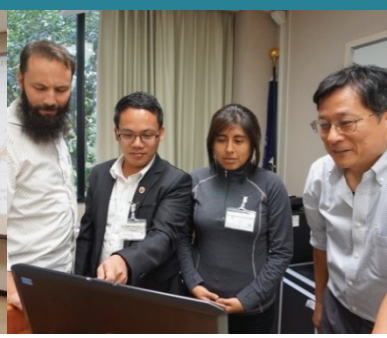
Join us

- Information Technology Related with Earthquakes and Disasters
- Earthquake Phenomenology
- Earthquake Circumstance
- Characteristics of Earthquake Disasters
- Structural Analysis
- Structural Dynamics
- Seismic Design
- Seismic Evaluation and Retrofitting
- Theory of Tsunami
- Earthquake Hazard Assessment
- Earthquake Risk Assessment
- Tsunami Hazard Assessment
- Tsunami Countermeasures
- Disaster Mitigation-Recovery Policy
- Disaster Risk Management
- Disaster-Recovery Management and Development Assistance

United Nations
Educational, Scientific and
Cultural Organization

International Institute of Seismology and Earthquake Engineering

IISEE



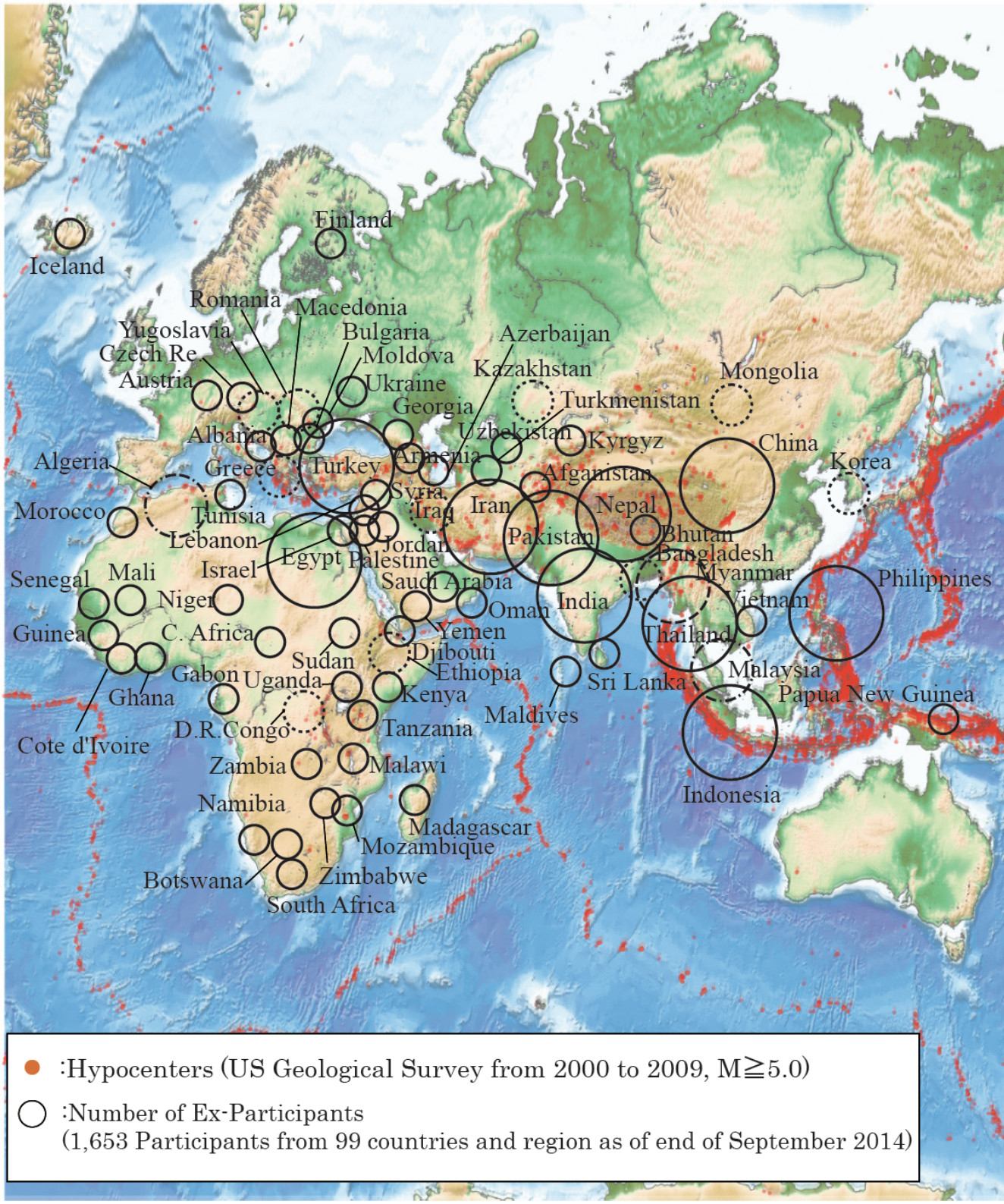
IISEE

More than 50 years: More than 1,600 participants

The International Institute of Seismology and Earthquake Engineering (IISEE) at the Building Research Institute (BRI) in Tsukuba, Japan provides training program in seismology, earthquake engineering and tsunami disaster mitigation to researchers and engineers from developing countries. As of September 2014, a total of 1,653 participants from 99 countries has completed the training courses from 1960.

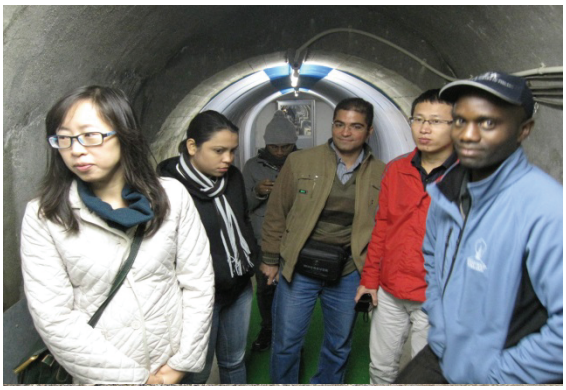
Please click the IISEE Website : http//iisee@kenken.go.jp/

Number and Nationalities of Ex-Participants



IISEE Training Course

IISEE mainly conducts one-year training courses named Seismology Course, Earthquake Engineering Course and Tsunami Disaster Mitigation Course, and two-month course named Global Seismological Observation Course. Short-term training courses focusing on specific themes take place occasionally.



Seismology Course

Seismology Course

The course provides advanced knowledge and technology concerning earthquakes and seismic hazards. Participants belong to the organizations responsible for seismic observation and earthquake disaster mitigation in their countries. Lectures such as seismic hazard, risk evaluation and earthquake disaster mitigation policy-making are designed to be useful for participants after returning to their countries. Practical training, study tours, and participation in international conferences are also included in the program.

Earthquake Engineering Course

Earthquake Engineering Course

The course is designed to contribute to the reduction of structural damage caused by earthquakes that cause human suffering in developing countries. Participants are mainly researchers, engineers from governments and universities. Lectures comprise basic studies (structural analysis, structural dynamics, earthquake resistant structures for reinforced concrete construction, steel structures) and the latest studies (seismic isolation, response control technique, seismic limit state design). These are systematically provided through lectures, practices and study tours.

Tsunami Disaster Mitigation Course

Tsunami Disaster Mitigation Course

The course began in 2006 after the gigantic tsunami generated by the earthquake off Sumatra in 2004. Lectures provide advanced education and technology for dealing with earthquakes and tsunamis. Participants are specialists who can apply and disseminate their acquired knowledge and techniques for tsunami disaster mitigation and introduce tsunami hazard evaluation and early-warning systems in their countries.

IISEE Training & History

Global Seismological Observation Course

Global Seismological Observation Course

The course is launched in 1995 by the request of the Ministry of Foreign Affairs of Japan. It is conducted as part of the Japan's contribution to the world's nuclear disarmament in cooperation with the Japan Metrological Agency and JICA. Participants are expected to play an important role in the CTBT and IMS. Lectures are seismological observation technologies for monitoring nuclear tests and earthquakes, and data analytical techniques to discriminate nuclear tests from natural earthquakes.

Individual Course

The course is not a group training and designed for participants with high scholastic ability and professional experience. A participant pursue his/her own study individually with his/her supervisor in IISEE.

Other Training Courses

Occasionally, IISEE takes place short-term training courses focusing on specific themes such as China Seismic Building Course (2009-2012). It was launched in 2009 after the 2008 Sichuan Earthquake as part of reconstruction support by the Government of Japan. It was two-month training course given lectures in the Chinese language and 72 participants have studied structural technology in IISEE for 4 years. After they returned to China, they gave lectures to 324 local engineers. Those engineers gave lectures to 8,833 local professionals. On June 2014, the Latin American Earthquake Engineering Course is launched.

History of IISEE

After World War II, young researchers and engineers from earthquake-prone developing countries who came to Japan to study seismology and earthquake engineering were gradually increasing. Taking the opportunity of the 2nd World Conference on Earthquake Engineering held in Tokyo in 1960, the leading figures and experts of seismology and earthquake engineering in and out of Japan negotiated about the feasibility of the group training for those people. On July 1960, a nine-month training course was launched in the University of Tokyo.

The training was successful and requested to conduct permanently by the international community. The Government of Japan decided and established the IISEE in BRI on January 1962. Between September 1963 and August 1972, the United Nation's Special Fund and the United Nations Educational, Scientific and Cultural Organization (UNESCO) cooperated with the Government of Japan in conducting the training. From September 1972, the training was conducted solely by the Government of Japan.

On March 1979, BRI and IISEE moved to Tsukuba from Tokyo and on April 2001 BRI changed to an independent administrative agency by the governmental reform. With the cooperation with the National Graduate Institute for Policy Studies(GRIPS), the IISEE' one-year training program was certified as a GRIPS' master program from October 2005 and the participants are awarded the Master Degrees after the completion of the credits and master's theses.

Latin American Earthquake Engineering Course

Ex-Participants & Master's Degree

Nepali Ex-Participants

IISEE Ex-Participants

After training, the participants make steady efforts to mitigate earthquake disasters and are given leading positions in their countries. Some are shown as follows: *as of Sept 2014

INDONESIA

119 people of the Agency for Meteorology Climatology and Geophysics, the Research Institute for Human Settlement, etc. have joined the training. Prof. Dr. Ir. Djoko Santoso (1978-79, Seismology Course) is Director General of Higher Education, Ministry of National Education and the former rector of the Bandung Institute of Technology.

PERU

122 people, the second number next to China (128) have come to IISEE. They have Japan-Peru Center for Earthquake Engineering Research and Disaster Mitigation in the National University of Engineering (CISMID-UNI) which was established in cooperation with BRI. Dr. Julio Kuroiwa (1961-62, Earthquake Engineering Course), an emeritus of UNI , is one of the founders of earthquake engineering in Peru.

EGYPT

82 people have joined the training. Most of them have come from the National Research Institute of Astronomy and Geophysics (NRIAG). Dr. Rashad Kebeasy (1965-66, Seismology Course) and Dr. Salah Mohamed (1982-83, Seismology Course) served as NRIAG President.

A Master's Degree

In 2005, IISEE went into partnership with the National Graduate Institute for Policy Studies (GRIPS) which is a stand-alone national graduate university focused on policy studies in Japan. Due to the partnership with GRIPS, one-year training course participants in seismology, earthquake engineering, and tsunami disaster mitigation who have successfully;

(1) completed one-year training courses,
(2) obtained the required credits, and
(3) submitted the theses,

are conferred the degrees of "Master of Disaster Management" certified by GRIPS and BRI/IISEE.

To secure a master's degree after the one-year training in IISEE is a long-standing request and dream of the participants. With the master's degree, they will devote their career to earthquake disaster mitigation in their respective countries.

As of September 2014, 197 graduates are conferred the degrees from 2005.

Conferment of a Master's Degree in GRIPS

IPRED & Course Classification

IPRED Activities

International Platform for Reducing Earthquake Disasters (IPRED) was established by United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2007. It aims to promote collaboration in research, training and education in the fields of seismology and earthquake engineering. IISEE plays as the Centre of Excellence supported by UNESCO and Japanese Ministry of Land, Infrastructure, Transport and Tourism. The main goals are;

-to exchange information and propose plans on collaborative research, training, and education regarding seismology and earthquake engineering for reducing earthquake disasters, especially on buildings and housing.

-to address policy-relevant issues related to the reduction of earthquake disaster risks and implementation of the Hyogo Framework for Action, including the formulation of recommendations on priorities of the International Strategy for Disaster Reduction (ISDR).

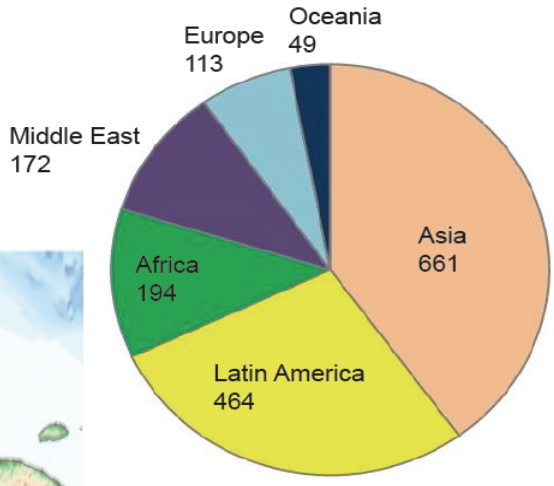
-to establish a system to dispatch experts to earthquake stricken countries in order to carry out post-earthquake field investigations and draw lessons for future risk reduction, by utilizing the worldwide network of the IISEE graduates.

The 6th UNESCO-IPRED Session in Peru

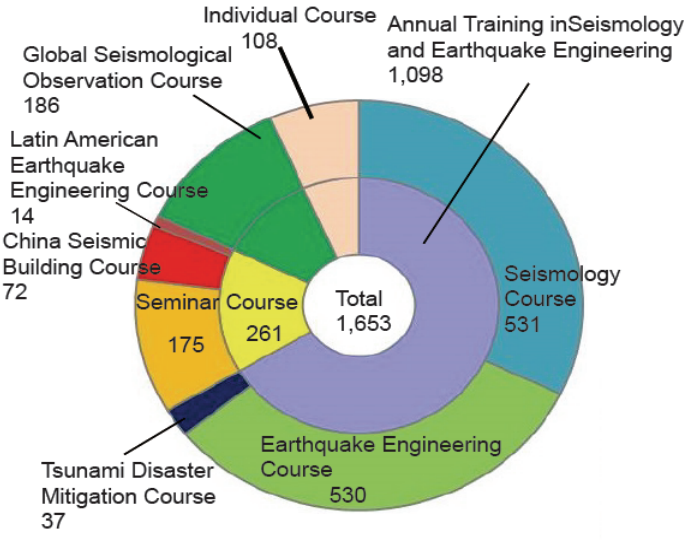
IISEE Course Classification

Total: 1,653 as of the end of Sept. 2014

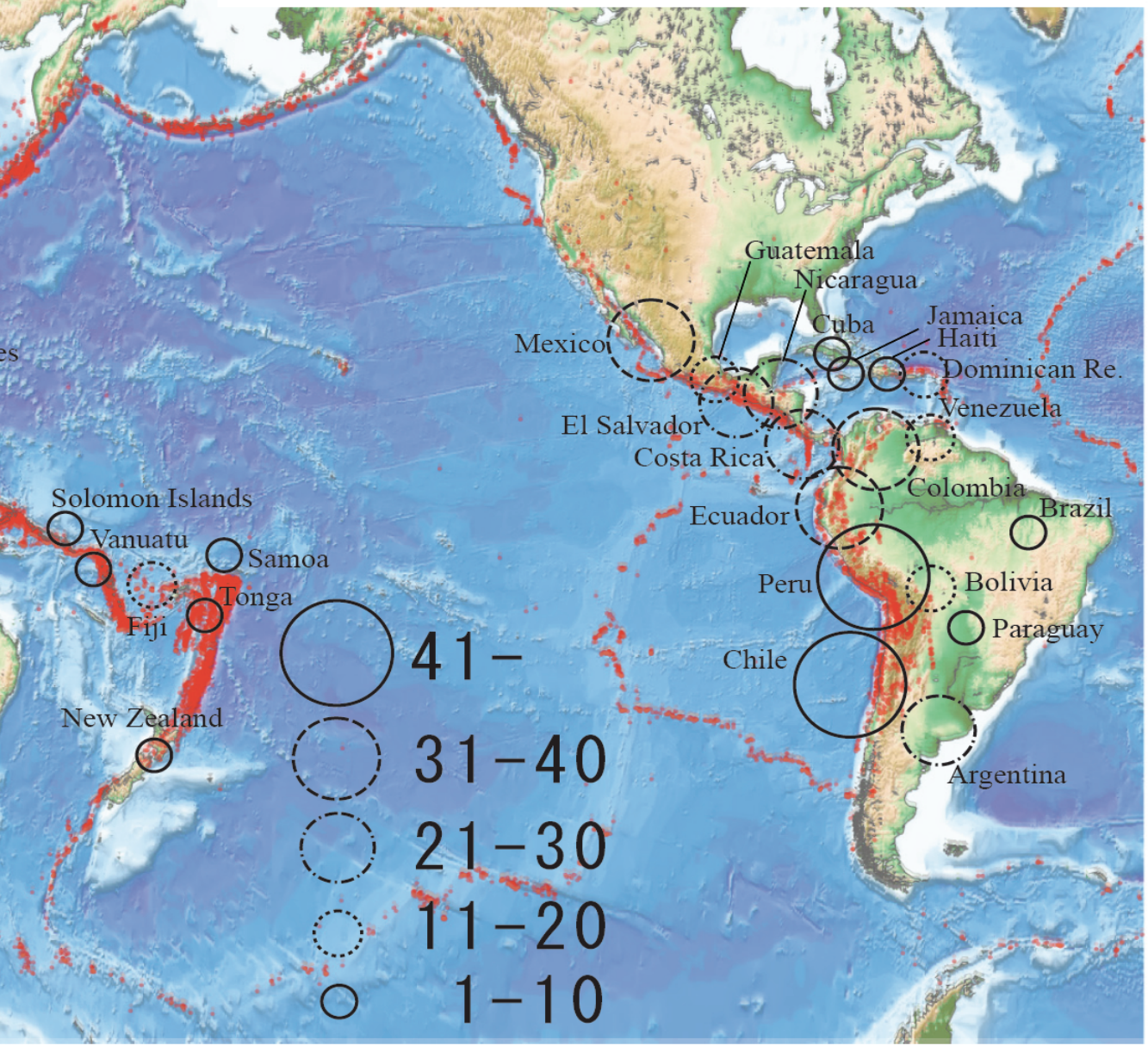
Training Course		Field	Capacity	Period	Commencement	Ex-participants	
Regular	Seismology	Seismology	10	1 year (Oct.-Sept.) Lectures in Class (8 months) Individual Study (3 months)	1960	531	1,098
	Earthquake Engineering	Earthquake Engineering	10			530	
	Tsunami Disaster Mitigation	Tsunami	6		2006	37	
Seminar	China Seismic Building	Earthquake Engineering	20	2 months	2009 (2009-2012)	72	261
	Latin American Earthquake Engineering	Earthquake Engineering	8	2 months (2 weeks in Latin America)	2014 (2014-2016)	14	
	Arbitrary	Seismology/ Earthquake Engineering	10 to 20	1 to 2 months	1980 (1980-2000)	175	
Global Seismological Observation		Seismology	10	2 months (Jan.-Mar.)	1995	186	
Individual		Seismology/ Earthquake Engineering /Tsunami	several	Upon request	1968	108	



Number of ex-participants by region



Number of ex-participants by course



To All the Corners of the Earth
IISEE Network

Better be Safe and Peace to People
in the Cause of Earthquake Disaster Mitigation

Due to the reduction of earthquake damage in developing countries, it is indispensable for them to fully understand their own characteristics of the seismic source, ground condition, building structures, etc, and to advance research and development of earthquake disaster mitigation technology. However, their seismological observation system and research system are not always sufficient. Most have not yet obtained the necessary information on earthquake mitigation study. To assist them, IISEE go public databases of earthquake and training information through the website.

http://iisee.kenken.go.jp/

IISEE Net

The information Network of Earthquake Disaster Prevention Technologies (IISEE Net) releases the information of earthquake disaster mitigation of buildings. It accumulates technical information (seismic design code, seismic network & activities, seismic damage, and micro-zonation) from mainly developing countries.

BRI Strong Motion Observation

It provides the recent strong motion observation data from more than 70 strong motion stations throughout Japan. BRI has been conducting the strong motion observation for building structures since 1957.

Newsletter

IISEE issues a monthly newsletter. It is a useful channel of communication and gives an update on IISEE current activities. The newsletter can be also accessed from the IISEE website.

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