

IAF SPACE OPERATIONS SYMPOSIUM (B6)
Virtual Presentations - IAF SPACE OPERATIONS SYMPOSIUM (VP)

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MISSION TRAJECTORY DESIGN TO VENUS FOR THE DEPLOYMENT OF VENUSIAN
ATMOSPHERIC GLIDER & CUBESAT CONSTELLATIONS FOR RESEARCH PURPOSES**Abstract**

A mission has been presented along with trajectory design to Venus. The mission design consists of deploying a Venusian glider and Cubesat constellation so as to study lower cloud regions and the surface for the trace gases and further study aerosols and volcanic activities. The deployment venus orbits for CubeSat constellation are proposed which will enable a global framework and will provide wide coverage of different regions at the same time increasing the sampling time and data. The mission criteria are thoroughly discussed taking in account the spacecraft flight profile, performance and orbital maneuvers calculations. The details of mission planning and interplanetary transfer results are shown.