

September 1, 2000

ETS2000 RESOLUTIONS

1/ Recognising the importance of the observation of tidal effects and of the determination of tidal parameters by space geodetic techniques,
the ETC recommends
to continue this observational effort;
to compare the results obtained by different space geodetic techniques between each other and with the results of ground based tidal measurements.

2/ Recognising the importance of the new international services on space geodetic techniques,
the ETC recommends
that WG6 establishes or intensifies the cooperation with the analysis coordinators of these international services concerning the tidal modelling.

3/ Considering the new fields of tidal research in lunar and planetary geodesy,
the ETC recommends
that the tidal community should take an active part in space missions related to lunar and planetary geodesy ;
requests a proper archiving of the data and metadata acquired during those missions and normal access to the world-wide geodetic community.

4/ Considering the increasing interest of the tidal community to lunar and planetary researches,
the ETC recommends
that a session on tides on the planets should be included in the future earth tides symposia.

5/ Recognising the importance of a global Earth coverage with superconducting gravimeters
for the study of weak geophysical signals,
for the determination of the liquid core resonance parameters,
for the study of the polar motion effects on gravity,
for the intercomparison of the load vectors derived from recent ocean tides models,
for the study of global and regional gravity changes to validate the results of the dedicated satellite missions,
the ETC recommends
to extend the GGP observation period for an additional 6 year period starting July 2003, to maintain the existing sites and to encourage the installation of new GGP stations especially in the Southern hemisphere and in polar regions.

6/ Recognising the fact that presently the calibration of the superconducting gravimeters participating to the world-wide GGP project is not homogeneous,
the ETC recommends
that systematic calibration campaigns with absolute gravimeters should be planned and realised before the end of the current GGP observation period,
through an international cooperative effort.

7/ Recognising the importance to keep in operation several calibration techniques for gravimeters to allow a mutual accuracy control,
the ETC recommends
that inertial calibration platforms and moving mass calibration devices should continue to be developed or maintained besides more usual calibration methods such as intercomparison with absolute or well-calibrated relative instruments.

8/ Recognising the importance of environmental data for the interpretation of tidal measurements,
the ETC recommends:

a/ to record the following parameters:

- The barometric pressure, temperature, precipitation, and ground water level. The sampling rate for the recording of environmental parameters should correspond to the sampling rate of the geodynamic data observed. A sufficient resolution and accuracy of the measurements of the environmental parameters should be granted.
- Although the difficulties of monitoring soil moisture are recognised, it is recommended to undertake efforts to realize a continuous monitoring of this parameter.

- The monitoring of wind is also recommended because wind might produce short-period noise as well as long-period modulations.

b/ to correct gravity data in long term studies for local (diameter 100km), regional (diameter 2000 km), and global atmospheric pressure signals as all three produce significant effects.

c/ to develop correction models for gravity, tilt, and strain related to:

- ground water table variations
- snow, rain and soil moisture
- stress resulting from temperature variations

9/ Noting the importance for tidal measurements of accurate error estimates and appreciating that such estimates can be made only if the power spectral density of the noise is known,
the ETC recommends
to show noise spectra as Power Spectral Density expressed in unit $2/$ frequency.

10/ On behalf of all participants of the 14th International Symposium on Earth Tides, the ETC thanks the Japanese National Committee for Geodesy, the Science Council of Japan, the Geodetic Society of Japan, the National Astronomical Observatory of Japan, the City of Mizusawa and the Iwate Prefecture for their generous support to the Symposium.

11/ ETC thanks the Local Organising Committee : Masatsugu Ooe (Chairman), Tadehiro Sato (Secretary) , Jiro Segawa (President of Geodetic Society of Japan) and the staff, for their wonderful welcome and their many efforts in making the 14th International Symposium on Earth Tides a great scientific success.