

## Teaching materials for determination of epicenter by using P wave polarity data of small earthquakes recorded in Hida region in Japan before and after 2011 Tohoku earthquake

\*Kenji Kawai<sup>1</sup>, Takahiko Uchide<sup>2</sup>

1. Department of Earth and Planetary Science, School of Science, University of Tokyo, 2. Geological Survey of Japan, AIST

We produced teaching materials for determination of epicenter by using P-wave polarity data for primary and secondary education. They can be used only with popular-priced products such as a ruler and a protractor and do not require any specialized software and device.

They consist of PDF files in which three-component waveform data before and after the P wave arrival for 929 small events recorded at Hi-net stations in Hida region from February 1 to April 30 in 2011 are printed. Since the P-wave polarity analysis with two lateral components provides information on seismicity in Hida region in Japan before and after 2011 Tohoku earthquake, students can discuss the temporal change of the underground stress state. According to the educated level of a student, the time-series waveform data allow students to conduct more geophysical interpretation and further analysis such as error analysis and determination of the epicenter by using P-S differential traveltime.