JWST Community Engagement

• We aim to provide the JWST User Community with the most up-to-date information on observatory operations, instrument performance, pipeline, calibration, data analysis tools, proposals, surveys & events
• Our main initiative since Sept 2023 JSTUC has been to improve our communication by increasing direct engagement with the community, including in-person interaction
• How we reach out:
  • Webb Office Hours
  • JWebbinars
  • AAS ‘Ask-an-Expert’ and Townhalls
  • JWST Observer News Items and Articles
  • Workshops (Improving JWST Data Products - Nov 2023 see D. Law’s Pipeline talk)
• How the community can reach us:
  • JWST Help Desk
  • Dedicated Instrument Scientists for PIs
  • User Survey (See M. Garcia Marin’s User Survey talk)
Webb Office Hours

- In direct response to JSTUC feedback for more direct/in-person interaction
- Invite community to join a team of STScI experts via WebEx to directly ask their data questions
- Cadence: 2nd and 4th Thursday of each month (started 8 Feb 2024)
- Wide range of 2-4 experts chosen per week (mainly from Instrument teams)
- Answer questions on Pipeline, calibration, instrument performance, proposal planning, etc.
- Not recorded, but Q&As are captured on the JWST Event Archive Page
Webb Office Hours to-date

- **Session 1**
  - technical difficulties stopped most from attending
  - 2 participants
  - 8 questions mainly about MRS data and analysis
    - MRS striping, bad pixel masks
    - background subtraction methods
    - spectral extraction in cubeviz

- **Session 2**
  - 1 participant
  - 1 question on header keywords (EFFINTIME)

- **Session 3**
  - 2 participants
  - 1 MRS repeat customer
  - outlier detection step with very large datasets
JWST Community Engagement – Webb Office Hours

• Webb Office Hours
  • initial sessions already yielding improvements to documentation based on questions asked
  • Users came prepared with images and notebooks to share
  • E.g. two questions on “black dots in MIRI MRS” yielded updates to JDox (release late March)

3. Q: What causes the black dots in the MIRI MRS channel 2 image below?

A: These are bad pixels. The bad pixel mask was updated a couple weeks ago. Try reprocessing again and these will hopefully be eliminated. If the problem persists, we recommend that you submit a Help Desk question to get additional help on this topic.
• **Webb Office Hours to-date**
  • We will be advertising regularly and hoping to grow the number of participants and see if the community wants to keep these events going
  • Please share with your community
  • Discussion:
    Is this useful? Do your colleagues, students want to join? Ideas to engage more?

### Sessions:

<table>
<thead>
<tr>
<th>Date</th>
<th>Q&amp;A Archive</th>
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<tbody>
<tr>
<td>08 Feb 2024</td>
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<td>22 Feb 2024</td>
<td>WOH 22Feb2024</td>
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<td>14 Mar 2024</td>
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<td>28 Mar 2024</td>
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JWST Community Engagement – AAS

- 243rd AAS, New Orleans, LA, 7-11 January 2024
  - “Ask-an-Expert” at the STScI booth
    - More direct interaction was encouraged by having STScI JWST instrument experts available during the entire meeting to answer data questions or concerns.
  - Success stories
  - Needs more advertising in the future
- Successful JWST Town Hall
  - Over 220 people in attendance
JWST Community Engagement - JWebbinars

- **JWebbinars:**
  - STScI hosts regular JWebbinars to provide virtual, hands-on instruction on common data analysis tools and methods for JWST observations (e.g. Pipeline, Jdaviz, proposal tools, Jupyter notebook demos)
  - Virtual programming environment (hosted platform) is provided so that participants will not be required to install software prior to attending the event.
  - For many topics participants will get the most out of the event if they are familiar with basic Python coding and the Jupyter notebook interface.
JWST Community Engagement - JWebbinars

- **JWebbinars:**
  - To date there have been 31 JWebbinars (starting in Aug 2021)
  - Held 7 Events from Sept 2023 – Feb 2024
  - Topics were chosen based on the needs of the community; chosen based on feedback from User Survey, Help Desk tickets, and known issues
  - Currently planning topics for the 2nd half of 2024

<table>
<thead>
<tr>
<th>JWebbinar</th>
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<tbody>
<tr>
<td>31 - Pipeline Reprocessing of JWST Imaging Data</td>
<td>Feb 2024</td>
</tr>
<tr>
<td>30 - MOS Planning with MPT using an Example Science Case</td>
<td>Jan 2024</td>
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<tr>
<td>29 - JWST NIRSpec Time-Series Observations: From Uncalibrated Data to Transit Light Curves using CalWebb</td>
<td>Dec 2024</td>
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<tr>
<td>28 - Pipeline Reprocessing of Integral Field Unit Spectroscopy</td>
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<td>27 - Introduction to the Astronomer's Proposal Tool for JWST for Cycle 3</td>
<td>Sept 2023</td>
</tr>
<tr>
<td>26 - Introduction to the JWST Exposure Time Calculator for Cycle 3</td>
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</tr>
<tr>
<td>25 - MAST: The JWST Data Archive</td>
<td>Sept 2023</td>
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</table>
**JWST Community Engagement - JWebbinars**

- **JWebbinars:**
  - Participants Register beforehand in order to get access to the virtual programming environment and Slack channel discussion.

<table>
<thead>
<tr>
<th>JWebbinar</th>
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<th>Attended</th>
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<tr>
<td>31 - Pipeline Reprocessing of JWST Imaging Data</td>
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<td><strong>Total</strong></td>
<td><strong>420</strong></td>
<td><strong>213</strong></td>
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JWST Community Engagement - JWebbinars

- **JWebbinars:**
  - All events are recorded and the videos are uploaded to [JWebbinar YouTube channel](#)
  - Even if in-person attendance is low, these videos still get YouTube views
  - Currently hold 2 sessions per JWebbinar to accommodate time zones, etc

<table>
<thead>
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<td><strong>476</strong></td>
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JWST Community Engagement - JWebbinars

JWebbinars:

- Each JWebbinar session is broken down into episodes for YouTube
- Historical videos continue to get many YouTube views
- Total views of all JWebbinars (all episodes): 25,493

- Most popular: JWebbinar 1- “Pipeline 101” from 2021
- Plan to revamp older popular videos with the latest updates and replace any deprecated notebooks, etc.
- We have other YouTube training videos beyond JWebbinars (ERS programs, ETC, APT)
- Across all STScI JWST YouTube videos, JWebbinars are some of the most popular

### Top Videos:
- ERS 1386: High Contrast Imaging of Exoplanets and Exoplanetary Systems with JWST
- ERS 1345: The Cosmic Evolution Early Release Science (CEERS) Survey
JWST Community Engagement - JWebbinars

- JWebbinars:
  - Additional materials and Jupyter Notebooks are available for download on GitHub
JWST Community Engagement – Observer News

- **JWST Observer News:**
  - Subscription news mailing list
  - Aim for ~ 4 news items per month
    - Post instrument/calibration/pipeline updates, observatory operations, upcoming events
  - Number of Subscribers = 4,358
JWST Community Engagement – Observer Websites

- JWST Observer webpages also includes all science planning and execution pages
JWST Community Engagement – Observer Websites

- JWST Observer pages

**February Views**

<table>
<thead>
<tr>
<th>Page title and screen class</th>
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<tr>
<td>2 Approved Programs</td>
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<tr>
<td>3 Cycle 3 GO</td>
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<td>6 Calls for Proposals and Policy</td>
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<td>7 Observing Schedules</td>
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<td>8 JWST Observer News</td>
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<td>9 STScI Announces the JWST Cycle 3 General Observer Program</td>
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<td>10 Cycle 1 GO</td>
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**February Views per day**

![Graph showing daily views and users over February 2023]
JWST Community Engagement – Social Media

- JWST Observer Social Media
  - (Separate from larger STScI and NASA JWST accounts geared toward the public)
  - New BlueSky account - 133 followers and counting!
  - 18,274 Twitter followers
  - 5,113 Facebook followers
  - 1,950 YouTube subscribers

- We share Observer News Items and Articles, Event registrations, AAS activity
JWST Community Engagement – Help Desk

- **JWST Help Desk:**
  - Reach out to STScI
    - Ask Questions
    - Provide Feedback
    - Get Announcements & Release Notes
  - We consistently encourage users to come to the Help Desk to give us real time feedback
**JWST Community Engagement – Help Desk**

- **JWST Help Desk:**
  - Respond within 2 business days
    - Resolution may take longer depending on difficulty of question and back and forth with the user
    - Avg resolution time is less than a week from submitting (less during Proposal season)

- Implementation and feedback to teams
  - Each ticket category has a Help Desk lead that tracks tickets and ensures feedback is reported back to their team and action items are created as necessary.
  - Feedback and FAQs from tickets are used to help prioritize the needs for Pipeline updates, JDox article creation/edits, JWebbinar topics, example notebooks, proposal reviews, etc.
JWST Community Engagement – Help Desk

- JWST Help Desk:
  - Avg 14 tickets per week (in non-call for proposal periods)
  - Most active during Call for Proposals period
JWST Community Engagement – Help Desk

- **JWST Help Desk Usage:**
  - Cycle 3 Call for Proposals period (Aug- Oct 2023):
    - 422 tickets
    - questions skew towards APT, SMO
    - 295 Unique Users
  - Normal Operations from Nov 2023 – Feb 2024:
    - 213 tickets
    - Pipeline accounts for 30% of tickets
    - 152 unique users
  - Historical unique users: 1,325
JWST Community Engagement – PI unique needs

- **Individualized Communication with PIs**
  - PIs are directly contacted when there is specific news/updates related to their observations
    - E.g. guide star failure, observations during a tilt event, etc (See M. Garcia Marin’s S&OC presentation on WOPRs, PCR)
  - Instrument Scientists and Schedulers available as needed
    - Dedicate time and effort to unique needs of each PI during program review process
    - Direct email access throughout the cycle
  - Guider teams support PIs to help select and vet the guide stars