Beijing National Earth Observatory (NEOBJI) is managed by the Institute of Geophysics (IGP), China Earthquake Administration (CEA), which is an important field arm of IGP and having held a leading role in earthquake and multi-disciplinary geophysical observation in China for many years.

NEOBJI has a long glorious history.

- **YEAR 1930**: The first seismic station in mainland China, which was installed by Chinese seismologists in 1930. After the Wiechert seismograph and Galitzin-Willip seismograph were deployed, the first seismograph was recorded on Sept. 30, 1930.
- **YEAR 1930 to YEAR 1937**: 2427 earthquakes were recorded. Bulletins and observation reports were published monthly and the data were exchanged with seismological agencies all over the world, which makes NEOBJT as a landmark of the modern seismological observation in China.
- **YEAR 1957**: Renamed as Beijing Observatory, and obtained earthquake waveform data since June 1, 1957, with the installed 513-type mid-strong seismometer. The geomagnetism records was first obtained in 1957.
- **YEAR 1982**: A 202m-depth cave for geophysical observation was completed with total inner length of 317.5m.
- **Year 1982 to Year 2010**: Seismometers, a gravimeter, and tilt-meters were installed in the cave, while geo-magnetometers and instruments for water level were installed in the yard and down in boreholes.
- **YEAR 1984**: Be awarded the “International Earth Observation Centenary” Silver Medal by IAGA in recognition of the outstanding contribution in Geomagnetic Observation.
- **FROM 1986**: Be a station of CDSN/GSN, sharing seismic data with the world.
- **FROM 1990s**: Be a GSETT beta station, and a CTBTO/IMS auxiliary station.
- **FROM 2000**: Be a China National Backbone Field Station, honored by the Ministry of Science and Technology of the People's Republic of China.
- **From 2010**: Be a base for International Cooperation, honored by the Ministry of Science and Technology of the People's Republic of China.
NEOBJI: practices and records

- Geomagnetic observation: IAGA Silver medal
- Seismological observation: Chinese magnitude standard
- Pioneering digital seismology in China: the CDSN and its upgrading
- The ChinArray center

Geomagnetic Observation at NEOBJI

Waveforms recorded on NEOBJI for the Wenchuan Earthquake (M8.0, 2008) and the photo during CDSN upgrade in 2013

The technical support center of the ChinArray
NEOBJI for today

- The seismological lab for the Chinese national seismograph network
- Technical standard and quality control for observation and monitoring
- The national observatory as the central node of array, network, and observatory clusters
- Geophysical observation and monitoring in the time of accelerating urbanization

Testing and quality control Center of the China National Seismological Network

Magnetic field-free space for calibrating instruments

Technical center of ChinArray

Instrumental Testing Center

Key Laboratory

NEOBJI Observation Center

Photos of some of the buildings of the Beijing National Earth Observatory (NEOBJI)
**NEOBJI for next 10 years**

- The observatory as a lab for research, development, and training
- Information service to the public
- The observatory as the base for knowledge transfer and public understanding
- Facilitating international collaboration through the observatory

**Suggestions for the Disaster Research Roadmap**

For *earthquake disasters research*, the suggestions might include:

1. To know more details about earthquakes, at least know more about the focal behaviors which doomed to cause disastrous waves.
2. To know more details about seismic waves, at least know more about the wave behaviors which doomed to cause ground acceleration.
3. To know more details about site responses, at least know more about the site behaviors which doomed to cause building damage.
4. To get a set of always-there solutions for faster response of earthquakes, consisting of alarm, evacuation, refuge and rescue.

The lost from a disaster directly relates to the strength of the hazard and the exposure of the life and property. Therefore, in order to reduce disaster risk, know more about the hazard itself might be one of the top goals of disaster research. *The contributions from NEOBJI* to disaster research would be to know more about the hazard, with long-term stable geophysical observations, with mass reliable monitoring data, and with nearer-and-nearer real boundary conditions. And the interests of NEOBJI for disaster research consist of:

- Rock physics and behavior before, during and after fault broken.
- High-resolution images for fault activities and high-precision features for focal mechanism.
- Standard, reliable, continuous geophysical observation in special areas for a long time.
- Quick and routine disaster information collecting and releasing process.

NEOBJI would like to be an open working base for international cooperation in disaster research.