序　文

岡村行信

2007 年に発生した能登半島地震と中越沖地震によって沿岸域に大きな被害を受けたが，発生前に活断層の存在が認識されておらず，沿岸域の活断層と地質の情報が十分に整備されていないことが浮き彫りになった．沿岸域は人口が集中し，交通網が整備され，産業活動も盛んであるが，地震などの自然災害に対しては脆弱であることから，海陸で空白域のない地質情報を整備し，活断層や地盤の情報を提供することが、防災対策上重要であることが認識されるようになった．そこで産業技術総合研究所では，2008 年度から地質分野全体として取り組む政策課題として「沿岸海域の地質・活断層調査」をスタートさせ、まず能登半島の北岸沿岸域を対象として，浅海域の高分解能音波探査及び堆積物調査，陸域地質図の編集，重力探査などを実施し，それらの調査データに基づいた海陸シームレス地質情報集「能登半島北部沿岸域」を 2009 年度に出版した．その出版によって，従来知られていなかった活断層が能登半島北部沿岸に沿って分布することが明らかになった．

2009 年には新潟の越後平野を中心とする沿岸域で，浅海域の高分解能音波探査，海底ボーリング，海陸連続反射探査を行ったほか，越後平野でのボーリング調査，既存ボーリングの収集，反射探査などを実施した．越後平野は、前年度に調査した能登半島北部沿岸域とは異なり，厚さ 100 m 以上の沖積層が覆われ，その西縁には活断層が発達することから，海陸連続した沖積層の厚さやその形成過程を明らかにすることに重点を置いて調査を実施し、越後平野西縁に発達する弥彦・角田断層の海陸接続及び活動性に関する詳しい情報も得た．

2010～2011 年には博多湾周辺域を調査対象とした。この地域は陸上には警固断層、宇美断層、西山断層などの活断層が発達し、海域では 2005 年福岡県西方沖地震が発生している。一方で、沖積層が薄く、活断層もそれほど活動度が高くないという特徴を持つ。このような地域でのシームレス地質図を作成するために高分解能音波探査，海底堆積物調査，陸域での沖積層及び第四紀層調査，活断層調査，各種物理探査などを実施しするとともに，既存のボーリング情報を収集した．海陸シームレス地質情報集「福岡沿岸域」は，それらの調査・解析結果をまとめたもので，以下のそれぞれ独立したマップと報告書が含まれている．

・readme_j.txtファイル

・index_j.html ファイル

・序文（岡村行信）

・福岡沿岸域 20 万分の１海底地質図及び同説明書（松本　弾）

・福岡沖陸棚域の海底堆積物の層序と年代（西田尚央・池原　研）

・福岡沿岸域 20 万分の１陸域地質図及び同説明書（尾崎正紀・水野清秀・中村洋介）

・福岡沿岸域平野地下の第四紀堆積物の地質構造（松島紘子・水野清秀・石原与四郎・木村克己・康義英・花島裕樹）

・福岡平野の第四系の地下地質構造と警固断層（木村克己・康　義英・花島裕樹）

・福岡県沿岸域における新たな活断層露頭と活断層地形の発見（中村洋介・水野清秀）

・福岡市生の松原での浅部地下構造調査（加野直巳・山口和雄）

・福岡沿岸域における基盤構造と活断層と関係（尾崎正紀）

・福岡沿岸域 20 万分の１重力図（ブーゲー異常）及び同説明書（駒澤正夫・大熊茂雄・上嶋正人）

・福岡沿岸域 20 万分の１空中磁気図（全磁力異常）及び同説明書（大熊茂雄・中塚　正・金谷　弘）

・福岡沿岸域における海陸シームレス第四系基底面標高分布（花島裕樹・松本　弾・康　義英・木村克己・水野清秀・松島紘子）

・福岡沿岸域 20 万分の１シームレス地質図（松本　弾・尾崎正紀・水野清秀・中村洋介・花島裕樹・康　義英・木村克己・松島紘子）

・福岡沿岸域 20 万分の１シームレス地質-重力図（駒澤正夫・大熊茂雄・上嶋正人・松本　弾・尾崎正紀・水野清秀・中村洋介・花島裕樹・康　義英・木村克己・松島紘子）

・福岡沿岸域 20 万分の１陸域地質-重力図（駒澤正夫・大熊茂雄・上嶋正人・尾崎正紀・水野清秀・中村洋介）

・福岡沿岸域 20 万分の１陸域地質-空中磁気図（大熊茂雄・中塚　正・金谷　弘・尾崎正紀・水野清秀・中村洋介）

・福岡沿岸域 20 万分の１活断層図（尾崎正紀・中村洋介・松本　弾・水野清秀）

・福岡沿岸域 20 万分の１活断層-基盤地質図（尾崎正紀・中村洋介・松本　弾・水野清秀）

・福岡沿岸域 20 万分の１活断層-重力図（駒澤正夫・大熊茂雄・上嶋正人・尾崎正紀・中村洋介・松本　弾・水野清秀）

・福岡沿岸域 20 万分の１活断層-空中磁気図（大熊茂雄・中塚　正・金谷　弘・尾崎正紀・中村洋介・

松本　弾・水野清秀）

・福岡沿岸域 20 万分の 1 基盤地質-活断層-重力図（駒澤正夫・大熊茂雄・上嶋正人・尾崎正紀・中村洋介・松本　弾・水野清秀）

・福岡沿岸域 20 万分の 1 基盤地質-活断層-空中磁気図（大熊茂雄・中塚　正・金谷　弘・尾崎正紀・中村洋介・松本　弾・水野清秀）

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Preface

Yukinobu Okamura

The 2007 Noto-Hanto and Chuetsu-oki earthquakes caused sever damages to the coastal area near the source areas. The source faults were not properly evaluated as active faults before the earthquakes, thus the earthquakes revealed that we don't have enough geologic data of the offshore area along the coasts. Because densely populated coastal areas that are the center of transportation and industrial productions are vulnerable to natural disasters like earthquake, it is widely agreed that geologic information of coastal areas is important. Thus, AIST started the multi-disciplinal project of the Geological Survey of Japan "Geology and Active Fault Survey of the Coastal Area". In 2008, the target area was the northern coast of the Noto Hanto, and we conducted high-resolution seismic profiling survey, sediment sampling, compilation of the land geological map, gravity measurement and others. Based on these surveys, we published"Seamless Geoinformation Series of Japanese coastal zones, Northern coastal zone of Noto Peninsula" in FY 2009, which revealed that several discontinuous active faults have developed along the coast in the shallow offshore.

In 2009, we conducted high-resolution seismic profiling survey, drilling, and other geological and geophysical surveys in the offshore and onshore areas around Niigata, and we also collected previous onshore drilling data and other data in the coastal zone of the Echigo Plain, in the Niigata area. Contrast to the coastal zone of the Noto Peninsula surveyed in 2008, a large alluvial plain, the Echigo Plain, has developed in this area, which is underlain by unconsolidated sediments after the last glacial age more than 100 m thick and the western margin of the plain is bounded by the active fault. Therefore, we focused our surveys to clarify the thickness and sedimentary processes of the alluvial plain and its seaward extension. In addition, we obtained data of the location, geometry and activity of the Yahiko–Kakuda active fault bounding the western margin of the plain.

In 2010 to 2011, our target area was the Fukuoka coastal zone. There are three active faults (Kego, Umi and Nishiyama faults) on shore of this area and the 2005 West Off Fukuoka Prefecture Earthquake occurred offshore of the Fukuoka city. Geologically, the activities of these faults are inferred to be low and Quaternary sediments are thin. We conducted high-resolution seismic profiling surveys, sediment coring and boring, compilation of the land geological data, and other geophysical surveys. This DVD "Seamless Geoinformation Series of Japanese coastal zones around Fukuoka" contains reports and maps listed below.

readme_e.txt

index-e.html

Preface by Y. Okamura

Study area map

Matsumoto, D. (2013) 1:200,000 Marine geological map along the coastal zone around Fukuoka with explanatory notes. In Seamless geoinformation of coastal zone, "Coastal zone around Fukuoka", Digital Geological Map S-3, Geological Survey of Japan, AIST.

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Komazawa, M., Okuma, S., Joshima, M., Matsumoto, D., Ozaki, M., Mizuno, K., Nakamura, Y. Hanashima, Y., Kou, Y., Kimura, K., and Matsushima, H. (2013) 1 : 200,000 Seamless geological map with gravity contours of the coastal zone around Fukuoka. In Seamless geoinformation of coastal zone, “Coastal zone around Fukuoka”, Digital Geological Map S-3, Geological Survey of Japan, AIST.

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