

## **Opening Address of the 14th International Symposium on Earth Tides** (on behalf of Prof. N. Kaifu, Director General of National Astronomical Observatory)

**Shoken Miyama**

**Associate Director of General of National Astronomical Observatory, Japan**

Good morning, ladies and gentlemen.

I am Shoken Miyama, the executive vice director of National Astronomical Observatory of Japan, NAOJ. As the representative of the host institute, I would like to say it is my great pleasure to welcome to you to Japan, and welcome to Mizusawa and to the 14th International Symposium on Earth Tides.

First of this symposium, on behalf of the Director, Norio Kaifu, I wish to extend our heartiest welcome to the scientists, secretarial staff and others who have come to this symposium from many countries. Especially we are honored by so many distinguished guests, the president of International Association of Geodesy, Special Commission 3, Professor Groten and the president of IAG Commission V, Professor Takemoto.

This city, Mizusawa is the birthplace of geodetic study in Japan. About a century ago, in 1899, the International Latitude Observatory of Mizusawa was founded under the program of the International Latitude Service in this city. After that as the center of Japanese Earth-Geodynamics, there have been many famous scientists and their works. Especially the work by the first director of the observatory, Professor Kimura, is World famous by the Z-term of Polar motion of Earth. The name of this city hall, "Z-Hall," comes from his discovery.

NAOJ was established in 1988, integrating the Tokyo Astronomical Observatory of the University of Tokyo, the International Latitude Observatory of Mizusawa, and the solar radio group of the Research Institute of Atmospherics, Nagoya University. Because the proper combination between the astronomy and the geodynamics will make good effects for both fields. In order to promote open-use of the observatory facilities for country-wide researchers, these three research centers were reorganized as NAOJ. After the establishment of NAOJ, in the Mizusawa, as a branch of NAOJ there are the Earth Rotation Division and the Mizusawa Astrogeodynamics Observatory. There are about 30 scientists. They are studying about Radio Geodynamics, Earth Rotation, Geodynamical data processing, Earth Deformation, Earth Tides and Gravity. Especially in the field of Earth Tides, we have Observation Facilities, The Esashi Earth Tides Station. That is located about 20 km east of the Mizusawa campus and consists of an observation tunnel and a gravity measurement room. In the near future we have some planes to investigate planet and moon tides also. In Mizusawa Astrogeodynamics Observatory there are young scientists from several Universities and some graduate students who are actively studying about Earth Tides.

Therefore that the 14th International Symposium on Earth Tides is held at this city and recent developments, instrumentation, observation and theory about the earth tide can be discussed here is very meaningful from the historical viewpoint as well as the educational viewpoint.

Before end of my opening address, I would like to say special thanks to the Sponsors, International Association of Geodesy, Commission V: Earth Tide Commission, National Committee for Geodesy, Science Council of Japan, and Geodetic Society of Japan. And also thanks to Cosponsors, Iwate Prefecture and Mizusawa City. In conclusion, I offer to this Symposium my best wishes for success and to each of the participants a happy and meaningful stay in this city. Thank you very much for your kind attention.