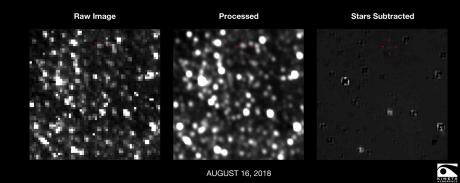
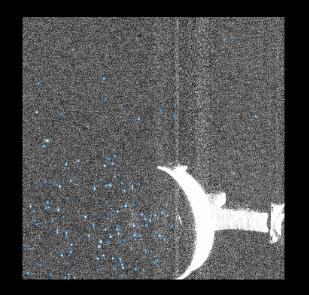
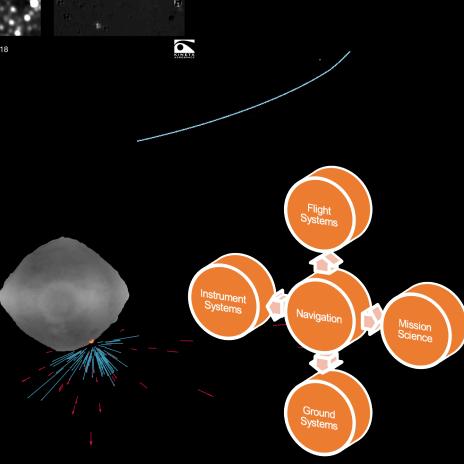


## **Space Navigation, Flight Dynamics, & Planetary Science**

- 20 year history providing navigation services to NASA planetary exploration initiatives
- First privately held company to provide navigation and flight dynamics expertise for NASA deep space missions.
- Over 1000 years of collective flight dynamics experience for earth-orbiting and deep space missions.
- SNAFD Services Focus Areas
  - Navigation & Mission Systems Development
  - · Mission Design & Trajectory Optimization
  - Optical Navigation
  - Orbit Determination
  - Maneuver Design
  - Planetary Science: Astrometry, Radio Science, Particle Science + Gravity
- Prime Navigation Team for
  - MESSENGER to Mercury
  - New Horizons to Pluto and Arrokoth
  - OSIRIS-REx to Bennu and Back
  - Lucy to the Jupiter Trojans
  - LunaH-Map cubesat + AutoNav Demo
  - DAVINCI+ to Venus
  - OSIRIS-APEX to Apophis
  - And much more to come!







was achieved by the NASA spacecraf
OSIRIS-REX, jointly operated by
NASA the University of Arizona and

Lockheed Martin, which moved into a

101955 Bennu on 31 Dec 2018.

vas confirmed to have a mass of 73.27 billion kg when the NASA

perated by NASA the Universit

entered its orbit on 31 Dec 2018