

## Preface

The Geological Survey of Japan (GSJ), AIST has been conducting earthquake-related geological and geophysical surveys and researches mainly in response to the basic policies of the Headquarters for Earthquake Research Promotion of the Japanese government, which was established in 2019. The national policy places particular emphasis on the promotion of social application of research results ever before, and we will intend to enhance the contents of this report series as one of the efforts in this direction.

On January 1, 2024, the M7.6 Noto Hanto Earthquake occurred in the Noto region of Ishikawa Prefecture. In response to the occurrence of coastal earthquakes such as the 2007 Noto Hanto Earthquake (M6.9) and the 2007 Niigataken Chuetsu-oki Earthquake (M6.8), AIST has conducted surveys of “blank areas” from inland to offshore regions, and has been releasing detailed geological information, including active faults, in seven areas up to the present. The first survey was conducted in 2008 in the northern coast of the Noto Peninsula. The active faults associated with the 2024 earthquake was published in a paper in 2010, and has been utilized in setting up fault models necessary for the national tsunami inundation assessment. We believe that once again the importance of geological information based on geological and topographical surveys has been demonstrated.

As part of the “Five-year acceleration measures for disaster prevention, disaster mitigation, and national resilience” (approved by the Cabinet in December 2020), AIST has started a four-year project, “Development of High-Precision Digital Geological Information for Disaster Prevention and Mitigation,” since the last fiscal year. This issue contains a research report conducted as part of the project (Drilling surveys across the estimated fault scarp of Tatsutayama fault passing the Kumamoto Castle Park, Kumamoto Prefecture, southwest Japan).

The reports were peer-reviewed by the editorial board consisting of the deputy directors and group leaders of the IEVG (Research Institute of Earthquake and Volcano Geology), to maintain a certain level of quality. We welcome frank opinions and comments from readers on the contents of this report and the way research results on active faults and earthquakes should be disclosed. At the end of this issue, we would like to express our gratitude to the relevant ministries, local governments, organizations, landowners, and companies for their understanding and cooperation in our research.

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