

# The NPOESS Earth Observing Platform

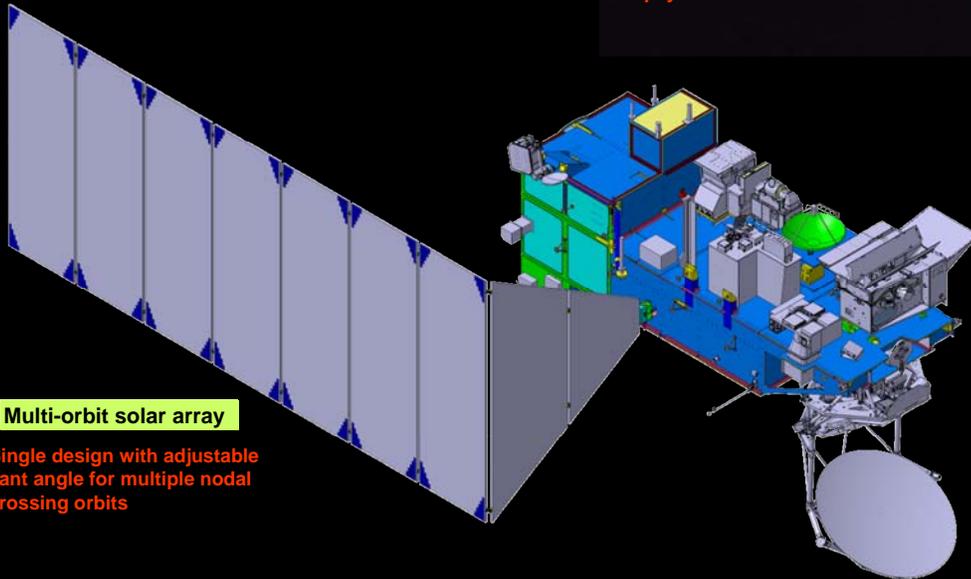
Poster generated by Don Adkins, NGST + Michael Perz & Brad Haughey, IPO

## Overall

- 7-year mission life
- Effective Payload Accommodation for multiple orbit planes
- Leverages EOS heritage and experience
- End-of-Life disposal accommodated

## Spacecraft designed for earth observation missions

- Large nadir platform for maximum payload accommodation in the EELV launch vehicle
- Optical bench stability
- Thermally optimized with large cold-side access for science payloads



## Multi-orbit solar array

- Single design with adjustable cant angle for multiple nodal crossing orbits

## Plug and play avionics architecture

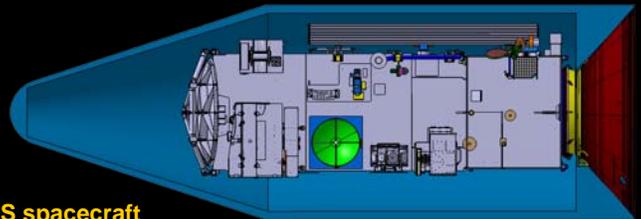
- Advanced 32-bit architecture
- Accommodates 1553, 1394, unique and emerging payload interfaces
- On-board JPEG compression services low rate field terminal needs.
- High autonomous capability satisfies NPOESS mission requirements

Large nadir deck maximizes available fairing envelope of the 4 metre EELV launch vehicles.

1330 orbit configuration



1730 orbit configuration



From inception the NPOESS spacecraft has had a *flexible by design* approach. Employing an “open” platform architecture where both spacecraft and payload interfaces are designed to be “plug-and-play” versus legacy systems that used custom interfaces. Available deck space exists for new payloads of opportunity.

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