

## S-netを用いた初動読み取りと震源決定

### Arrival-time and hypocenter determination using S-net

\*岡田 知己<sup>1</sup>、高木 涼太<sup>1</sup>、中山 貴史<sup>1</sup>、鈴木 秀市<sup>1</sup>、東 龍介<sup>1</sup>、豊国 源知<sup>1</sup>、吉田 圭佑<sup>1</sup>、内田 直希<sup>1</sup>、日野 亮太<sup>1</sup>

\*Tomomi Okada<sup>1</sup>, Ryota Takagi<sup>1</sup>, Takashi NAKAYAMA<sup>1</sup>, Syuichi Suzuki<sup>1</sup>, Ryosuke Azuma<sup>1</sup>, Genti Toyokuni<sup>1</sup>, Keisuke Yoshida<sup>1</sup>, Naoki Uchida<sup>1</sup>, Ryota Hino<sup>1</sup>

1. 東北大学大学院理学研究科附属地震・噴火予知研究観測センター

1. Research Center for Prediction of Earthquakes and Volcanic Eruptions, Graduate School of Science, Tohoku University

Hypocenter distribution is basic information for understanding seismogenesis.

For east off Honshu from Hokkaido, Tohoku, Kanto, S-net has been deployed by NIED. S-net is expected to improve accuracy of hypocenter location. In this study, we show a preliminary result of hypocenter determination using S-net and onshore stations.

We used hypomh (Hirata and Matsu'ura (1984)) with seismic velocity structure of Hasegawa et al. (1978). In our case, we used waveform converted to vertical, north-south, east-west components by Takagi et al. (this meeting).

For the earthquake near coast line, we can determine reliable hypocenter location, which is correspond to the location determined by F-net CMT or AQUA catalog. However, large travel time residuals over 3 seconds earlier are estimated for distant stations including the stations east of trench. This would mainly be due to the high velocity Pacific plate (e.g., Toyokuni et al., this meeting). To improve the velocity structure and use station correction are necessary for further study.

Acknowledgements: We used S-net, Hi-net and stations by universities (Hokkaido, Hirosaki, Tokyo and others), Aomori and Tokyo Pref., ADEP (Association for the development of earthquake prediction) and JMA. Profs. Matsuzawa, Zhao, Umino and Hasegawa and Mr. Hirahara give us valuable suggestions.

キーワード : S-net

Keywords: S-net