



DEPREM RİSK
YÖNETİMİ VE
KENTSEL
İYİLEŞTİRME
DAİRESİ
BAŞKANLIĞI



İstanbul
Planlama
Ajansı

5TH INTERNATIONAL CONFERENCE ON EARTHQUAKE EARLY WARNING

16-18 OCTOBER 2023
İSTANBUL-TÜRKİYE

PROGRAM

1st Day: October 16th

09.30-10.00 Registration

10.00-11.30 Opening Speeches

Prof. Dr. Şerif BARIŞ - *Kocaeli University, YUBAM*

Prof. Dr. Haluk ÖZENER - *Boğaziçi University, KOERI*

Bahar TÜRKYILMAZ -

Ministry of Interior Disaster and Emergency Management Presidency

Dr. Buğra GÖKCE -

Deputy Secretary General of Istanbul Metropolitan Municipality (İMM)

11.30-12.00 Coffee Break

12.00-12.30 Prof. Dr. Richard ALLEN - *University of California Berkeley*

Global delivery of earthquake early warning:

Performance, limitations and alerting strategy

12:30-13:00 Prof. Dr. Alon ZIV - *Tel Aviv University. (Video)*

Introducing ViDA3: An earthquake early warning algorithm for

offshore hypocenter determination using onshore seismic networks

13.00-13.30 Lunch

13.30-14.30 Session I 2023 Kahramanmaraş Earthquakes

Marcou, S., Lux A., Akimov A., Allen R., *"Insights into Potential Earthquake Early Warning Performance in Türkiye and California from Replays of the February 2023 Kahramanmaraş Earthquakes"*.

Böse, M., Ceylan S., Andrews J., Massin F., Clinton J. Tatar O., Türkoğlu M., *"Rapid Finite-Fault Models for the 2023 M7.8 Kahramanmaraş, Türkiye, Earthquake Sequence"*.

Okuyan A.S., Yesilyurt A., Zulfikar C., *"Real-Time Earthquake Risk Assessment for the Industrial Buildings"*

Akkar S., Yazgan U., Açıkgoz, N., Ülkü O., Atıcı A.T., *"Site Characterization, Portfolio Granularity and Its Geospatial Distribution Significance in Loss"*.

14.30-14.45 Soichiro YASUKAWA - UNESCO, Disaster Risk Reduction Unit
Early Warning System for All Initiative and UNESCO's action on earthquake early warning system

14.45-15.00 Coffee Break

15.00-16.30 Session II-EEW Global Implementation Status

Ahn J.K. Ahn, J.K., Han S., Lim D., Kim B., Hwang E.H., *"Review of Trial Operating for On-Site Warning with a Machine Learning Module"*.

Clinton, J., Massin F., Böse M., Burgoa B., Marroquin G., Munoz C., Gonzales B.O., Protti M., Strauch W., Yani R., *"Public EEW in Central America"*.

Nof, R. Yagoda B.G., Zwebner Y., *"Truav Earthquake Early Warning System for Israel-Operational Stage and the Public's Perspective" (Video)*.

Seywerd H., McCormack D., Bird A., Crane S., *"Canada's National Earthquake Early Warning Program" (On-line)*.

Aktuğ B., *"Seismogeodetic Earthquake Observation in Turkey: Potential and current practices"*

Fahjan, Y., Zulfikar C., REDACt Project Team, *"Advancement of Cross-Border Rapid Earthquake Damage Assessment System (REDAS)"*.

16.30-17.15 Panel Discussion: IMM's Earthquake Mobilisation Plan,
Moderator: Şerif Barış

Murat YÜN Head of Earthquake Risk Management and Urban Development Department of IMM

Selçuk TÜTÜNCÜ Manager of IMM Disaster Coordination Center (AKOM)

Erol ÖZGÜNER Head of Information Technology Department of IMM

17.15

Cocktail+live music

2nd Day: October 17th

10.00–10.30 **Assoc. Prof. Dr. Masumi YAMADA** - *Kyoto University (On-line)*
Application of Earthquake Early Warning Methods
to the 2023 Turkey–Syria Earthquake

10.30-11.00 **Dr. Mitsuyuki HOSHIBA** - *Japan Meteorological Agency (On-line)*
Does moment magnitude matter for earthquake early warning in the
near-fault region?

11.00-11.15 **Coffee Break**

11.15-12.30 **Session III-Seismic Networks in EEW**

- Güralp C.** Güralp, C., McGowan M.,
"A New approach to strong motion sensor design".
- Mariotti, M.**, "Temporary and permanent EEWS solutions sensors and
infrastructures".
- Neagoe, C.**, Marmureanu A., Ionescu C., "Romanian Seismic Network –
Contribution to the Early Warning System".
- Wang, T.**, "The Development of EEW and Multi-Hazard Early Warning
System (MHEWS) in China and beyond".

13.00-13.30 **Lunch**

13.30-14.45 **Session IV-New Technologies and Algorithms in EEW (IOT, AI, BigData, Machine Learning)**

- Coşkun, Z.**, Koç B., Özgür H.G., Dal M.E., Erkokmaz T., Şahin R.C.,
Özkan E., Buldanlı K., Tuñç S., Pınar A., Özener H.,
"Fiber Optic Distributed Acoustic Sensing in Earthquake
Early Warning Applications in the Sea of Marmara".
- Tuñç, S.**, "Earthquake Early Warning System in Marmara Region".
- Eisermann, A.S.**, Ziv A., "Hybrid small-aperture array networks in
EEW" (Video). Lee J, Ahn J.K., Hwang E.H.,
- Kwon, Y.W.**, "Earthquake Monitoring and Alerting in CrowdQuake
using IoT and Deep Learning".
- Dindar, A.A.**, Akbaş B., Toprak S., Sözdinler C.Ö., Kaneda Y. "Development
of Distributed Acoustic Sensing Based Early Warning in
MARTEST Project".
- Merdan Tutar, N.**, Zülfikar C. "Implementation of EEW Algorithms for
High-Speed Railway Lines in Türkiye"

14.45-15.00 **Coffee Break**

15.00-15.30 Prof. Dr. Yih-Min WU *National Taiwan University. (On-line)*
Development of earthquake early warning and shakemaps system using low cost sensors in Taiwan

15.30-16.00 Prof. Dr. Aldo ZOLLO & Dr. Simona COLOMBELLI
University of Naples Federico II.
The first, end-to-end, Earthquake Early Warning system for the high-speed railway in Italy

16.00-17.15 Panel Discussion

Poster Session

Orihuela, B., Dallo, I., Clinton, J., Strauch, W., Protti, M., Yani, R., Marroquín, G., Sanchez, J., Vega, F., Marti, M., Massin, F., Böse, M., Wiemer, S., Earthquake early warning in Central America: The societal perspective

Orihuela, B., Clinton, J., Papadopoulos, A.N., Danciu, L., Böse, M., Massin, F., Strauch, W., Yani, R., Mixco, L., Impact Assessment of EEW systems in Central Ame

Eyidoğan, H., **Başarı, E.**, Predicting Earthquakes Before They Occur Through Artificial Intelligence

Yamanaka, H., Takai, O., Yoshimi, M., Tsuno, S., Özmen, Ö.T., Özel, O., Çaka, D., **Duran, P.**, Askan, A., Miyake, H., Chimoto, K., Ono, T., Arslan, M.S., Albayrak, K., Temporary Strong Ground Motion Observation in Damaged Areas of the 2023 Kahramanmaraş Earthquake

Sadikoğlu, E., Tutar, N.M., Ceylan, İ.A., A tsunami prediction study from earthquake data

**Posters can be visited throughout the day.*

3th Day: October 18th

Cultural Tour Basilica Cistern, Roof of The Grand Bazaar

