



STScI | SPACE TELESCOPE
SCIENCE INSTITUTE

EXPANDING THE FRONTIERS OF SPACE ASTRONOMY

JWST Cycle 4 Observatory Perspective

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Welcome!

- Thank you for contributing to the success of JWST!
- STScI will review accepted programs and recommend revisions, if appropriate. Proposals do not have to be technically perfect.
- Please ask if technical aspects of a proposal are unclear. Otherwise, assume proposals are feasible.

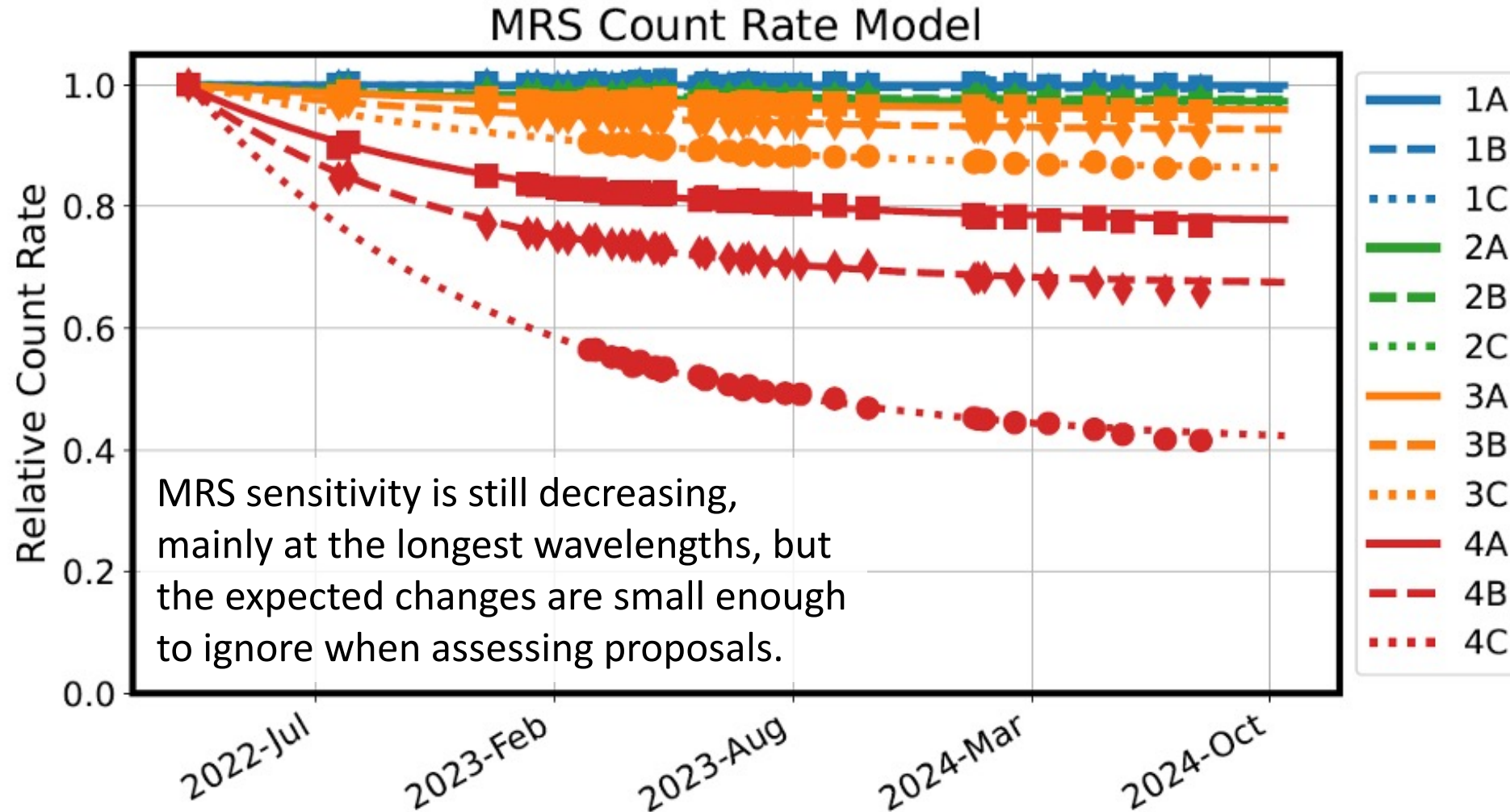


Check that special requirements are scientifically justified

- Timing constraints make scheduling harder for others.
 - Explicit timing constraints (e.g., period and phase)
 - Roll angle constraints, which are implicit timing constraints
 - Coordination with other observatories
- Coordinated parallels use resources.
 - Recorder space and downlink bandwidth.
 - Parallel slots are also used by pure parallel programs.
- Disruptive targets of opportunity are disruptive.
 - Operations staff have to build and uplink a new short-term schedule.
 - Other observers discover very late that their observations will be delayed.

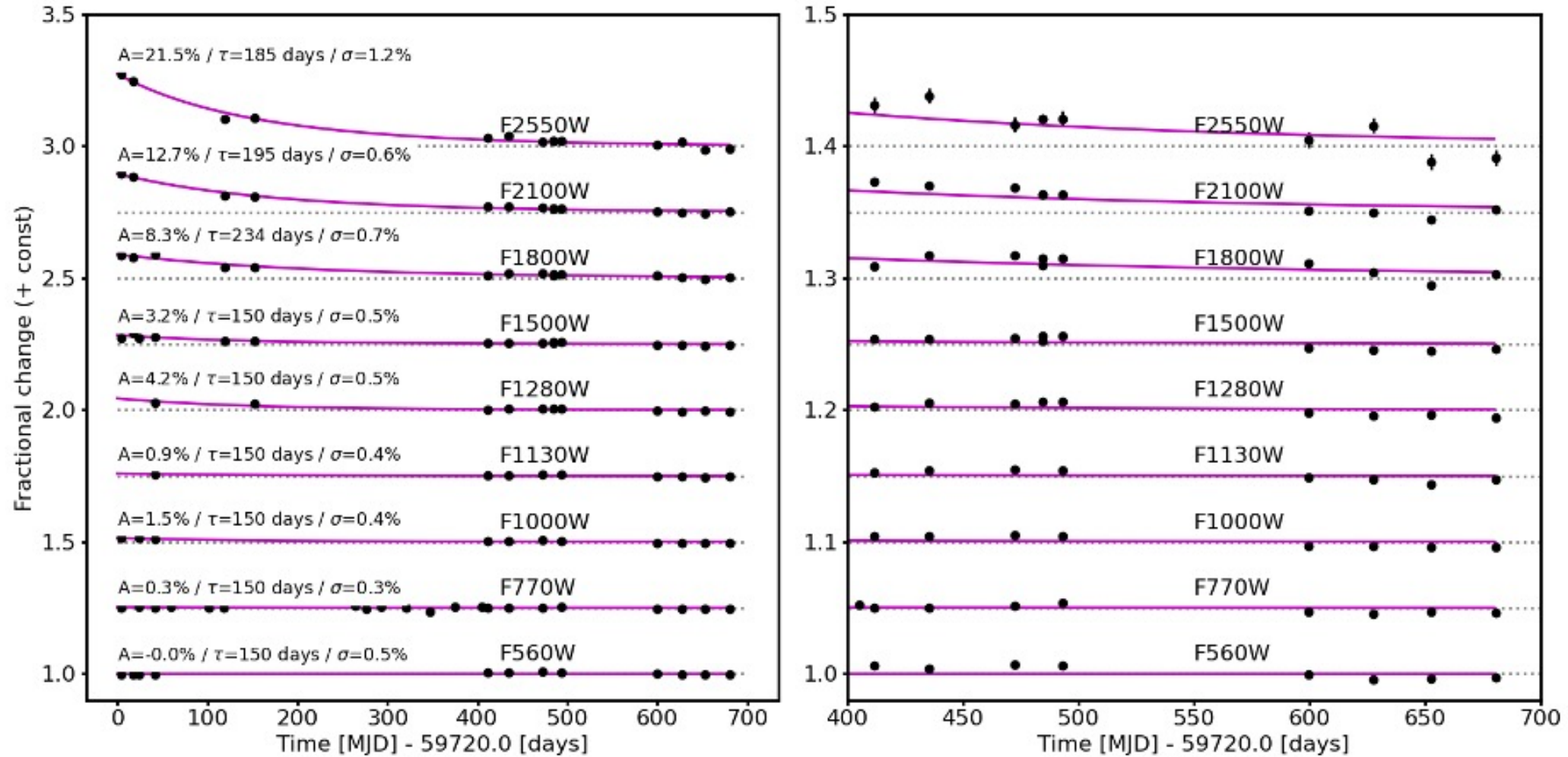


Ignore MIRI sensitivity changes when evaluating proposals





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Expected changes in imaging sensitivity are small enough to ignore when assessing proposals.



Evaluate NIRCam/DHS proposals from a science perspective

- Starting with Cycle 4, the NIRCam Grism Time Series template has an option to use a Dispersed Hartmann Sensor (DHS) to obtain spectra (rather than photometry) in the short wavelength channel.
- ETC and APT do not yet have the new DHS readout patterns.
 - New patterns (DHS3, DHS4, DHS5, DHS6, DHS7) will help manage data rate.
- STScI will verify that DHS targets are feasible (saturation, data excess).
- STScI will help observers adjust exposure specification before execution.



Pure parallel programs

- Use a parallel instrument in some visits with only one prime instrument.
- Dither offsets and maximum exposure duration controlled by the prime.
 - Pure parallels cannot change configuration within a prime dither pattern.
 - Number and quality of pure parallel exposure slots changes with each cycle.
 - In Cycle 3, there were 236 pure parallel slots with $\text{glat} > 50 \text{ deg}$ and $t > 1500 \text{ s}$.
- Cycles 1-3 allocated and executed 800-1200 hours of pure parallels.
 - Mix of exposure durations, number of allowed configurations, number of dithers
- Pure parallels consume significant support and downlink resources.
- <https://jwst-docs.stsci.edu/jwst-opportunities-and-policies/jwst-general-science-policies/jwst-science-parallel-observation-policies-and-guidelines>
- <https://jwst-docs.stsci.edu/jwst-opportunities-and-policies/jwst-call-for-proposals-for-cycle-4/jwst-observation-types#JWSTObservationTypes-PureParallelObservations>



Evaluate calibration proposals on the same scale as other proposals

- Calibration proposals use observatory time and/or grant funding.