A science case on atmospheric circulation

B. Grieger (1), F. Leblanc (2), M. Fränz (1), H. Lammer (3), T. Siili (4) and T. Tokano (5)

(1) Max-Planck-Institut für Sonnensystemforschung, Katlenburg-Lindau, Germany, (2) Service d'aéronomie, Université Pierre et Marie Curie, Paris, France, (3) Institut für Weltraumforschung, Graz, Austria, (4) Finnish Meteorological Institute, Helsinki, Finnland, (5) Institut für Geophysik und Meteorologie, Universität zu Köln, Germany (grieger@mps.mpg.de)

Comparative studies of atmospheres of different planets promote the comprehension of circulation related phenomena, e. g. superrotation. Atmospheric General Circulation Models (GCMs) require wind and temperature measurements of Venus, Mars, and Titan with the highest available spacial and temporal coverage. Wind and temperature data are needed to validate and tune GCMs. Temperature data can also be used to drive GCMs. A valuable service by IDIS to the modeling community would be to provide all available wind and temperature measurements in a common format with respect to planet, altitude, latitude, longitude, time. IDIS shall provide support to the institutes to provide their data on winds and temperatures in an agreed format. The institutes commit themselves to provide their data on the WWW, update their data as appropriate, and maintain a revision log. IDIS shall provide a web interface to access the data. The interface shall collect the revision information and display it and allow to download a homogeneous merged version of all the institutes' data. IDIS shall probably *not* provide data base and visualization capabilities. These may be in the responsibility of the data user.