# The WorldWide Telescope:
# Past, Present, and Future

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# In 2016, AAS took over the WorldWide Telescope project.

The American Astronomical Society (AAS) is the major organization of professional astronomers in North America.

The mission of the AAS is
*to enhance and share humanity's scientific understanding of the universe as a diverse and inclusive astronomical community.*
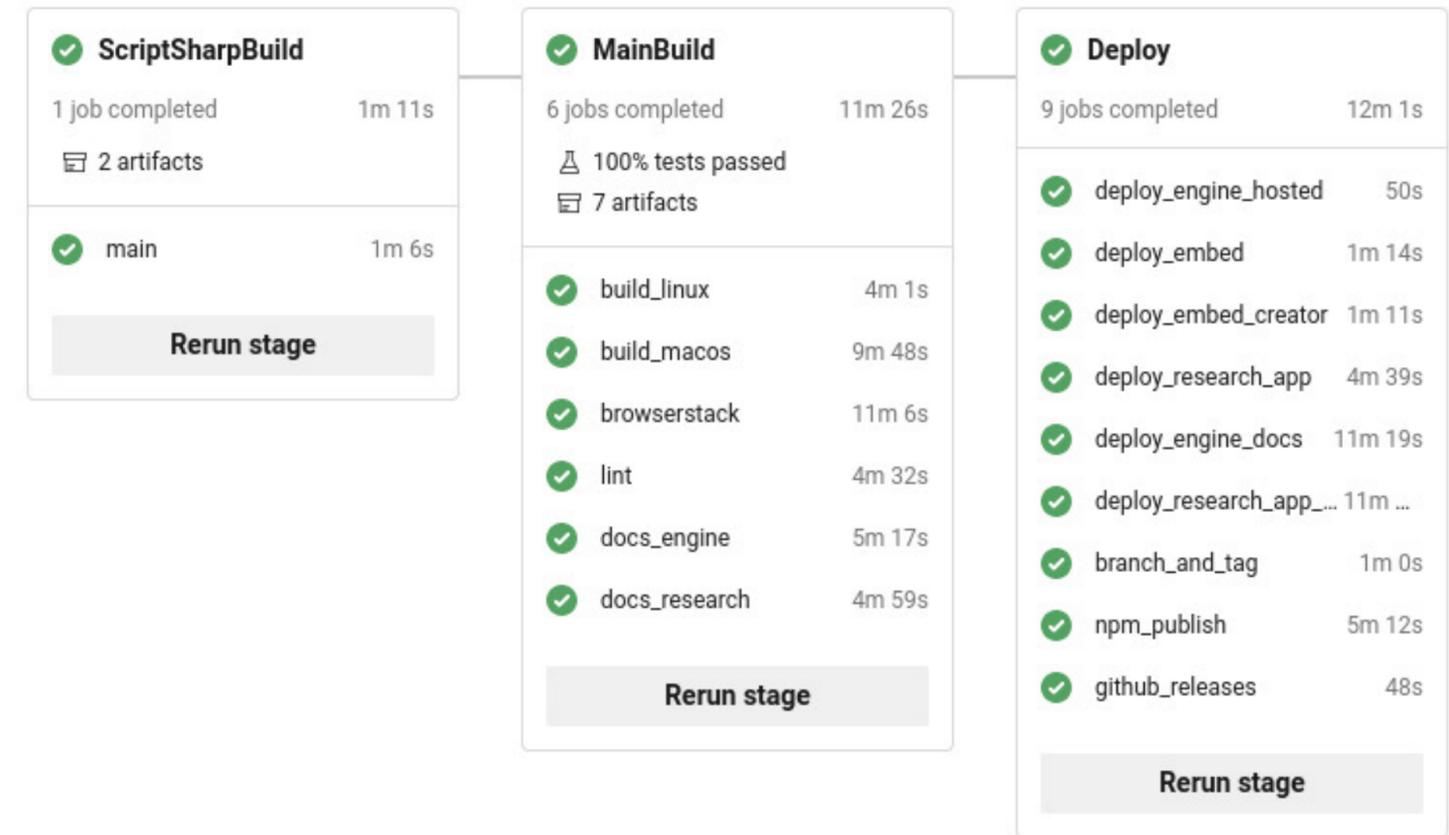
This is a perfect fit for WWT!

I like to say that AAS WorldWide Telescope is
*a tool for showcasing astronomical data and knowledge.*

# AAS has been emphasizing the *web* version of WWT.

The motivations:

- Better fit for researchers and students

- Browsers are powerful enough

- Available online since 2009!

Translating WWT to the web is hard, but worthwhile

Big opportunity with the rise of Jupyter and "science platforms"

# Demo: JupyterLab

# Demo: Hubble app
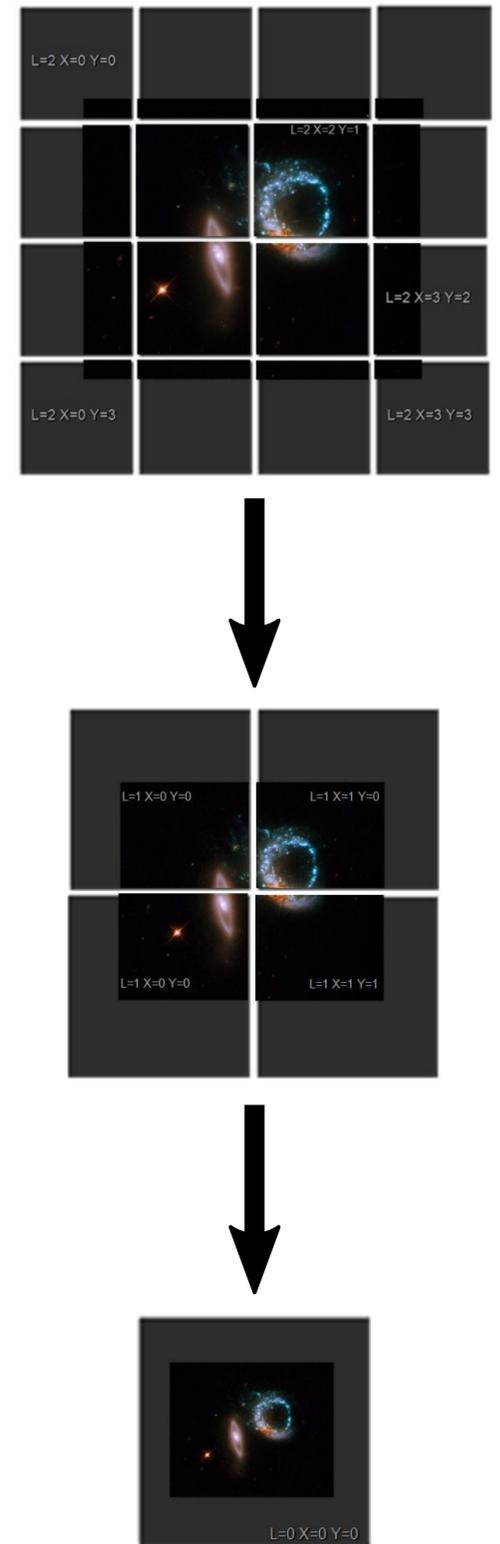
# AAS has also been working on WWT data tools.

The WWT *data model* is just as important as the engine code.

Trying to make it as easy as possible to get data into WWT:

- The **toasty** Python package for tiling all kinds of images

- The **WWT Aligner** for matching PR images to science data

- Builtin web servers for local previewing

- New HiPS support (thank you, China-VO!)

A project like WWT must deliver a whole *ecosystem* of software.

The next Windows release will more than double the number of built-in images!

# "WWT 2022" is coming soon!

A complex ecosystem like WWT is always gaining new features.

We strive to make releases frequently, which can make it hard to celebrate all of the progress that is being made!

So the **"WWT 2022 edition"** won't involve much in the way of new software, but it will give us a way to talk about all of the progress that has been made.

The launch date will be announced soon!

# We envision "WWT 2023" next year.

WWT 2023 will build on the foundation provided by WWT 2022:

- Import more data sets

- Make the JupyterLab app more powerful

- Improve the data tools

- Better documentation: tutorials, howtos, reference materials

- Fix bugs

**The big question:** WWT has so many data sets now that the folder-based explorer can be very limiting. Can we build a better discovery interface?

# Here are some takeaways:

- Software architecture matters
- Interesting software is always part of an ecosystem
- The web is a big deal!

Useful links:

- **Try pywwt:** bit.ly/pywwt-notebooks
- **GitHub:** github.com/WorldWideTelescope/
- **Documentation:** docs.worldwidetelescope.org
- **Newsletter signup:** bit.ly/wwt-signup

*Thanks for your attention!*

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