

## 固体地球科学分野におけるデータ駆動型解析の進展と今後の展望 Progress and future prospects of data-driven analysis in solid-earth science

\*桑谷 立<sup>1,2</sup>、岡本 敦<sup>3</sup>、吉田 健太<sup>1</sup>、中村 謙吾<sup>3</sup>、土屋 範芳<sup>3</sup>、駒井 武<sup>3</sup>

\*Tatsu Kuwatani<sup>1,2</sup>, Atsushi Okamoto<sup>3</sup>, Kenta Yoshida<sup>1</sup>, Kengo Nakamura<sup>3</sup>, Noriyoshi Tsuchiya<sup>3</sup>, Takeshi Komai<sup>3</sup>

1. 国立研究開発法人 海洋研究開発機構、2. 国立研究開発法人 科学技術振興機構、3. 東北大学大学院環境科学研究科

1. Japan Agency for Marine-Earth Science and Technology, 2. Japan Science and Technology Agency, 3. Graduate School of Environmental Studies, Tohoku University, Japan

The high-dimensional and large amounts of data sets in geosciences show very complex behavior and often have large uncertainty. It is important to extract a small number of essential parameters which can explain the phenomenon from high-dimensional data in order to understand the behavior of dynamic solid earth. Under the framework of a big scientific project entitled as “Initiative for high-dimensional data-driven science through deepening sparse modelling” supported by the MEXT in Japan ([http://sparse-modeling.jp/index\\_e.html](http://sparse-modeling.jp/index_e.html)), we try to introduce data-driven approaches into geosciences. In this presentation, we will share some applications in solid-earth science and discuss future prospects.

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