Contribution ID: **87** Type: **Oral**

Multiple Suppression for 2D Marine Seismic Data Using Surface-related Multiple Elimination and Parabolic Radon Filtering

Marine seismic reflection method is widely used in petroleum industry to map and interpret the potential of petroleum reservoirs. Surface-related multiple reflections are particular problem in marine reflection seismic investigation, as they often obscure reflections from imaging targets. This research demonstrates the effectiveness of the combination of surface-related multiple elimination (SRME) and parabolic Radon filtering. SRME is a model-based and data-driven method which does not need any assumptions about subsurface velocities, positions and reflection coefficient of the reflector causing multiple reflections. Parabolic Radon filtering, a moveout-based method, applied for residual multiple reflections is based on velocity discrimination between primary and multiple reflections, thus velocity model and normal-moveout correction are required for this method. The combination of SRME and parabolic Radon filtering can attenuate almost multiple reflections and provide high-quality seismic image of marine seismic data.

Primary author: Ms SITTIPAN, Pimpawee (Chiang Mai University)

Co-author: Dr WONGPORNCHAI, Pisanu (Chiang Mai University)

Presenter: Ms SITTIPAN, Pimpawee (Chiang Mai University)

Track Classification: Environmental Physics, Atmospheric Physics, Geophysics and Renewable Energy