher with some programs that have no EAP and some with an EAP, the one without an EAP is overwhelmingly more stressful to work on.

Working on a project with zero EAP in the first month of JWST science operations was exciting, but also pretty terrible for my physical and mental health. We had to work literally around the clock and were definitely rushing to reduce and analyze our data. And we were still scooped by three other teams. While it was exciting to be involved, I cannot afford that level of intensity again. The experience made me pretty sure I didn't want to lead any Cycle 2 proposals and also seriously consider leaving the field. The problem was not necessarily the zero EAP (but rather the pressure to publish and gain recognition that leads to this high-pressure culture), but the zero EAP made it much worse.

We received zero exclusive access time data from JWST, and as a graduate student I wrote a discovery paper for a galaxy at redshift z=9.5. Because the data were public, I had to write the paper in a matter of days, which made me feel less confident in the analysis I was publishing and was absolutely terrible for my mental and physical health. I hardly ate anything, slept only a few hours, and didn't even have time to shower for 4 days. The reality is that graduate students and other junior researchers will be the ones facing these conditions if all data are immediately public.
Rushed publications and less careful analysis

- Faster science results do not mean better science results.
- I view [this issue] as bad for all science and scientists to have to rush to publish immediately and to have to read publications that were rushed. The point of JWST/HST is to do science, not merely to produce data. Proprietary periods -- even short ones -- lead to better science at essentially zero cost.
- Lack of exclusive access will yield to rushed, potentially flawed results with the serious risk of damaging the credibility of scientists and institutions.
- Careful science and good mentorship/training require time.
- My biggest concern is the rushed publication problem. Unlike surveys, which may spawn many projects, targeted observations likely have a single goal or two in mind, but rushed analyses do not serve science well, and by extension do not serve the general public well either.
- It is my opinion that the short access period in year 1 has resulted in a large number of rushed papers, many of which have already been shown to be false. It has reduced the quality of JWST data.
- The early JWST public data on Galaxy Evolution has been exciting, but no one believes the results because they have been so rushed.
- Poor analysis takes others longer to correct once it is in the literature.
Increases pressure on junior scientists

- We were in this situation with the JWST ERS data and it was an awful time for the junior researchers who were leading the papers on the data. People can go through this once or twice, but it cannot become a standard. Research needs time and especially junior researchers and their work need to be protected. People who scoop others are usually more senior researchers. This would make the mental health situation of junior researchers even worse than it already is. ... Also, junior researchers often have to work on job applications which can take a significant amount of their time, so that projects easily get delayed by a couple of months. In the situation of no EAP, there would be no space to breathe for junior researchers in such situations and both the quality of the science and the applications would suffer.

- I have been personally impacted by non-EAP as I was scooped as a graduate student on a high-impact paper. ... I am very concerned that my future students will experience similar scenarios if EAP is removed. How do I explain to them that they don’t have time to carefully learn the tools and science behind the data, that publishing is more important than learning and appreciating the data?

- I worry that junior researchers may fear using zero EAP data because the PI team could take retribution when they junior researcher submits a proposal, looks for a job, etc.
Increases pressure on scientists at smaller institutions

- The proprietary period is critical for enabling investigators at small and under-resourced institutions to lead programs on HST and JWST. While such an investigator may have a good idea that leads to a successful proposal, they often cannot compete with investigators at other institutions worldwide who have more resources to work with archival data. They may need to wait for the summer, when they themselves will have research time, or when student interns are available. Funding from HST and JWST programs help provide resources to successful investigators, but these typically do not start until data is taken, by which point, it is already too late if the data goes public immediately in a competitive landscape. Even if the money were to come earlier, which would be helpful, the lead time needed for recruitment of students and postdocs is often of order one year. Taking the other point of view --- that of the archival researcher at a small institution, the aforementioned reasons are also why it is unlikely that they would benefit from immediate data release. This time, they would be competing with larger teams, but without the benefit of funding. The main people who benefit from immediate data release are those who have ample resources, and are direct competitors of the team leading the original program. In some cases, the data may have uses orthogonal to the original intent of the program, in which case interested researchers can contact the team during the proprietary period.
Effort of proposing

- Scientists who come up with good ideas, write good proposals, then create (time consuming) Phase II’s eventually get (most) the data they request. This represents a lot of intellectual effort, and “free research time” to have the data collected by HST. These people should be rewarded by having exclusive access so they can properly analyse their data. If it were not for their efforts the data would never have been collected! Is it fair to let rival researchers just take the HST data - that the original PI has invested so much effort in obtaining.

- We realize that the analysis of astronomical data takes time and effort, and because of that it is public policy to fund the work of US researchers who are granted HST/JWST time. On the same token, if we believe that producing a paper from one's observations is so onerous that it requires funding, should we not also grant the time necessary for that work?
I have built a career based upon the analysis of archival data and so I strongly believe in the need for archives of publicly available data. For all proposals that I have had accepted, I have always waived the EAP and preferred instead that the data is made instantly public. I do this because I believe the data should be a community resource and therefore should benefit everyone, not just me. ... But it is my view that simply eliminating the EAP would actually have a negative impact on the field overall, despite potential enhancing my own career.
Additional Thoughts on Open Data Access for Hubble and JWST

- Lastly I hope that this survey will follow its own philosophy and that the results are published fully and openly, with zero exclusive access period.
- Open access to scientific results should not be confused with immediate open access to raw, unprocessed data. They are not the same thing!
- I keep coming back to “if nobody was a jerk, none of this discussion would be necessary”, but that just isn't reality, and I feel really strongly that NASA and ESA should make it their primary duty to ensure the system they create doesn't incentivise the jerks.
- Zero EAP does not provide better open-access. That is a red herring. All data are archived and do become public at the end of a reasonable EAP. So the arguments that zero EAP somehow provide better or more open-access are specious. From my perspective, zero EAP by default will largely result in a negative impact on fairness in research.
- The style of proposals will change drastically. If large consortia apply, this guarantees fast publications on all aspects of the new data. Small groups and students are discouraged with this system.
- The common argument against zero EAP is that the proposers spending time on working on an idea, yet the data will be available for all. Well, the proposers are also getting funding for that idea, so I think all it requires is a shift in POV, the telescope proposals will eventually become a funding proposal rather than collecting proprietary data for those already in an extremely privileged position.
Additional Thoughts on Open Data Access for Hubble and JWST

• I appreciate your current policy as it is now with large and treasury programs having zero exclusionary period, but other programs having the choice depending on their own situations. I think it strikes the right balance.

• I think the fact that JWST's lifetime may now be longer than originally planned (as a result of the superbly successful launch and L2 insertion) means that the urgency of releasing data immediately to inform future observing proposals is now lower. That in turn argues that nonzero EAPs should be favored for JWST as well as HST data.

• From my perspective, it seems like this is being considered purely so that we can tell the public "hey guess what? All this data is available to YOU!" even though we all know that 99.99% of the general public will do absolutely nothing with it. All the data is already available to the public after the EAP anyway, so there's no improvement here.
• Scooping has also been a massive issue in the exoplanet community. Some programs require multiple transits to answer the science case proposed. On many occasions the first transit has become public and teams have published them without contacting the PI of the proposal, who is usually waiting for all transits to perform the science.

• The pressure to publish results quickly so as to not get "scooped" really depends on the field. I think it is particularly cut-throat in exoplanet and high redshift communities, not so much in the ISM field that I work in. If I were a researcher in the field of exoplanets and galaxy evolution, I would be very concerned about zero exclusive access period, particularly if I were a student, postdoc, or junior faculty.

• [...] I say this coming from the perspective of somebody who's literally had a NASA-facility paper scooped by somebody who went around telling mutual acquaintances, "I know he had a paper submitted, I did it because he got a job that should have been mine". (Exoplanets is terrible.)

• It is an open secret in the JWST exoplanets community that the period was incredibly stressful for students involved in the data analysis that was public immediately this summer, with one student I know of engaging in self-harm and another I've discussed with now planning to leave the field due to their terrible experiences in those weeks. This is because while senior astronomers paid lip service to caring about junior faculty, in practice the greatest pressure was from those very same astronomers on the junior members of the team. (I also got doxxed on a JWST conference call attended by hundreds of people for speaking publicly about my concerns by those senior people.)
Slices by Institution Type
Impact of Zero EAP on Community Groups by Institution Type

- StudentsGO
- JuniorGO
- SeniorGO
- StudentsArchival
- JuniorArchival
- SeniorArchival
- SmallInstitutions
- PublicInterest

Institution Types:
- Other
- Research Inst
- Obs or Lab
- 2Y U or CC
- 4Y U or College
- PhD Univ

Color Scale:
- Negative
- No Impact
- Positive
Impact of Zero EAP on Community Groups by Mentorship or MSI affiliation
Impact of Zero EAP on Research Plans by Institution Type
### Potential Benefits by Institution Type

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percentage of Respondents at Institution Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faster multiwavelength follow-up and better synergies with other facilities</td>
<td>Doctoral degree granting university: 40.2%</td>
</tr>
<tr>
<td></td>
<td>Other four-year university or college: 30.6%</td>
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<tr>
<td></td>
<td>Two-year college or community college: 30.6%</td>
</tr>
<tr>
<td>Better and more informed science proposals for future cycles</td>
<td>Doctoral degree granting university: 31.5%</td>
</tr>
<tr>
<td></td>
<td>Other four-year university or college: 33.5%</td>
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<tr>
<td></td>
<td>Two-year college or community college: 34.1%</td>
</tr>
<tr>
<td>Levels the playing field for observers at institutions with less representation among the proposing community</td>
<td>Doctoral degree granting university: 31.8%</td>
</tr>
<tr>
<td></td>
<td>Other four-year university or college: 31.8%</td>
</tr>
<tr>
<td></td>
<td>Two-year college or community college: 34.1%</td>
</tr>
<tr>
<td>Faster science results</td>
<td>Doctoral degree granting university: 27.2%</td>
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<tr>
<td></td>
<td>Other four-year university or college: 30.9%</td>
</tr>
<tr>
<td></td>
<td>Two-year college or community college: 33.5%</td>
</tr>
<tr>
<td>Accelerates new ideas</td>
<td>Doctoral degree granting university: 23.4%</td>
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<tr>
<td></td>
<td>Other four-year university or college: 26.3%</td>
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<tr>
<td></td>
<td>Two-year college or community college: 28.0%</td>
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<tr>
<td>Increased opportunities for citizen science using facility data</td>
<td>Doctoral degree granting university: 18.8%</td>
</tr>
<tr>
<td></td>
<td>Other four-year university or college: 19.6%</td>
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<tr>
<td></td>
<td>Two-year college or community college: 23.2%</td>
</tr>
<tr>
<td>Increased public engagement and support for science and observatories</td>
<td>Doctoral degree granting university: 15.3%</td>
</tr>
<tr>
<td></td>
<td>Other four-year university or college: 15.3%</td>
</tr>
<tr>
<td></td>
<td>Two-year college or community college: 20.1%</td>
</tr>
</tbody>
</table>
Summary and Wrap-Up
High-Level Summary

- Results were varied but the overall message was clear.
  - Majority strongly not in favour of Zero EAP for Hubble and JWST.
  - But some responses enthusiastically positive about Zero EAP.

- Overall results did not change when sliced by demographic group.
  - Career stage, research field, geographic region, institution type — some small variations but the same overall conclusion.
Draft of EAP Working Group Charter

• STScI is constituting a working group comprising members of the Space Telescope Users Committee (STUC) and the James Webb Space Telescope Users Committee (JSTUC) to provide a perspective on community preferences for the evolution of Exclusive Access Periods (EAP) for Hubble and Webb data. The working group is charged with:
  • Using the summary of the community survey to develop assessment of the community’s views on the advantages and disadvantages of a non-zero EAP;
  • Advising STScI and NASA on general protocols to follow in considering changes to EAP;
  • Determine whether there are particular circumstances where EAP values above the default may be warranted, and provide specific examples;
  • Advise STScI and NASA on how to adjudicate such cases.
• The working group will report in early 2024. The recommendations are strictly advisory.