

NSRC-2017 Contributed Talk

The Unique Advantages of Suborbital Atmospheric, Astrophysical, and Planetary Science at Twilight

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Suborbital vehicles offer key advantages over orbital vehicles for a broad suite of atmospheric, astrophysical, and planetary science observations involving twilight phenomena. These applications range from studying the upper atmosphere and the ionosphere, to the inner planets and sungrazer comets, as well as certain transient astrophysical phenomena that occur in the solar exclusion zones of satellites like NASA's Hubble Space Telescope and the James Webb Space Telescope. I will detail these opportunities and review to the power of vehicles built by World View, Virgin Galactic, Exos, and Blue Origin for these important research applications.