

A 2002-2005 climatology of the global mesospheric sodium layer measured by the GOMOS instrument

D. Fussen (1), F. Vanhellemont (1), J. Dodion (1), C. Bingen(1), N. Matshvili (1), E. Kyrölä (2), J. Tamminen (2), V. Sofieva (2), J. L. Bertaux (3), A. Hauchecorne (3), F. Dalaudier (3), O. Hembise (5), G. Barrot (5), M. Guirlet (5), R. Fraisse (6), P. Snoeij (7), L. Saavedra (7) and T. Fehr (7).

(1) IASB, 3 av. Circulaire, B-1180 Brussels, Belgium.

(2) Finnish Meteorological Institute, PO Box 503,FIN-00101 Helsinki, Finland.

(3) Service d'Aéronomie du CNRS/IPSL, BP.3, 91371, Verrières-le-B., France

(4) LPCE-CNRS, 3a, av. Recherche Scientifique, F-45071, Orléans, France

(5) ACRI-ST,260 Route du Pin Montard, BP 234, 06904,SophiaAntipolis France,

(6) Astrium EADS,31Avenue des Cosmonautes,31402 Toulouse Cedex 4, France,

(7) European Space Agency, Estec/Noordwijk(NL), Esrin/Frascati(It).

Recently a general GOMOS reprocessing of the 2002-2005 data has been performed from an improved version of level 1b data. In a 2004 paper, we published the first global measurement of the mesospheric sodium layer retrieved by the star occultation technique for the 2003 data set. This work will present the analysis of the sodium layer for the whole GOMOS mission. In particular, we will study the latitudinal, seasonal and interannual variations of the integrated Na column as well as of the vertical number density profile. Also, the question of the diurnal Na cycle will be reanalyzed.