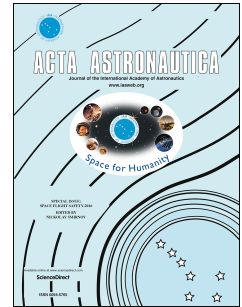


# Accepted Manuscript

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## The Strata-1 Experiment on Small Body Regolith Segregation

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### Abstract

The Strata-1 experiment studies the mixing and segregation dynamics of regolith on small bodies by exposing a suite of regolith simulants to the microgravity environment aboard the International Space Station (ISS) for one year. This will improve our understanding of regolith dynamics and properties on small asteroids, and may assist in interpreting analyses of samples from missions to small bodies such as OSIRIS-REx, Hayabusa-1 and -2, and future missions to small bodies. The Strata-1 experiment consists of four evacuated tubes partially filled with regolith simulants. The simulants are chosen to represent models of regolith covering a range of complexity and tailored to inform and improve computational studies. The four tubes are regularly imaged while moving in

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