

3.5.6.8 Special Bureau for Loading

On 1 February, 2002 the Special Bureau for Loading (SBL) was formally established. Eventually, the SBL is expected to provide in near real-time a consistent global solution data set describing the surface deformation, gravity signal and geocentre variations due to various surface loading processes, in reference frames relevant for direct comparison with existing geodetic observing techniques.

The accuracy of the products provided through the SBL should, as much as model limitations allow, match the precision of the space-geodetic and gravimetric observing techniques. Achieving this ambitious goal requires major scientific advances with respect to the earth model, the theory and the algorithms used to model deformations of the earth and improvement of the surface loading data themselves. Consequently, a scientific agenda has been established to perform the research necessary for the improvement of the models and algorithms, in parallel with an operational agenda which is directed towards establishing a service which provides validated loading products to the IERS community.

SBL has made significant progress during this year to attain the goal of becoming operational. We have addressed a number of issues related to determining loading products from variations in atmospheric mass. (For more information please download a copy of the SBL position paper). The knowledge gained from this research will allow us to implement new surface loading data sets and produce the appropriate products more quickly.

One major accomplishment of the SBL this year, was the creation of the web site (<<http://www.gdiv.statkart.no/sbl/>>). A mirror site will be established soon. We expect to have the historical loading effects (1995 - 2002) computed using the NCEP Reanalysis data on the web by June 2003. Results from the ECMWF data set will immediately follow.

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