

Europlanet N2 Science cases

(Outcome of Europlanet N2-N7 workshop at ESAC Villafranca, Madrid, Spain, April 24-26, 2006)

1. Understanding super-rotation (Grieger)
2. Ion-neutral chemistry at Titan (Leblanc)
3. Solar wind interaction at Jupiter and Saturn including aurorae (Krupp)
4. What is the origin of the planetary modulated (quasi-periodic) signatures at Saturn? (Krupp)
5. Investigation of the interaction of magnetospheric plasma with icy moons in the Saturnian system and other giant planet systems (Krupp)
6. Definition and archiving of ground-based observations in support of space missions (Coustenis)
7. Catalogue of IR and Raman spectra of gas CH₄ coefficients, organics (Coustenis)
8. Dating planetary surfaces from cratering processes: formation of the solar system (Coustenis)
9. Quantifying the Martian geochemical reservoirs (Toplis)
10. Exchange processes between surface and interior of icy moons (Grasset)
11. What are the relative contributions of asteroidal dust, cometary dust, meteor streams, interstellar dust and circumplanetary dust to the structure of zodiacal cloud as a function of heliocentric distance, latitude and time (Graps)
12. What is the dynamical and morphological structure of the Kuiper belt (Graps)
13. How can we best optimize from observations, numerical experiments, lab simulations, further analysis of past mission data, the science return of Rosetta
14. Solar wind-comet surface interaction (Schmidt)
15. Surface material composition (Schmidt)
16. Distant activity, outbursts, splitting and disruption of cometary nuclei (Makinen)
17. Planets under extreme stellar conditions (Lammer)