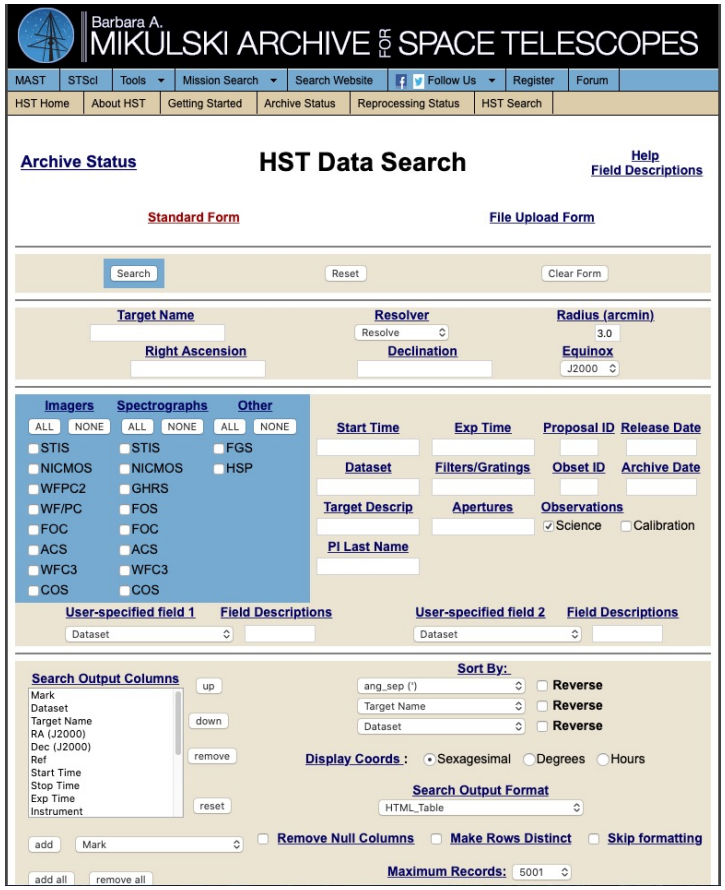
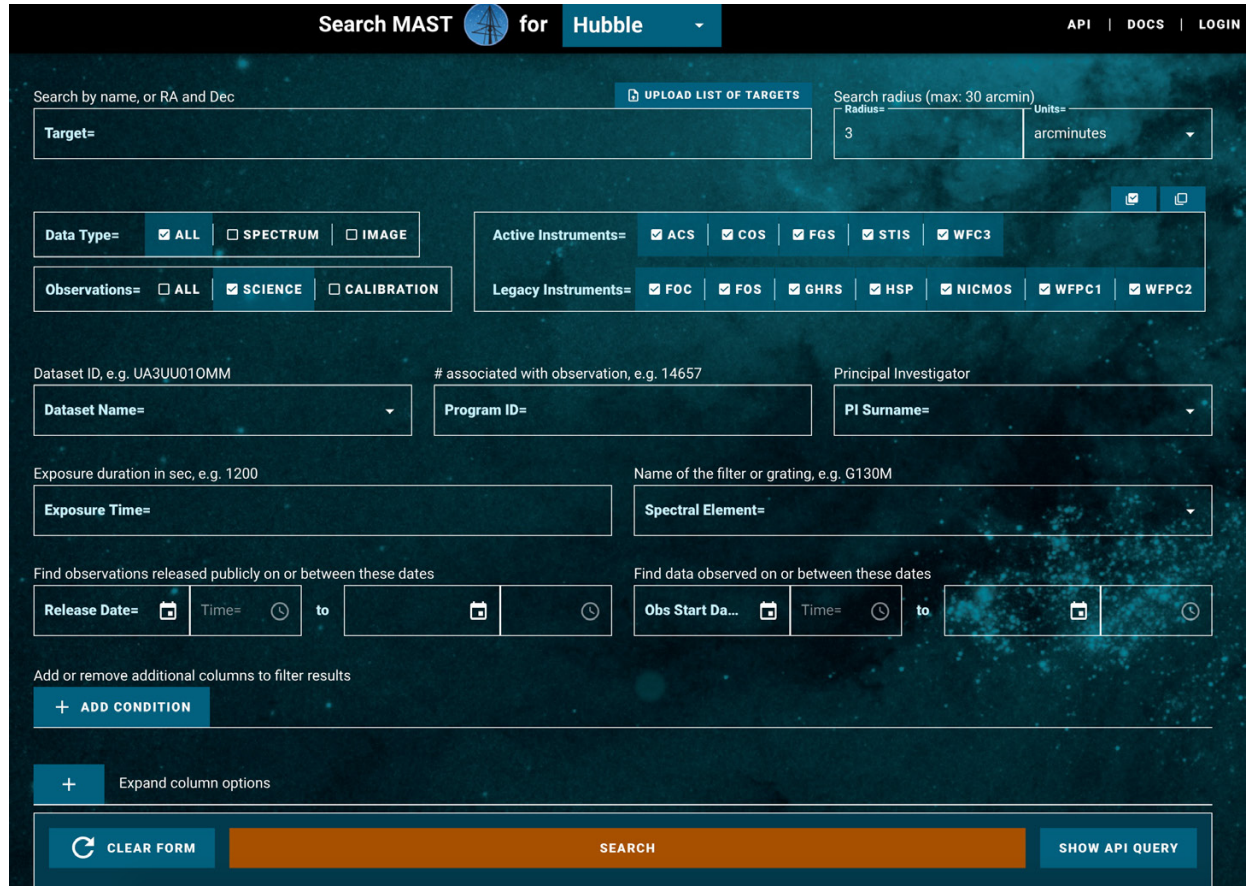
Modern Mission-Specific Search Forms At MAST
HST STUC Demo – April 2021, Dr. Scott W. Fleming (MAST)

Classic



Modern



Project Goals and Motivations

- Current search form is OLD, and it shows.
- Difficult to maintain, doesn't use modern (current or near-future) technical enhancements the archive is working on.
- Not particularly accessible.
- Not regularly tested for performance.
- Short-term: Modernize the existing search form!
- Longer-term: Stepping stone for new single search hub for all of MAST.
  - Share and recycle components, using the new HST search form as the first one up.
  - Improve performance of HST users, but keep functionality.
  - Add NEW features and enhancements.

NOTE: Demo will be focused on the web form, but an API does exist, and is intended to allow anyone who relies on scripted access of the current HST search form to transition to new API with *minimal* changes.

Who Is Involved?

Scott Fleming: Project Lead
Jennifer Kotler: Lead Designer
Brian Erickson, Syed Gilani, Tim Kimball: Developers

MAST Astronomers: Design Input and Initial Testing
MAST Developers: Development and Engineering Solutions and Suggestions, Code Review

Have conducted ~10 one-on-one tests with internal STScI staff (thanks for volunteering their time!)

Current Status

- Started in Fall 2020. Got an end-to-end system working in ~March.
- Current focus: data retrieval (no more “staging” when asking for data), adding authentication (sign in to access non-public data you have permissions for), documentation, and polish based on internal one-on-one testing.
- Aiming for a “soft launch” in summer (end of June?)
  - The current form will be available for a modest amount of time (read: not LONG, but not zero either).
  - Want to get as many people using the new form as possible, and send constructive feedback, so we can make sure the new form can handle your use cases with the old form as quickly as possible.
  - This will be iterated and improved on over time, this is not a “release and done” situation! Lots of improvements and new features in our backlog already, and more will be added. This will be a “version 1.0”.
- Will be interested in some volunteers to do some “test drives” of our form in May/June time frame.
  - Anyone here welcomed to volunteer, but even better are colleagues or students who haven’t seen the demo at all, so they come at it from a fresh perspective.
  - This would be a one-on-one test with our lead designer, and will take about 1 hour total.
  - If interested, contact me (fleming@stsci.edu).

Demo Time!

I'll walk through the current search form as it stands now to highlight the features and how it works. Keep in mind this is work-in-progress still, but in most cases is close to what the form will look and act like on the initial release.

Due to time consideration, I won't be showing how things work with the OLD form, under the assumption that many of you are familiar with it already, but if you have questions, feel free to ask.

That said, some things aren't implemented yet, and some things will be changing between now and summer release.

After the demo, I'll open the floor for questions, or for suggestions on items/features to add for our consideration.