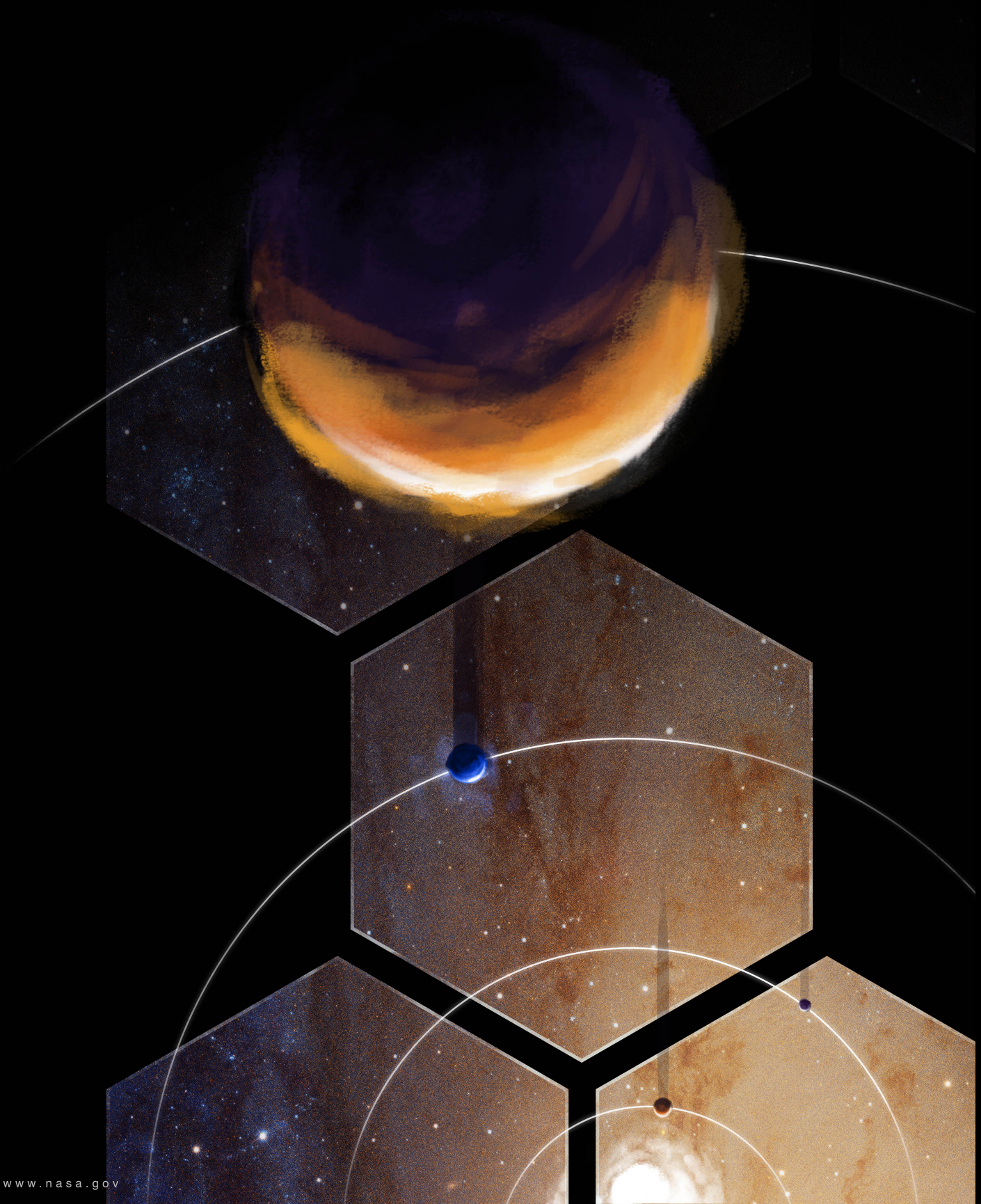
National Aeronautics and Space Administration

L U V O I R



www.nasa.gov

LUVOIR

Large UV/Optical/Infrared Surveyor

Cosmic Origins

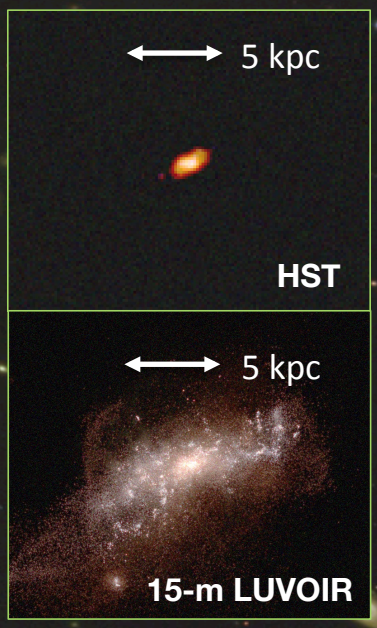
http://asd.gsfc.nasa.gov/luvoir

LUVOIR is a concept for a highly capable, guest observer-driven space observatory with tens to thousands of times the science grasp of HST. LUVOIR would enable transformative breakthroughs in Cosmic Origins science by combining a large aperture, broad wavelength coverage, and long operational lifetime with a suite of powerful instruments.

ECLIPS: Near-UV to near-IR coronagraph with imaging spectroscopy
LUMOS: Far-UV to optical multi-object spectrograph and imager
HDI: Near-UV to near-IR high resolution wide-field camera
POLLUX: Far-UV to near-UV spectropolarimeter (European instrument)

Growth of Structure

Observe dwarfs from *z*=0 to reionization era

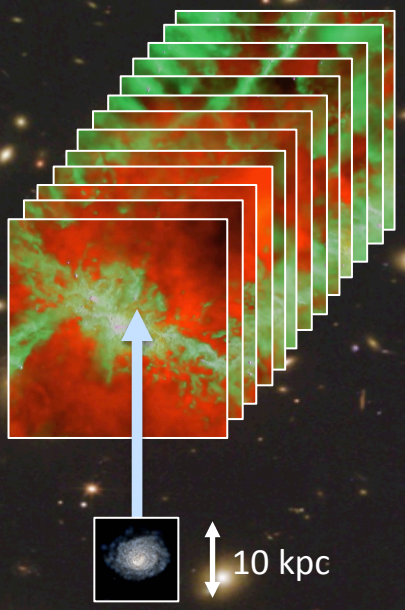


STScI / G. Snyder & M. Postman

Dwarf galaxy at *z*=2

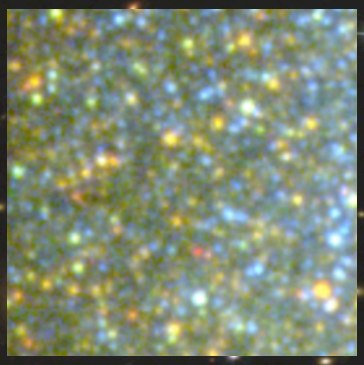
Galaxy Evolution

Map multi-phase gas around galaxies at many epochs



Stellar History

Stars and planetary systems in all environments



RGB Stars at 30 Mpc

PPDs at AU scales