

Voyager Observations of the Heliopause and LISM

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Voyager 2 crossed the heliopause and entered the local interstellar medium (LISM) on November 5 2018, 119 AU from the Sun. Voyager 1 crossed this boundary in 2012 at 122 AU but did not have a working plasma instrument. This paper will discuss the Voyager 2 plasma data and other observations near the heliopause boundary and in the LISM. In May 2018 Voyager 2 entered a region in front of the heliopause which was 1.5 AU thick characterized by decreasing speed, increased density, and increasing galactic cosmic ray (GCR) intensity. This region persisted up to the heliopause where the radial flux observed by the plasma instrument dropped to background levels but signal remained in the side-looking sensor. The GCR intensity increased and heliospheric particle densities dropped at the boundary. The LISM signals in the plasma instrument are weak but sufficient to provide estimates of the plasma density, temperature, and speed into the side-looking sensor.