

EUROPEAN SPACE AGENCY

SOLAR SYSTEM WORKING GROUP

Recommendation on the Double Star 2nd Extension

At the 122nd meeting of the Solar System Working Group (SSWG) held on 5 October 2006 at ESA Headquarters, Paris, the SSWG was presented with the latest status and results from the Chinese-ESA mission, Double Star. The SSWG was requested to review and endorse an extension of ESA's participation in the mission for a further 9 months.

The closely-spaced Cluster and more widely-separated Double Star spacecraft simultaneously measure plasma parameters at six points in the Earth's magnetosphere with similar payloads. This combination results in the investigation of a wide range of magnetospheric phenomena over multiple length scales. This combination also allows European scientists to cost-effectively address some of the science goals of the dedicated NASA missions, MMS and Themis. This is of importance to both NASA, in the preparation of these missions, and the ESA science community in the leveraging of our future participation in them. Of the 16 instruments onboard the two Double Star spacecraft, 15 continue to function nominally. The SSWG was informed that analysis of data from Cluster and/or Doublestar has so far resulted in over 500 publications. The present extension is restricted to 9 months at which point the orbit of one of the two Double Star spacecraft will decay.

The SSWG therefore recommends unanimously that Double Star be extended for a further 9 months.