

Rosetta SWT recommandation

The ESA Rosetta Project informed the SWT, in its meeting held at ESTEC April 3, 2003, that the Wirtanen January 2004 recovery mission using a Proton launcher is too risky, in particular because of the transportation without NTO defueling.

In this framework, the SWT endorses the proposal to target the Rosetta mission towards Churyumov-Gerasimenko, considered as a scientifically very interesting comet.

However, higher risks in implementing some operations have been identified, in particular with respect to the ejection and landing of the Rosetta Lander, that need to be studied and reduced. Therefore, immediate actions must be initiated and coordinated by ESA :

- assess the risk of dust on the overall mission;
- demonstration of higher performances of the landing gear;
- ensure sufficient time in orbit for adequate comet characterization and landing preparation;
- study the relaxation of the delivery constraints to cope with the demonstrated Lander performances and the actual comet characteristics, not jeopardizing the overall mission.

Both Ariane and Proton launchers should be further investigated for the February 2005 back-up mission to Churyumov-Gerasimenko.