

I attended the 27th International Union of Geodesy and Geophysics (IUGG) General Assembly in Montréal, Canada, from July 8th to 16th. This conference is a special opportunity for participants from around the world to come together and share their science and culture. This year, I received the support from the Seismological Society of Japan (SSJ) and attended the conference as a PhD student.

In the conference, I made a poster presentation named '*Far-Field Tsunami Data Assimilation for the 2015 Illapel Earthquake*'. This is my research in the past one year, in collaboration with colleagues from Chile. The 2015 Illapel earthquake (Mw 8.3) occurred off central Chile on September 16th, and generated a tsunami that propagated across the Pacific Ocean. The tsunami was recorded on tide gauges and Deep-ocean Assessment and Reporting of Tsunami (DART) tsunameters in the east Pacific. Near-field and far-field tsunami forecasts were issued based on the estimation of seismic source parameters. In our study, we retroactively evaluate the potentiality of forecasting this tsunami in the far field based solely on tsunami data assimilation from DART tsunameters. The comparison between forecasted and observed tsunami waveforms suggests that our method accurately forecasts the tsunami amplitudes and arrival time in the east Pacific. This approach could be a complementary method of current tsunami warning systems based on seismic observations.

My presentation received attention from many researchers. They gave me comments on this topic and we discussed about the potential application of tsunami data assimilation. Such discussion is very important to help me advance my research in tsunami science. And I also broadened my horizon by listening to other people's oral and poster presentations.

I am very appreciated for the generous support of SSJ, which enabled me to attend this conference this year. I would also like to thank my supervisor, Prof. Kenji Satake, and the staff of SSJ, Okano-san, for their warm help during my application. I expressed my gratitude to SSJ on the top of my IUGG poster. I hope I could make more progress in the area of tsunami science.

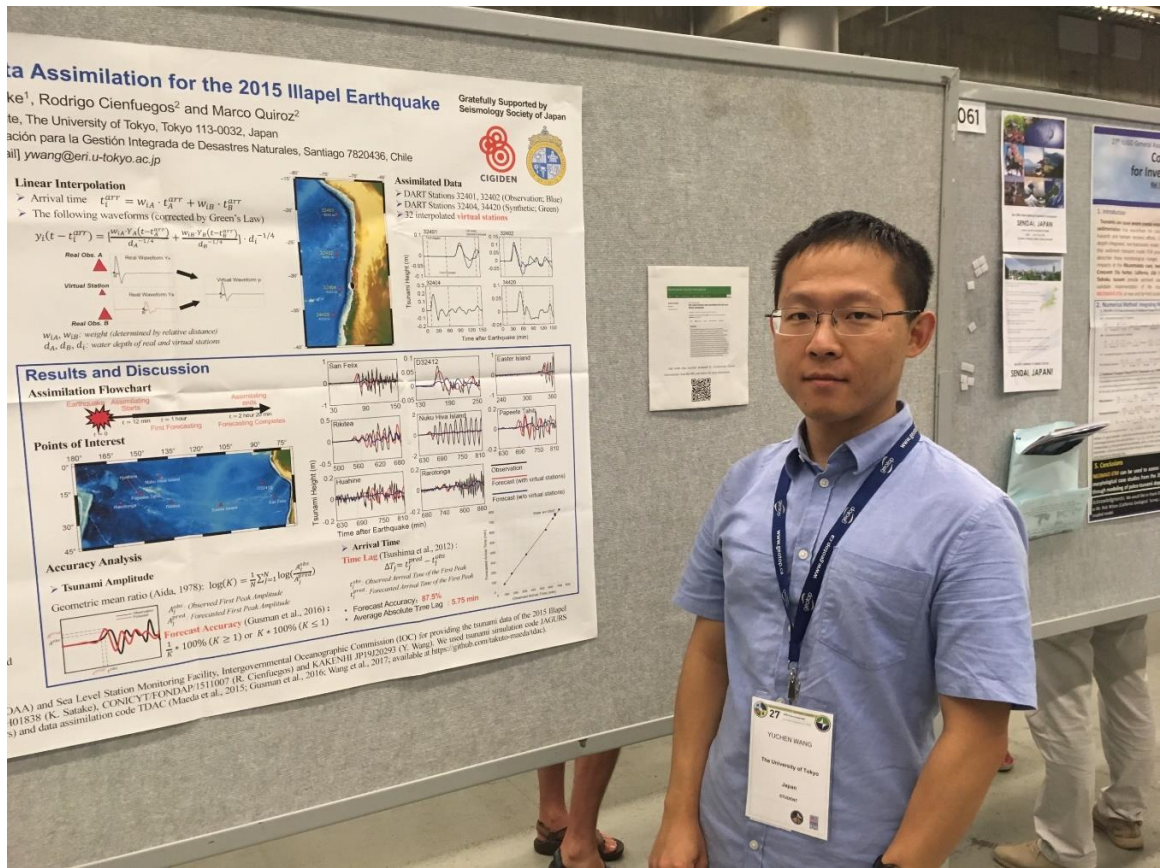


Figure. My poster presentation at the 27th IUGG General Assembly. The presentation belongs to JP05 tsunami session. The acknowledgement of the support from SSJ is written on the top of the poster.