



## **Multi-Spacecraft Observations of ICMEs and Magnetic Clouds: Ulysses and STEREO**

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The Ulysses spacecraft, in a six year period polar orbit of the Sun, has almost completed its third fast latitude scan through heliolatitudes from  $80^{\circ}\text{S}$  in February 2007 to  $80^{\circ}\text{N}$  in January 2008. At perihelion in August 2007 the spacecraft is at a distance of 1.4 AU from the Sun and fortuitously is almost radially aligned with the Earth in heliolongitude. Thus the orbit is also bisecting the locations of the two STEREO spacecraft as they separate in longitude between  $10$  and  $15^{\circ}$  either side of the Earth. Making use of the ACE spacecraft in addition, this period therefore provides a unique opportunity to study the solar wind and its embedded magnetic field from vantage points separated in both longitude and latitude. In this paper we will focus on what we can learn about the structure and propagation of the interplanetary manifestations of coronal mass ejections (ICMEs) from observations by this combination of spacecraft. A period of probable coronal mass ejection activity is apparent in the Ulysses data over about 8 days at the end of June, into July, culminating in a very clear magnetic cloud on the 4th and 5th of July. A further ICME is observed at Ulysses on 7th September. However, neither of these events show clear signatures in STEREO or ACE in-situ data and we attempt to understand and explain the reasons for this.