IVA MOMCHEVA

DATA SCIENCE MISSION OFFICE

CONSOLIDATING THE LEADERSHIP AND OVERSIGHT OF [ARCHIVE] ACTIVITIES WILL LEAD TO GREATER COORDINATION, ELIMINATE DUPLICATION, ENABLE MORE EFFICIENT USE OF RESOURCES AND ALLOW THE INSTITUTE TO TAKE FULL ADVANTAGE OF SYNERGIES BETWEEN THE DATA SCIENCE WORK ON MULTIPLE MISSIONS.

WE RECOMMEND THAT STScI FORM A DATA SCIENCE MISSION OFFICE AS SOON AS POSSIBLE.

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Mission Office Head

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Project Scientist

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Mission Scientist

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WHO ARE WE?

AREAS OF RESPONSIBILITY

- Data management
  - Data systems
  - Data processing
  - Data analysis tools
  - Archival work

Not in DSMO purview: planning, ETC, pipeline development

SCHEDULED HAND-OFFS

DMS area	April '17	May – June '17	July – Sept '17	FY18 onwards
ASB	Planning	Dual mission	Full responsibility	Full responsibility
DPAS (TBD)	Planning	Planning?	Dual mission	Full responsibility
DSB (TBD)	Planning	Planning?	Dual mission	Full responsibility
DAT (SSB)	Planning	Dual mission	Full responsibility	Full responsibility

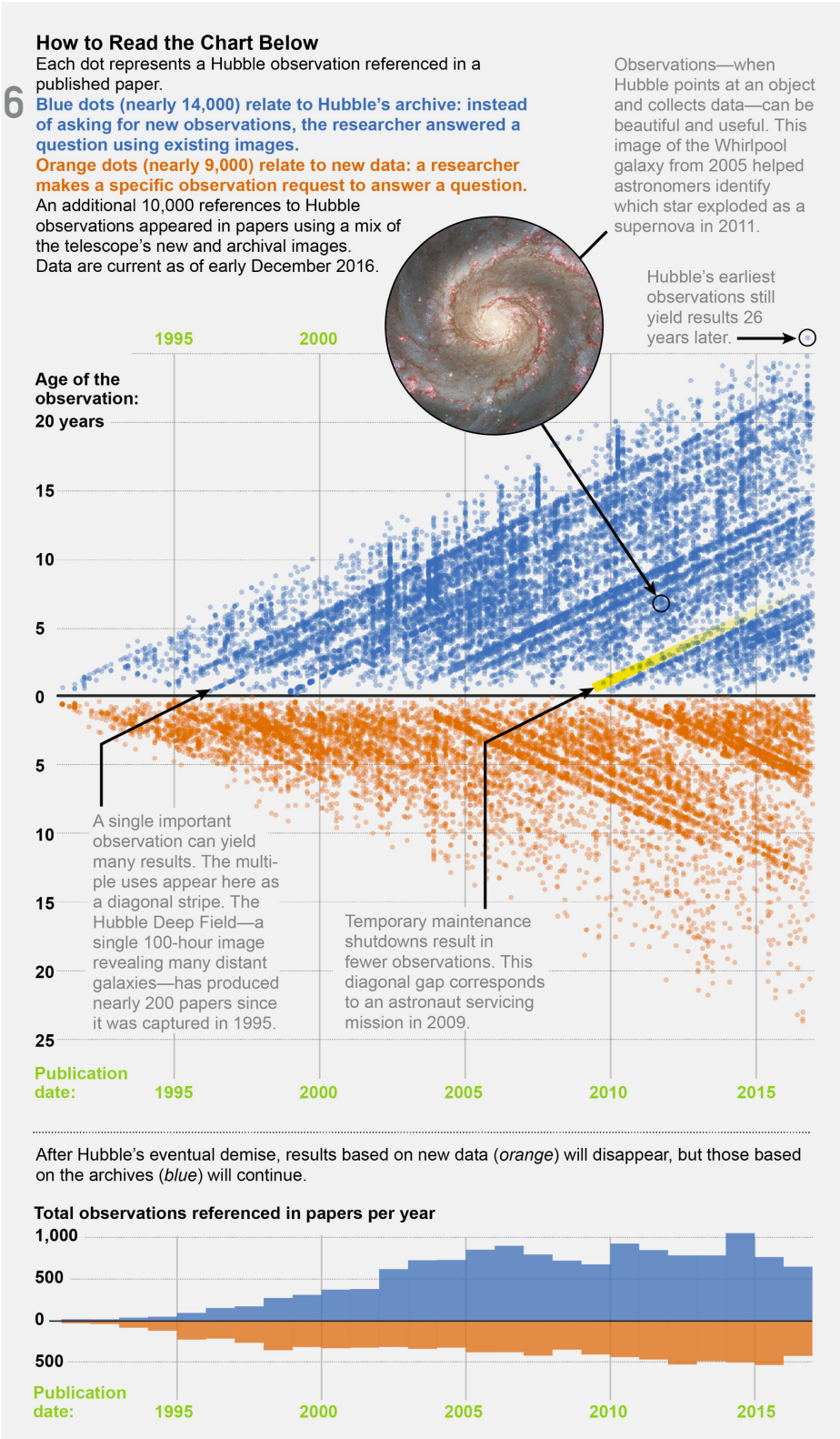
WHAT WILL DSMO DO FOR HUBBLE?

IMPROVE INFRASTRUCTURE

- Recommend improvements to current infrastructure, process and management
- Update and consolidate toolchain across branches
- Explore cloud infrastructure for reprocessing, access and delivery of data

IMPROVE ARCHIVAL SERVICES

- Better support for large datasets (GO & archival large programs)
- Recommendations for delivering data and software
- Tools and access for HLSPs
- Consolidate services around archive
- Connect HST with other facilities



Credit: Katie Peek; Source: MAST, STSCI (data); Hubble Heritage Team (STScI/AURA)

IMPROVE DATA ANALYSIS TOOLS

- Dedicated data analysis tools team
- Update toolchain to Python
- Community and cross-AURA collaborations

THANK YOU!