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A FABULOUS JOURNEY IN THE HELIOSPHERE

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During '70s four satellite were launched for the direct study of the external planets of the solar system and for the investigation of the heliosphere, the space surrounding the Sun till a distance of about 100 AU (Astronomic Unit, equivalent to the medium distance between Sun and Earth). Actually, the heliosphere is the space dominated by the solar emissions: electromagnetic radiation and corpuscular radiation (solar wind).

The four satellites were: Pioneer 10 (1972), Pioneer 11 (1973), Voyager 1 (1977) and Voyager 2 (1977). The two Pioneers are now missing in space, while the two Voyagers are still connected via radio with Earth. Nearly 35 years after their launch, they are now crossing the heliopause, the relatively thin layer in which the solar wind and the stellar wind become equivalent. In particular, Voyager 1 will be the first human object to leave the empire of our star.

The data gathered by the two Voyagers are giving us an approximate idea of the structure of the heliosphere and the action of the Sun in this extremely far regions.