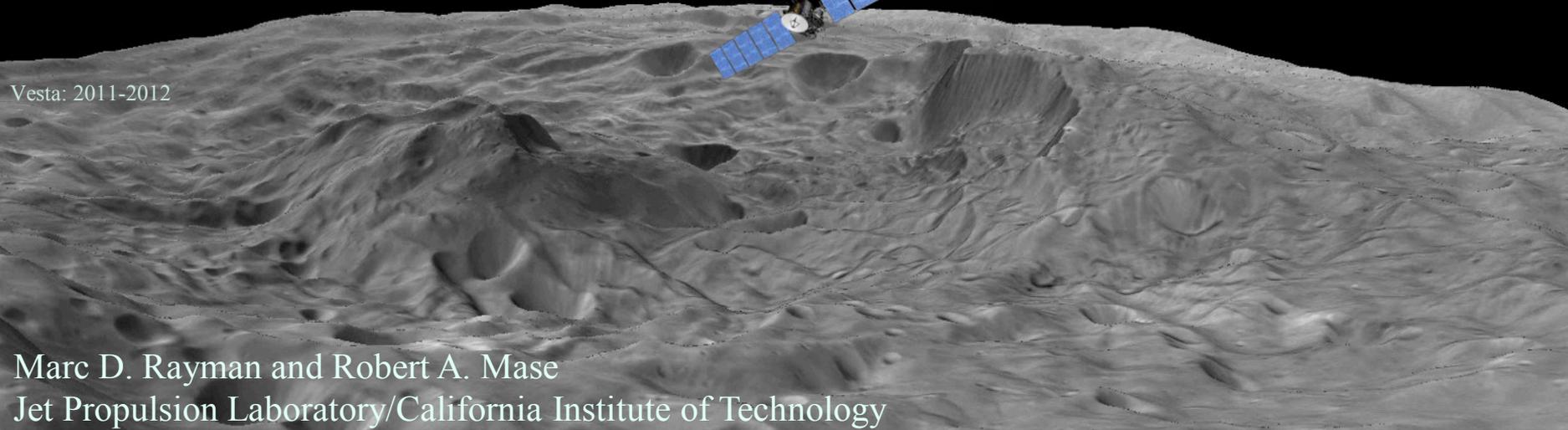


Dawn's Exploration of Vesta



Ceres: 2015



Vesta: 2011-2012

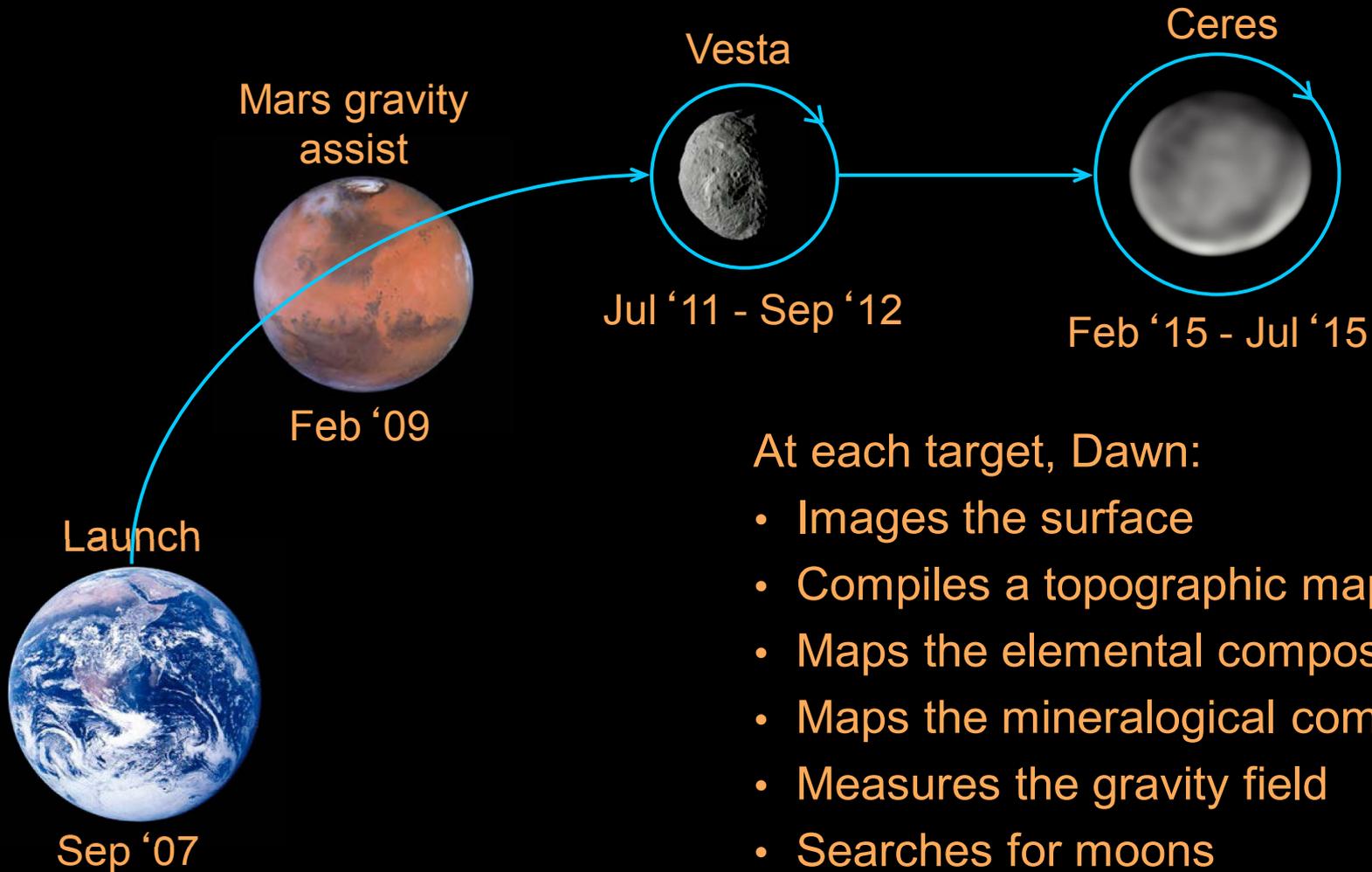
Marc D. Rayman and Robert A. Mase
Jet Propulsion Laboratory/California Institute of Technology



UCLA



Mission Itinerary

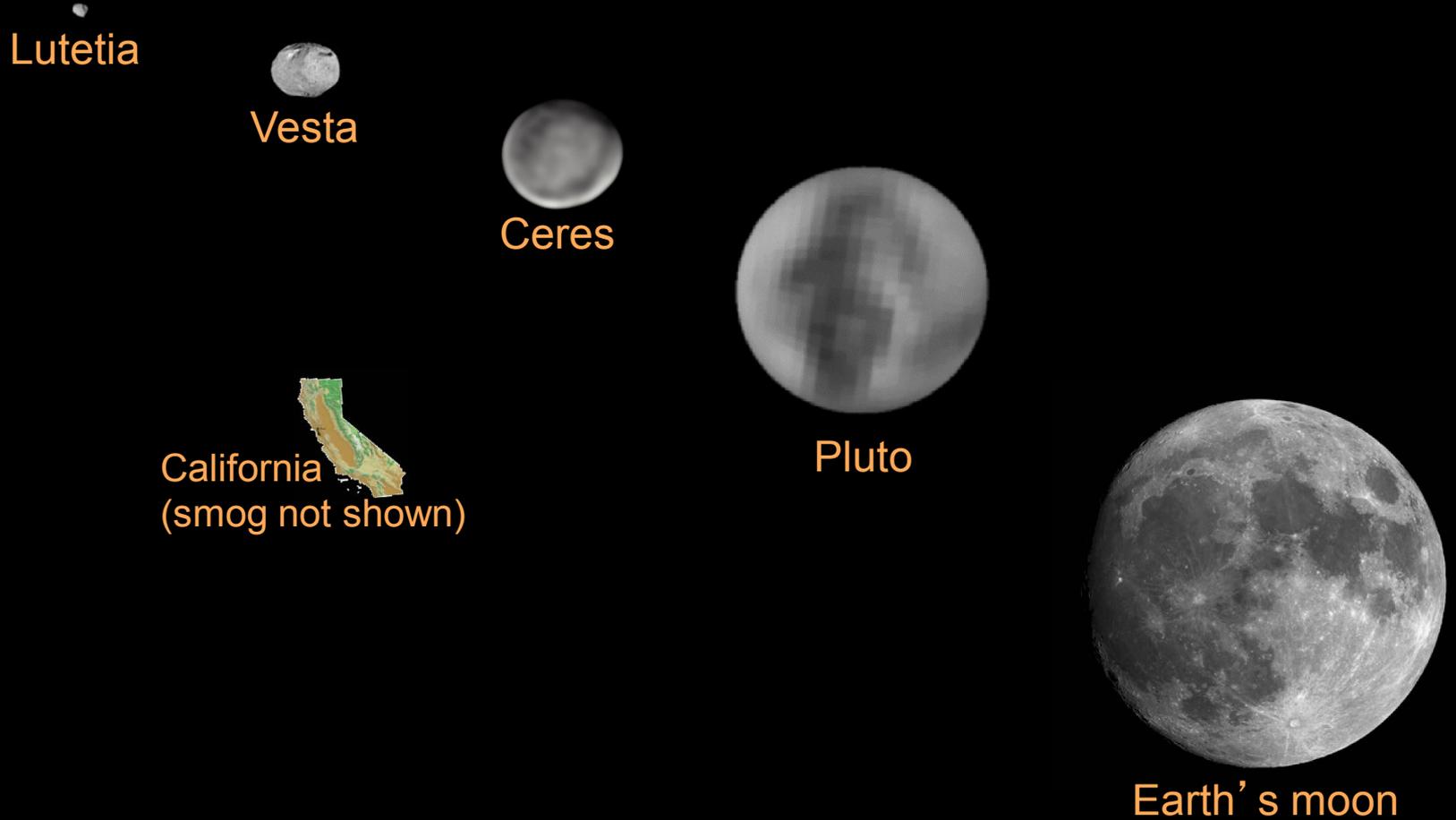


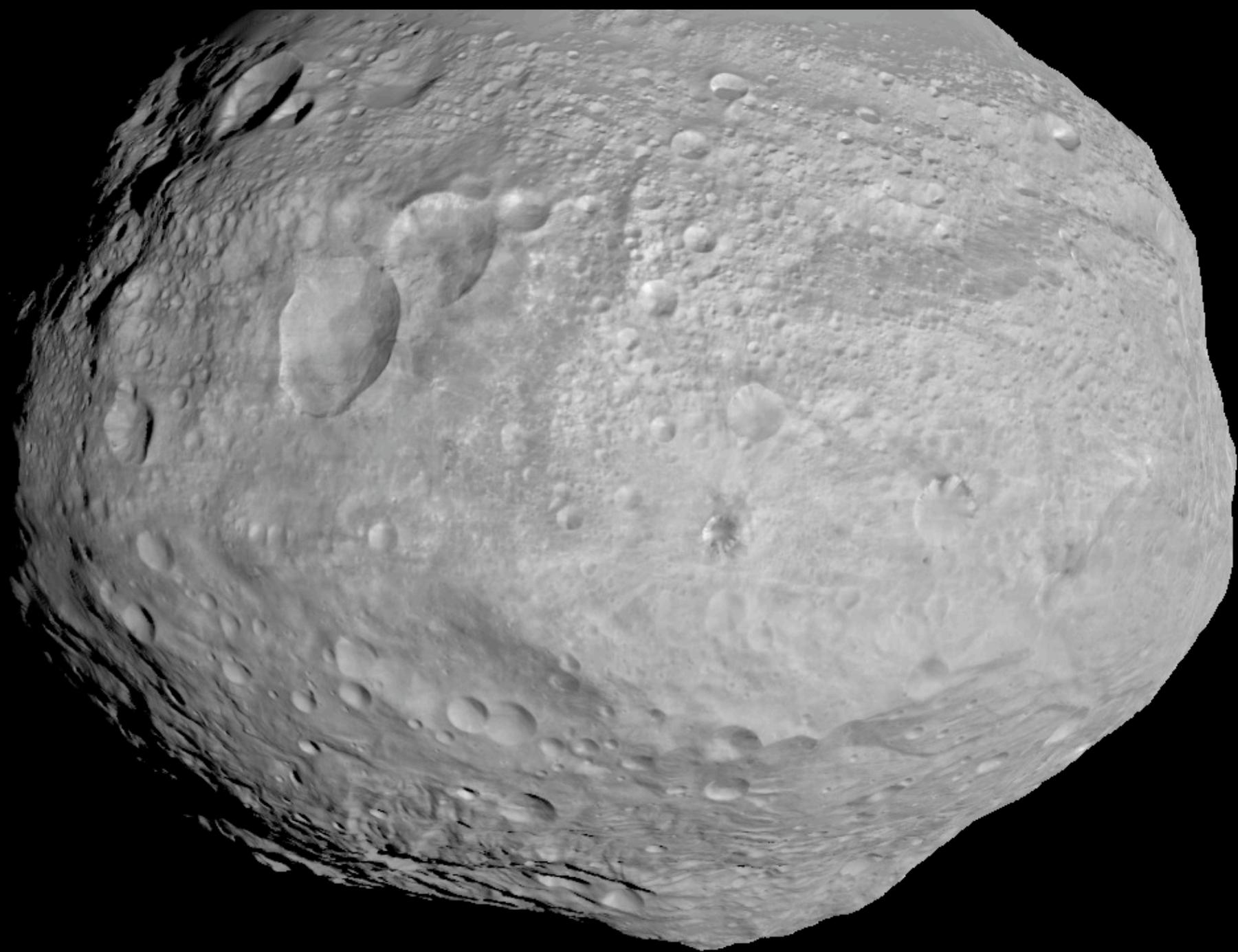
At each target, Dawn:

- Images the surface
- Compiles a topographic map
- Maps the elemental composition
- Maps the mineralogical composition
- Measures the gravity field
- Searches for moons

Note: Text not to scale.

Vesta and Ceres Size

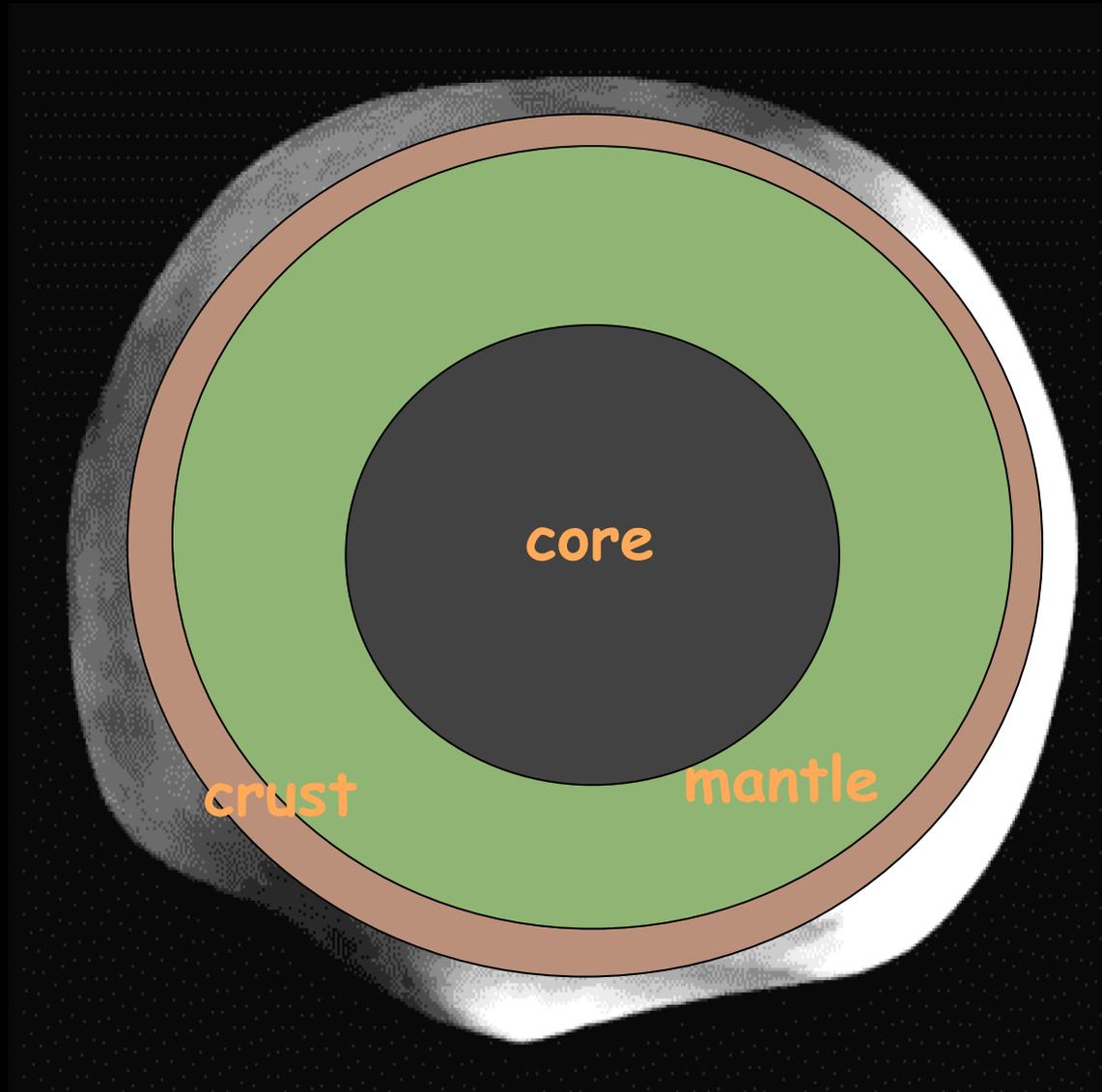




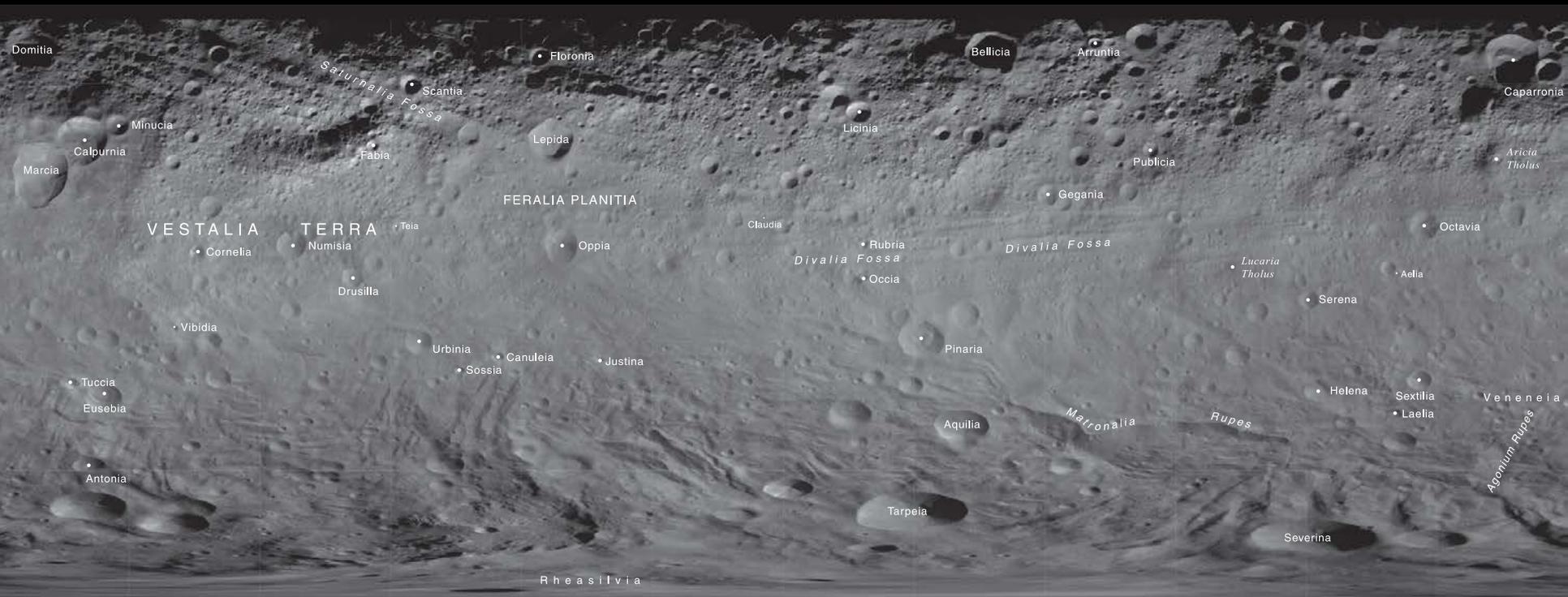




Vesta Interior Structure



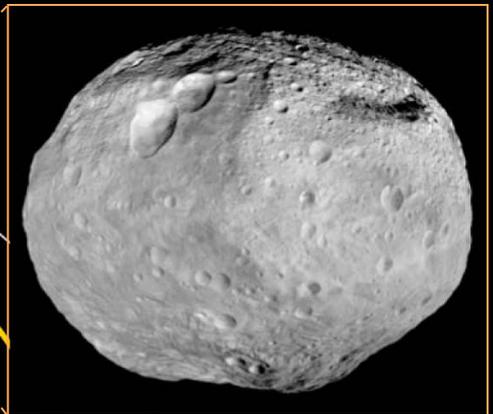
Cartography



Craters named for Vestal Virgins and other famous Roman women
Other features named for towns and festivals associated with the Vestals



Sep 12



Launch
Sep '07

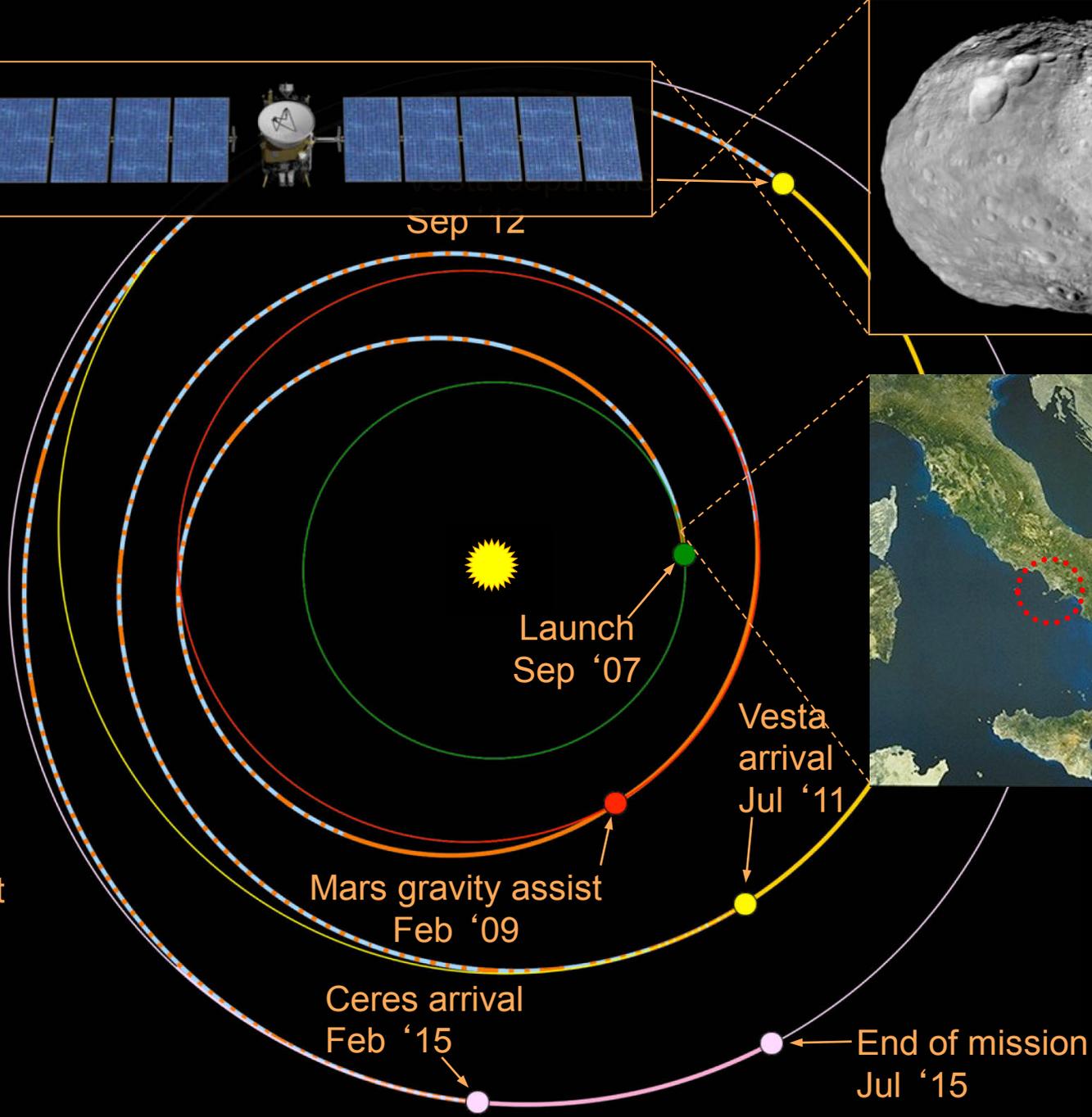
Vesta
arrival
Jul '11

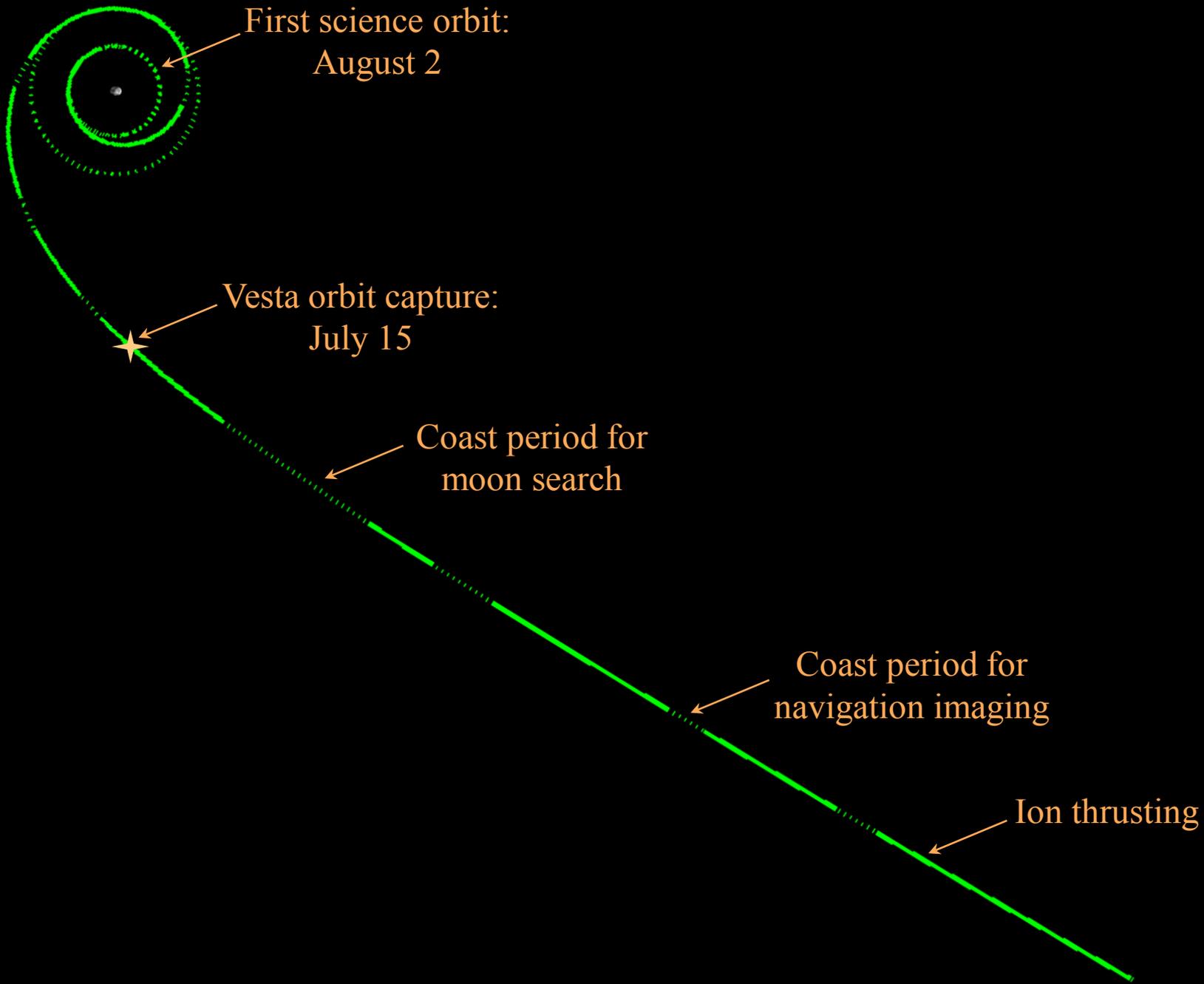
Mars gravity assist
Feb '09

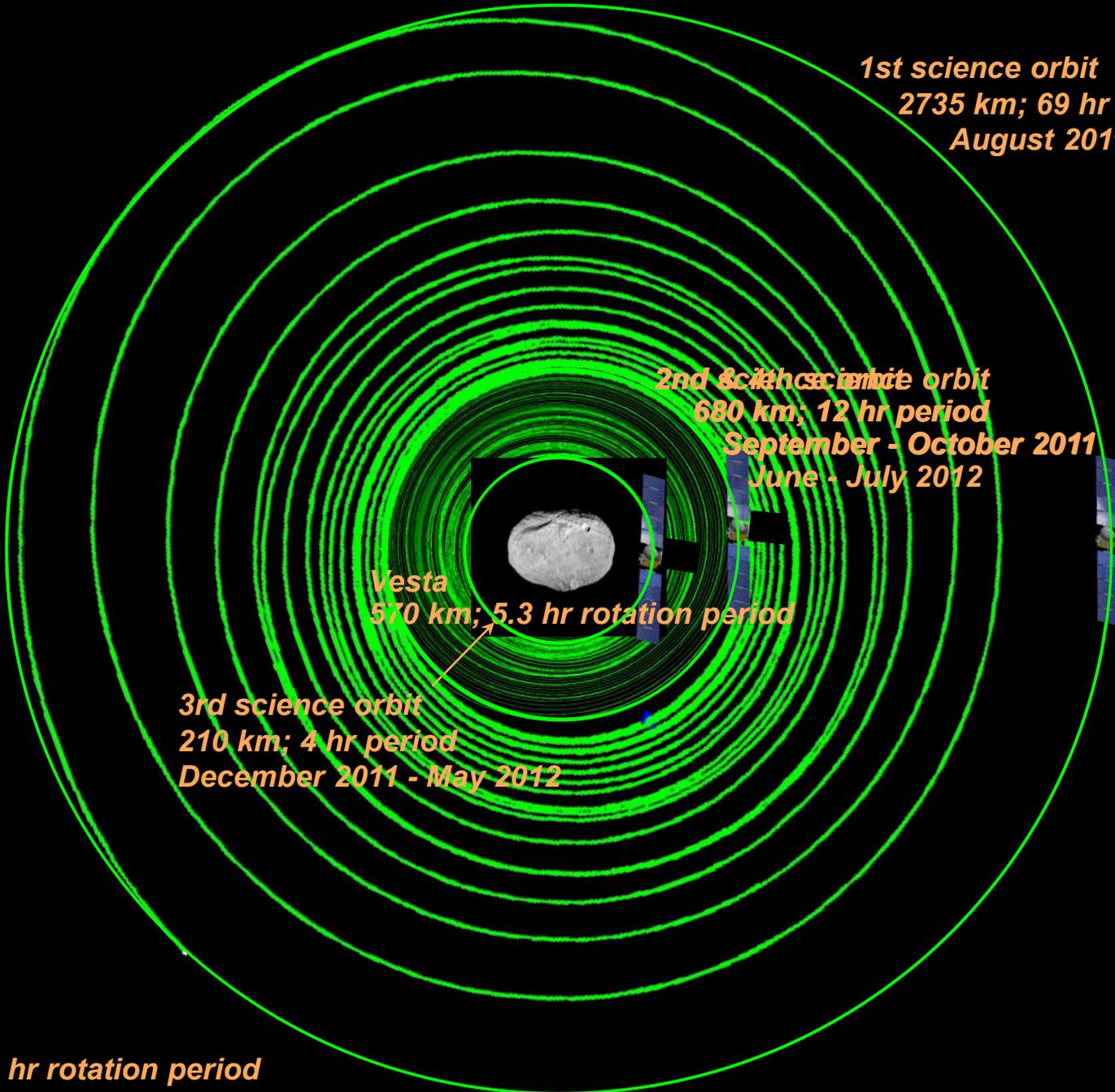
Ceres arrival
Feb '15

End of mission
Jul '15

— Thrust
— Coast







1st science orbit
2735 km; 69 hr period
August 2011

2nd science orbit
680 km; 12 hr period
September - October 2011
June - July 2012

Vesta
570 km; 5.3 hr rotation period

3rd science orbit
210 km; 4 hr period
December 2011 - May 2012

Vesta
570 km; 5.3 hr rotation period

Selected Near-Term Milestones

- Reduce ion throttle level and power on TWTA: today at 19:00
- Power TWTA off: today at 21:25
- Increase ion throttle level: today at 21:30
- Attend presentation of “System Design of Hayabusa 2”: ~ 2 minutes from now
- Eat lunch: ~ 13:00
- Return to Los Angeles: Wednesday at 11:10
 - Note to self: Buy cat food on the way home from the airport

