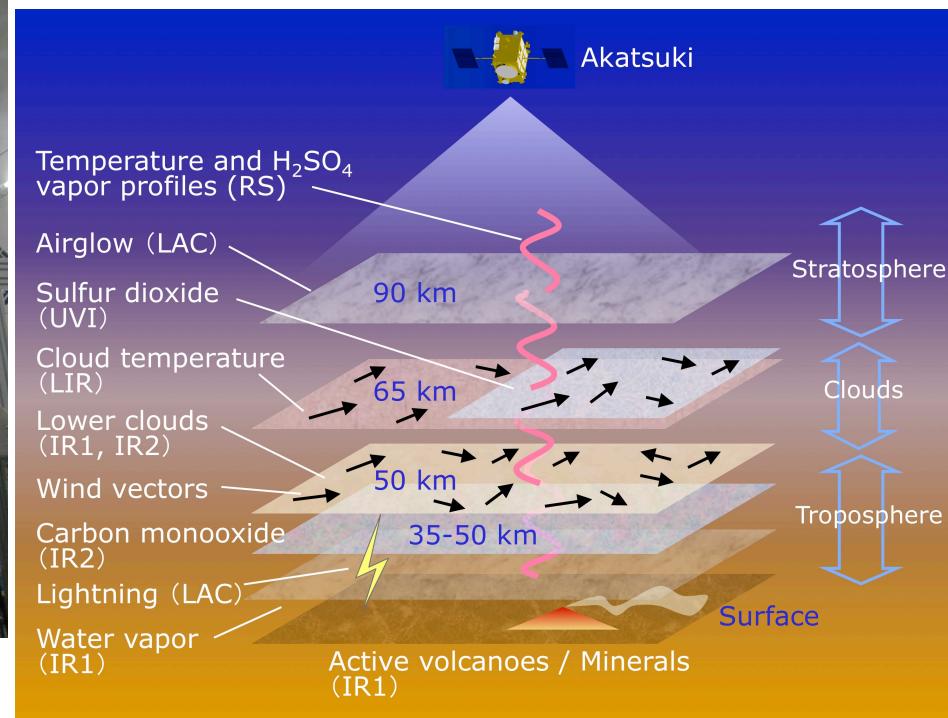
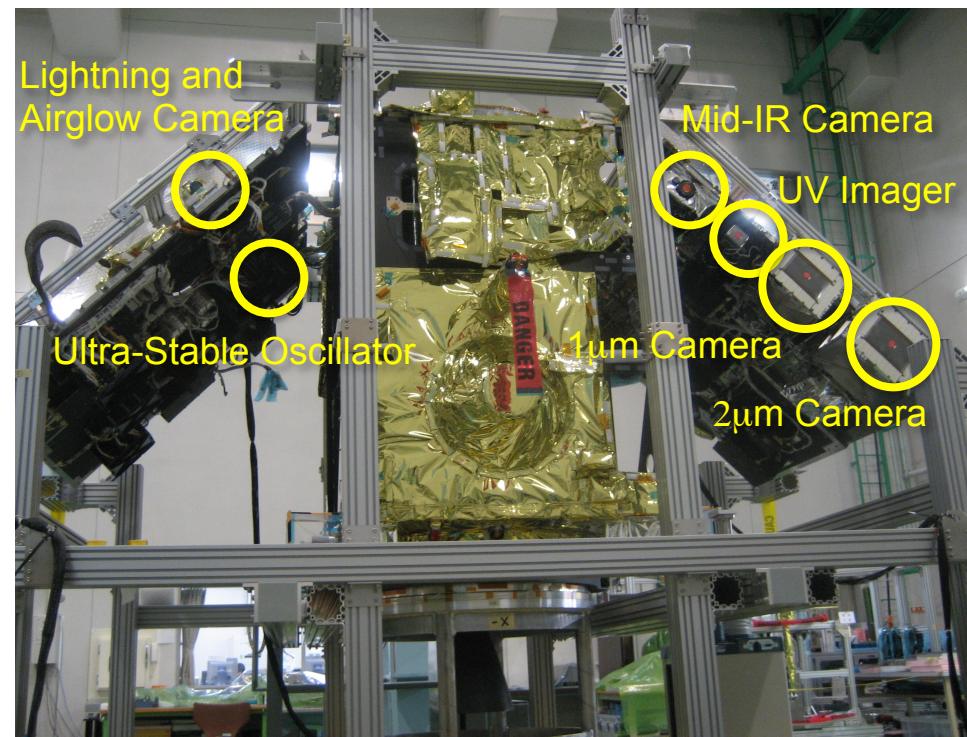


Akatsuki's orbit plan

Takeshi Imamura (JAXA)

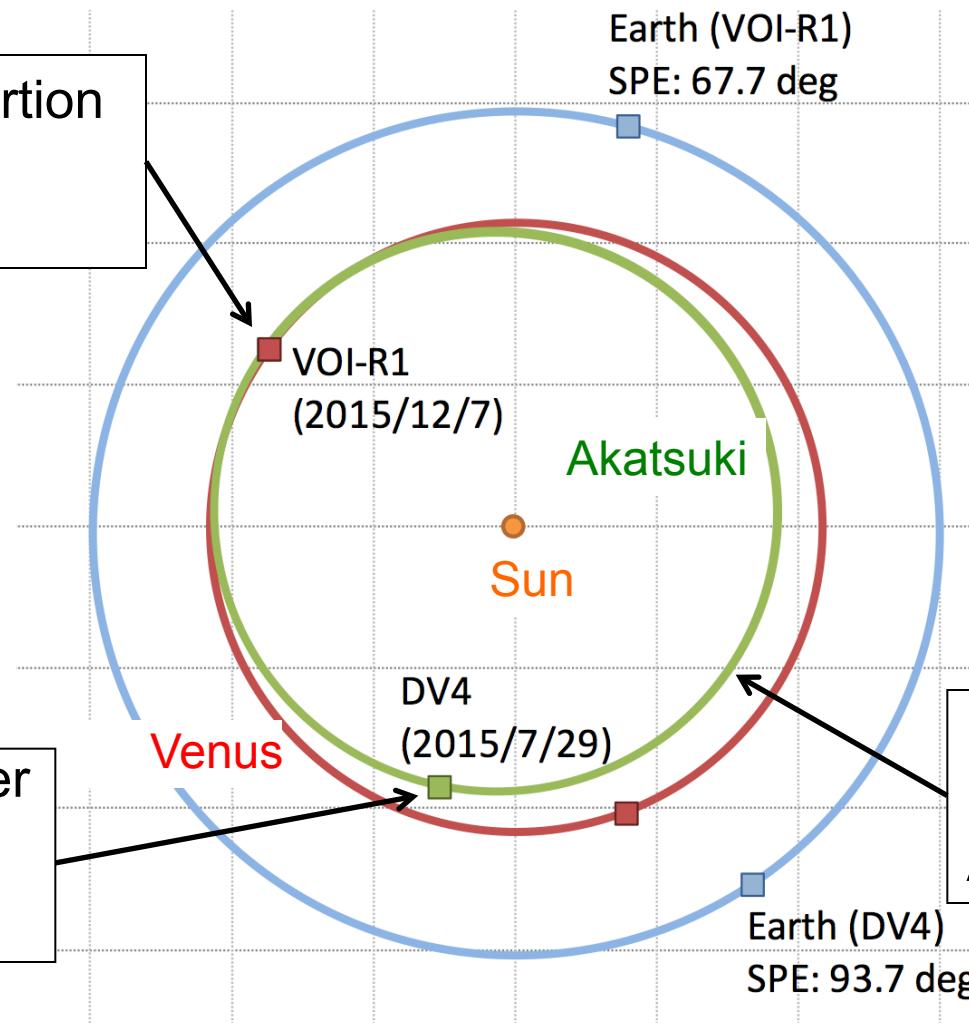


Venus orbit insertion
Dec 7, 2015
 $\Delta V = 196$ m/s

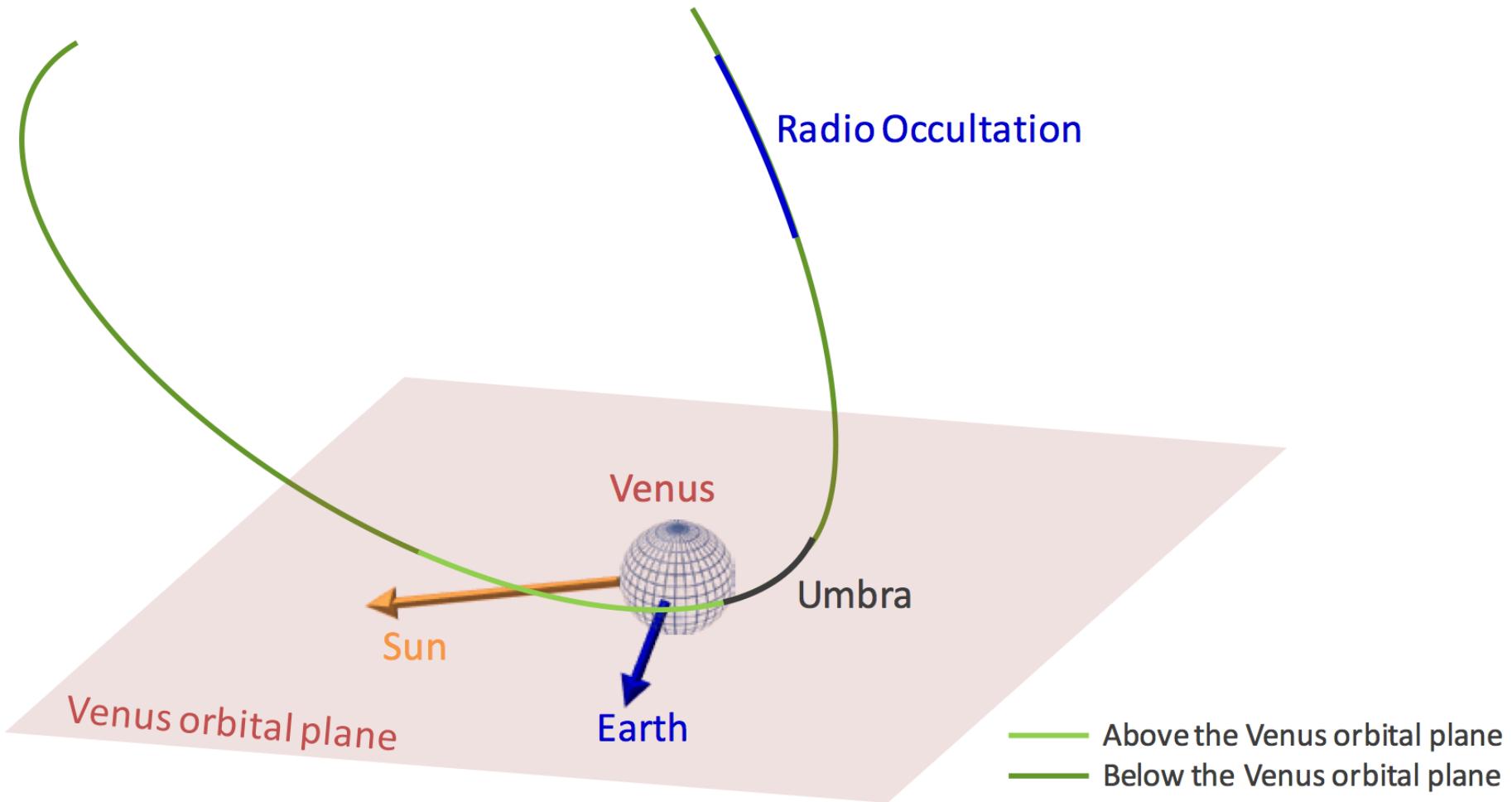
Earth (VOI-R1)
SPE: 67.7 deg

Orbital maneuver
Late July 2015
 $\Delta V = 87$ m/s

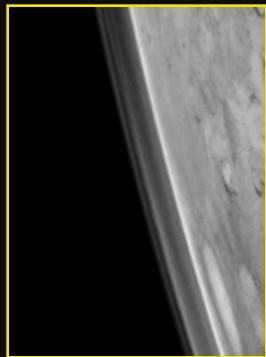
Last (9th)
perihelion passage
Aug 29, 2015



Event	Date	ΔV	Apoapsis	Period
DV4	late July, 2015	87 m/s		
VOI-R1	Dec 7, 2015	196 m/s	4.9×10^5 km	16.2 days
VOI-R2	Dec 7, 2015	3 m/s	4.7×10^5 km	15.3 days
PC1	Mar 25, 2016	32 m/s	3.2×10^5 km	8.7 days
PC2	Jun 14, 2017	2 m/s	3.1×10^5 km	8.4 days

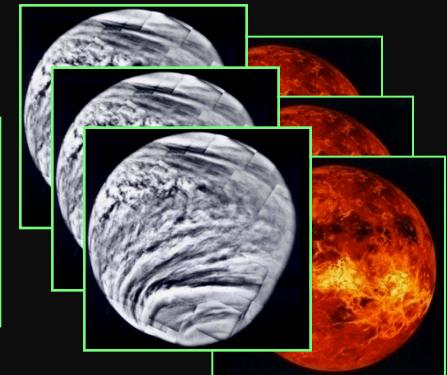


Observation plan in the new orbit



Limb images

Successive global images of atmosphere and ground surface (~9 days)



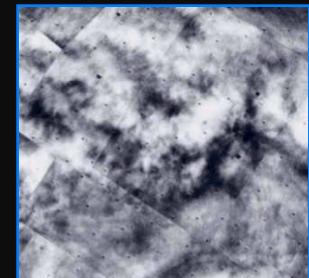
Orbital period ~ 9 days

Ground station



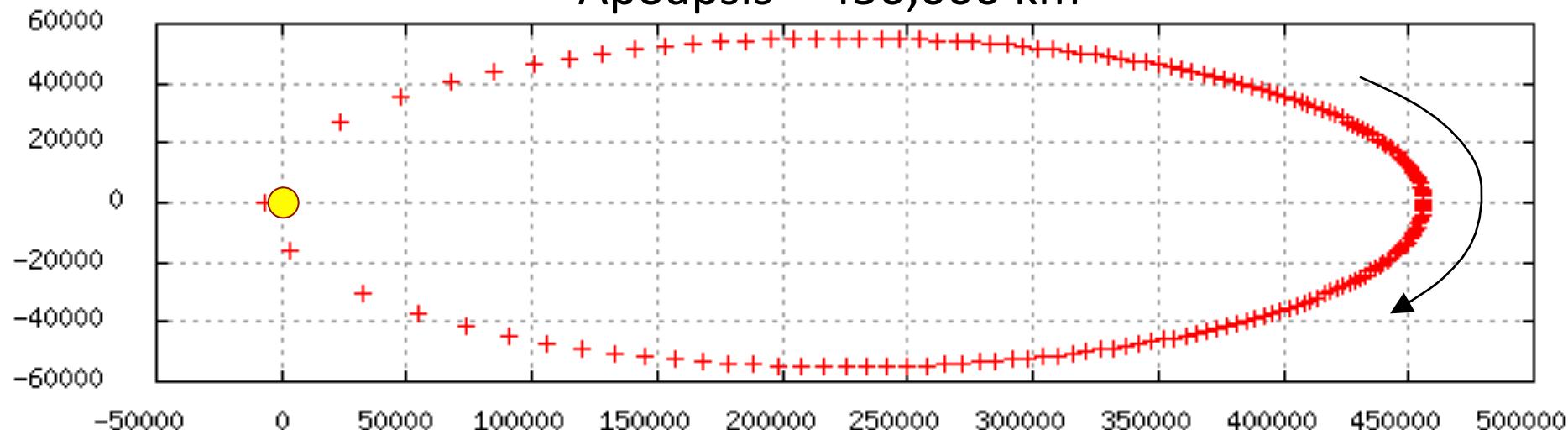
Temperature / H_2SO_4 vapor / Ionosphere by radio occultation

- Close-up images
- Stereo viewing
- Lightning
- Airglow

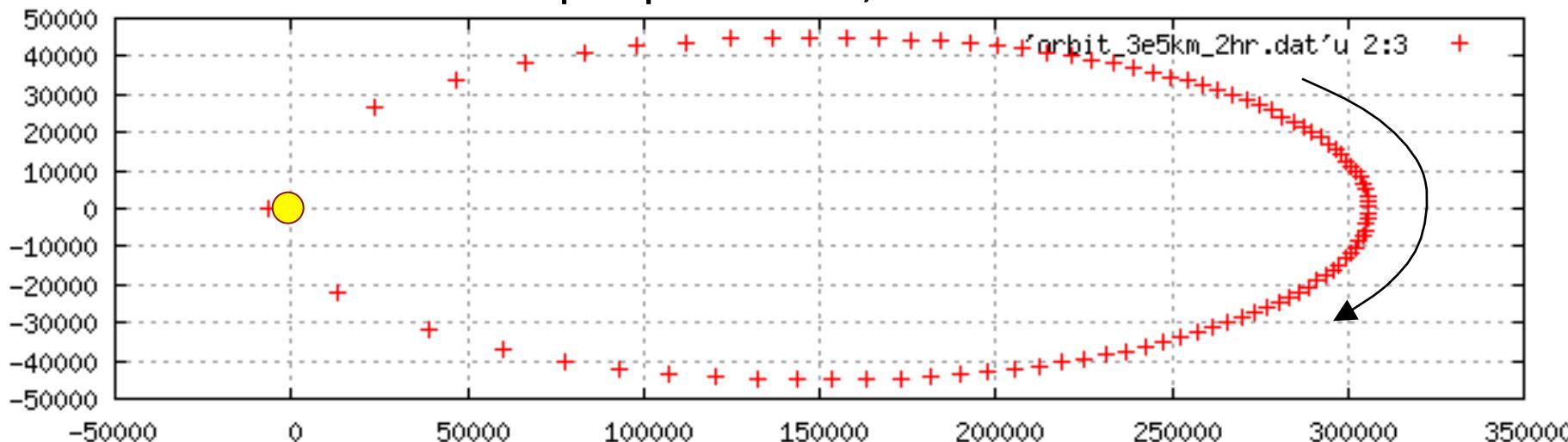


Spacecraft positions at every 2 hours

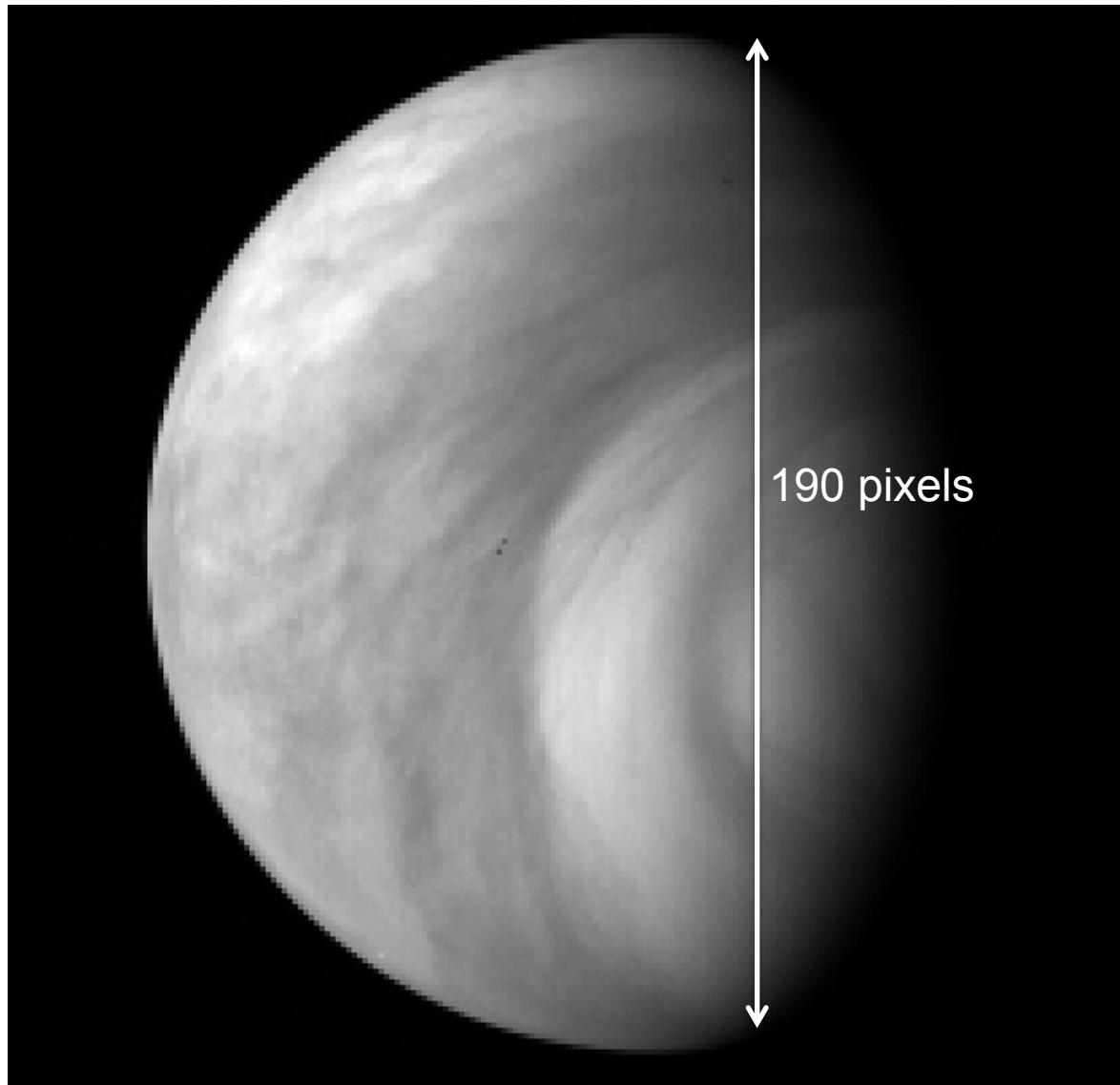
Apoapsis = 450,000 km



Apoapsis = 300,000 km

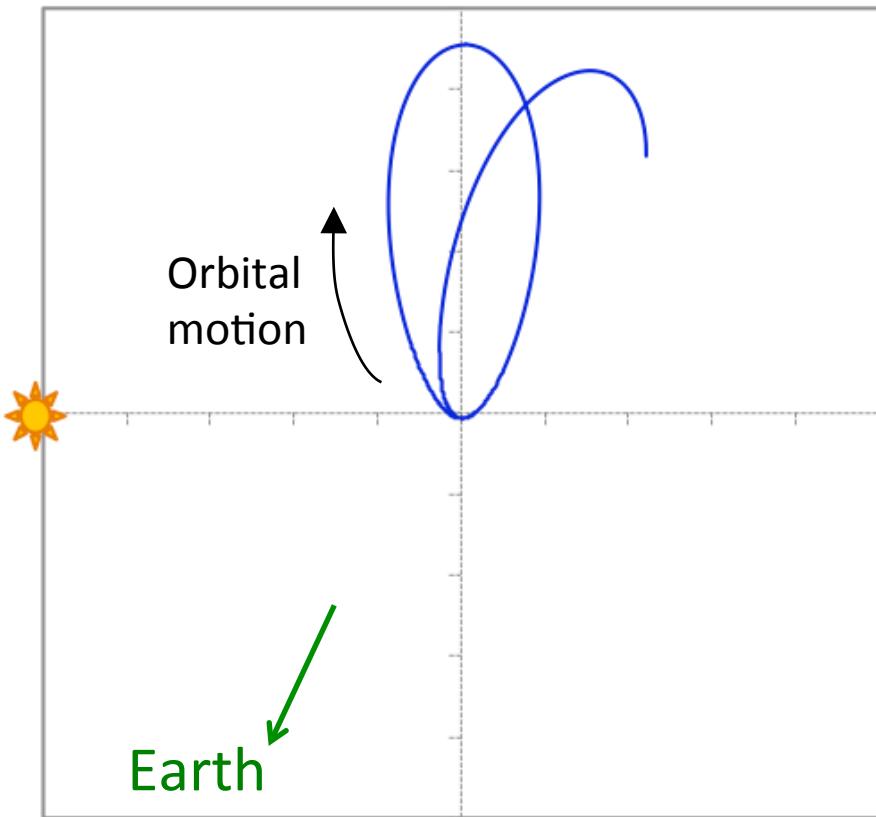


Venus to be seen from Akatsuki's apoapsis
(an equivalent 2x2 binned VMC image)

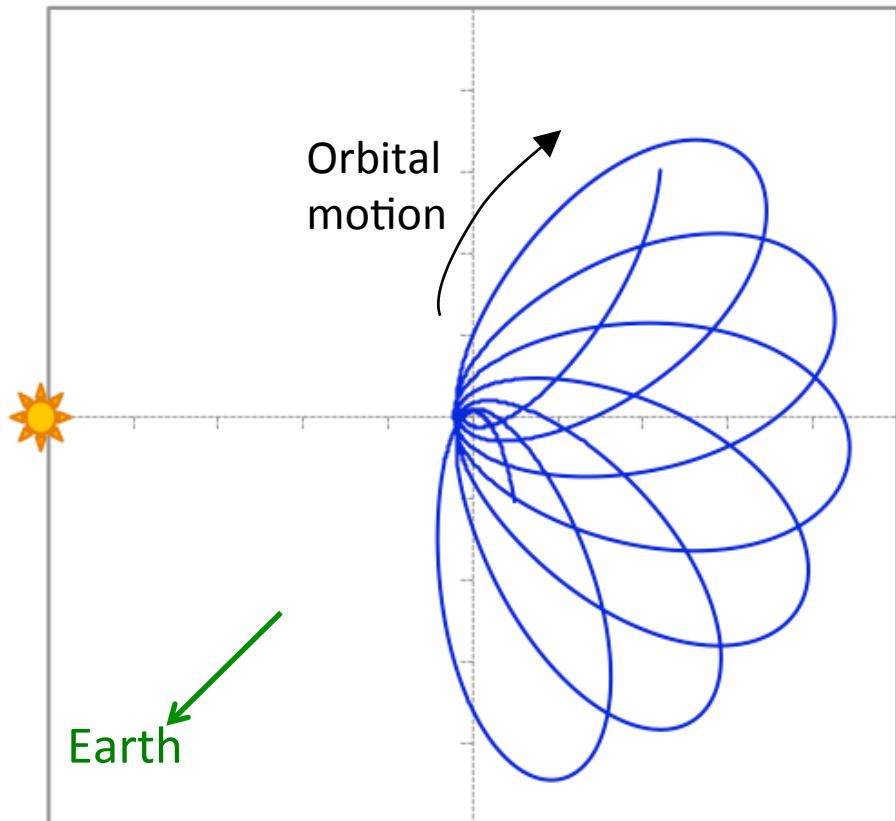


V0470_0048

Dec 7, 2015 (VOI) to Dec 31, 2015
Initial checkout



Jan 1, 2016 to Mar 31, 2016
Initial C/O → Regular obs



Trajectory of Akatsuki in a frame fixed to Venus and Sun
(Center: Venus)

Latitudes to be observed by radio occultation (UDSC+IDSN32)

