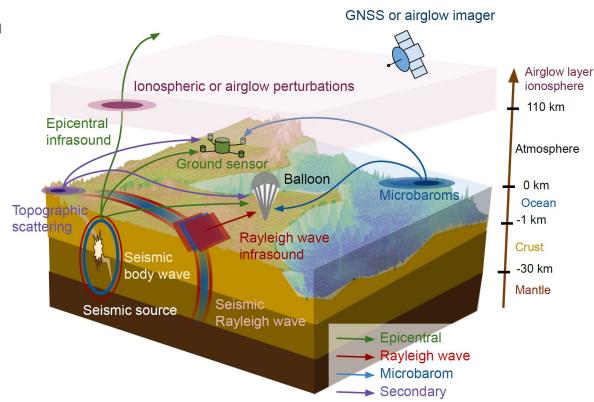


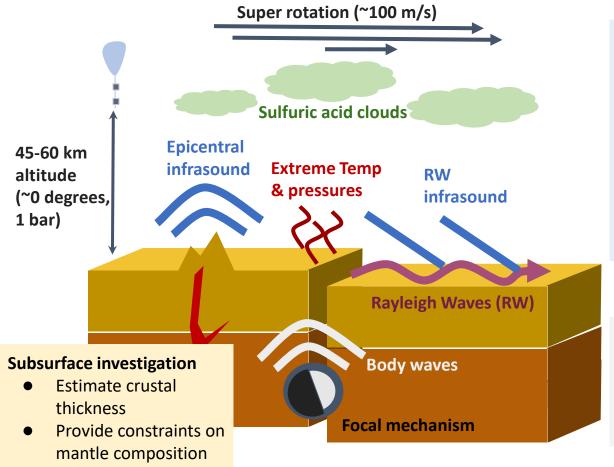
Seismo-acoustics: linking subsurface and atmosphere

- Earthquake epicentral motion and seismic waves couple to the atmosphere.
- Recording is possible through ground infrasound sensors, balloons, or remote sensing (GNSS, Airglow imagers)
- Can we extend infrasound inversion problems to study subsurface processes?





AIR: Using seismo-acoustics to explore Venus' interior



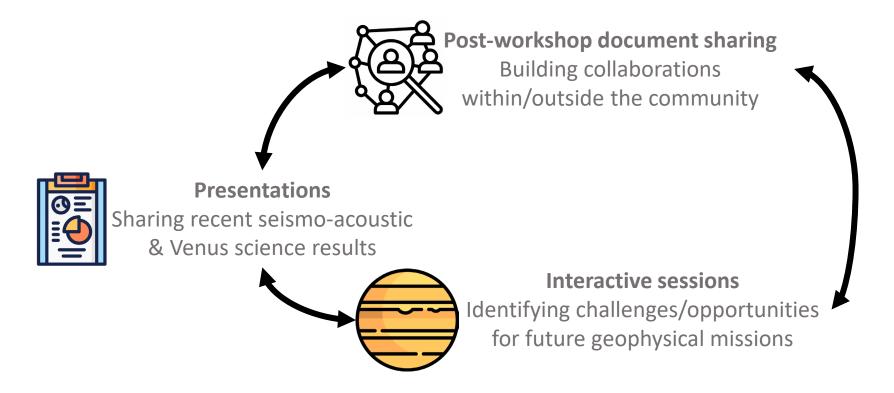
Detectability

- Determine likelihood of observable magnitudes/mechanisms/ distances
- Assess detectability of seismic or direct volcanic infrasound
- Assess the potential of quake infrasound for subsurface and source inversion

Source characterization

- Estimate distribution of focal mechanisms and focal depths
- Estimate spatial distribution of active volcanoes

Workshop: Pushing for Venus seismology & collabs





Program day #1

September Monday 16th Teams link: click here			
Time PST (Time CET)	8:00 - 8:15 (17:00 - 17:15)	Introduction	
	8:15 - 8:45 (17:15 - 17:45)	Marouchka Froment: First results of the AIR project Related presentation: Froment_internoise_AIR.pptx	
	8:45 - 9:15 (17:45 - 18:15)	Siddharth Krishnamoorthy: JPL balloon campaigns	
	9:15 - 9:30 (18:15 - 18:30)	Break	
	9:30 - 10:00 (18:30 - 19:00)	Anna Gülcher: Geodynamic modelling of Venus' tectonics and implications for seismicity Related paper: gulcher_coronae_simulations.pdf	
	10:00 - 11:00 (19:00 - 20:00)	Interactive session #1: Discussion about instrumental challenges led by Siddharth Krishnamoorthy	





Program day #2

September Friday 20th Teams link: click here			
Time PST (Time CET)	8:00 - 8:30 (17:00 - 17:30)	Raphael Garcia & Iris Van Zelst: Results from the ISSI workshop titled "Seismicity on Venus: Prediction & Detection" Related papers/preprints: JGR Planets - 2024 - Zelst - Estimates on the Possible Ann Garcia_preprint_seismoacoustic_detection_venus.pdf Maia_seismogenic_thickness_Venus.pdf	
	8:30 - 9:00 (17:30 - 18:00)	Solene Gerier: Analysis of post-seismic infrasound recorded by pressure sensors aboard stratospheric balloons Related paper: gerier_modeling_seismoacoustic.pdf Asbtract: Infrasound are produced by natural events such as explosion, volcanic eruptions and earthquakes; and the infrasound analysis can provide information about the source of the low-frequency sound and about the medium in which waves propagate.	
	9:00 - 9:15 (18:00 - 18:15)	Break	
	9:15 - 10:30 (18:15 - 19:30)	Interactive session #2: Discussion about seismo-acoustic modeling and inversion challenges led by Marouchka Froment	
	10:30 - 11:00 (19:30 - 20:00)	Wrap up	

