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Spacecraft charging in sunlight: new evidence of monopole-dipole potential distribution SHU LAI — We present the results of a statistical study on high-level charging of spacecraft in sunlight at geosynchronous altitudes. Below the critical temperature of the ambient plasma, no spacecraft charging occurs in eclipse. A spacecraft has a shadowed side in sunlight. The critical temperature remains the same and the ratio of the surface potential in sunlight to that in eclipse is about 1/3, agreeing with the monopole-dipole model.

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