

Enhancing our understanding of the atmosphere-ionosphere coupling with Low Earth Orbiting satellite missions

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Low Earth Orbiting (LEO) satellites provide unique opportunities to observe the near-Earth space environment. Recent LEO satellite mission have been making rapid contribution to our understanding of the coupled atmosphere-ionosphere system by providing unprecedented observational evidences for the connection between ionospheric/thermospheric phenomena and their meteorological causes. This talk will briefly summarize the achievements of the decade-long CHAMP mission from the vertical coupling point of view, which is followed by a scientific perspective on the newly launched 3-satellite constellation SWARM mission.