付録 2. 現地調査地点・測定点の写真

Site No. 1 (Abuya fishing port)



写真 A1. 石川県の安部屋漁港 (調査地点番号: 1) の測定点及びその周辺の様子. (a)と(b)は、測定点 1 の周辺から南西を向いて見える様子. (a)の写真奥が沖合にあたる. (c) 測定点 1 の北西の岸から南東を向いた様子で、ANNnewsCH (2024)の動画の構図に近い. ANNnewsCH (2024)の動画では、(c)の右側から左側へ津波が伝わる様子が認められた.

Photo A1. Views of Abuya fishing port, Ishikawa Prefecture (site No. 1). (a, b) Views taken from the vicinity of measurement point 1, looking southwest. The offshore area is seen at the far end of photo (a). (c) View taken from the northwest shore of measurement point 1, looking southeast, with an angle of view similar to that of the ANNnewsCH (2024) video. According to ANNnewsCH (2024), the tsunami propagated from right to left in (c).

Site No. 2 (Wajima Port)



写真 A2. 石川県の輪島港 (調査地点番号: 2) の測定点とその周辺の様子. (a) 測定点 2A. 2024 年能登 半島地震に伴う土砂崩れで輪島験潮場は亡失した (国土地理院, 2024b). (b) 測定点 2a. 防波堤の上部 を構成するブロックの高さ (黄色の矢印) を測定した.

Photo A2. Views of Wajima Port, Ishikawa Prefecture (site No. 2). (a) Measurement point 2A. The Wajima tide gauge station was destroyed by a landslide associated with the 2024 Noto earthquake (GSI, 2024b). (b) Measurement point 2a. The height of a block (yellow arrow) making up the top of the coastal levee was measured.

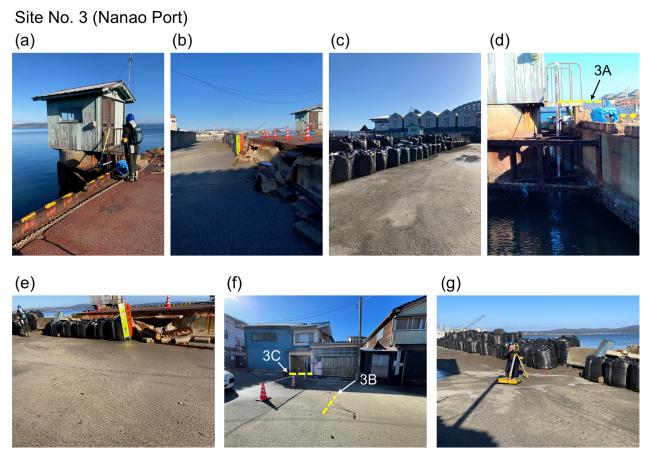


写真 A3. 石川県の七尾港 (調査地点番号: 3) の測定点及びその周辺の様子. (a) 七尾検潮所. (b)と(c) は、検潮所周辺の様子. 護岸が破壊され、黒色の土のうが積まれていた. (d) 測定点 3A. 海面を基準に、検潮所へ向かう橋の歩行面 (黄破線)までの高さを測定した. (e) 検潮所周辺の路面. 水が流れた痕跡が認められた. (f) 測定点 3B 及び 3C. 測定点 3B では、流水の痕跡が途切れた位置 (黄破線)を測量した. 測定点 3C では、周辺の建物の玄関口へ向かう階段の 1 段目の上面 (黄破線)の高さを測量した. (g) 測定点 3B と 3C の測定風景.

Photo A3. Views of Nanao Port, Ishikawa Prefecture (site No. 3). (a) The Nanao Port tide gauge station. (b, c) Views near the station. Seawalls were destroyed, and black sandbags were piled up there. (d) Measurement point 3A. The height from the sea surface to the surface of the bridge crossing to the station (dashed yellow line) was measured. (e) Road surface around the station. Traces of flowing water were seen. (f) Measurement points 3B and 3C. For point 3B, the location where the water traces were no longer visible (dashed yellow line) was measured. For point 3C, the height of the first step of the uphill stair to the building entrance (dashed yellow line) was measured. (g) View of total station measurements being acquired for points 3B and 3C.

Site No. 4 (Domi fishing port)



写真 A4. 石川県の百海漁港 (調査地点番号: 4) の様子. (a),(b),(c)は,漁港からそれぞれ東,北,南を向いて見える様子.

Photo A4. Views of Domi fishing port, Ishikawa Prefecture (site No. 4). (a–c) Views from the port looking (a) east, (b) north, and (c) south.

Site No. 5 (Shimosazanami fishing port)

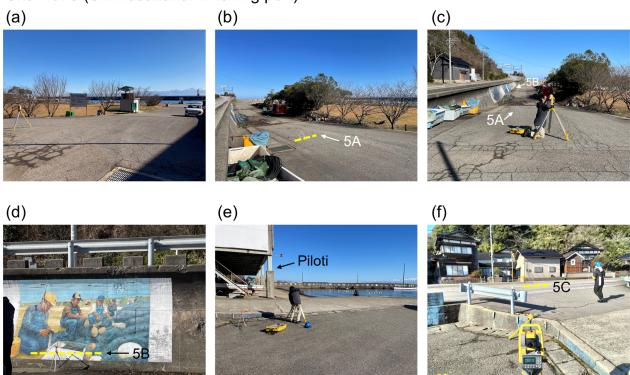


写真 A5. 石川県の下佐々波漁港 (調査地点番号: 5) の測定点及びその周辺の様子. (a) 測定点 5A の南西の位置から南東を向いて見える様子. 測定点 5A 及び 5B は(a)の枠外左側で, (f)の枠外右側にある. (b) 測定点 5A. 坂道途中の枯草の塊の位置(黄破線)を測定した. (c) 測定点 5A (手前)と 5B (奥)の位置関係. (d) 測定点 5B. 目撃者によれば、地震の翌日は壁画に痕跡が確認されたとのこと(黄破線で示した高さ). (e) 測定点 5C の南東の位置から東を向いてみえる様子. 写真左部の建物はピロティ構造. (f) 測定点 5C. 車道のセンターライン (黄破線)の位置を測定した.

Photo A5. Views of Shimosazanami fishing port, Ishikawa Prefecture (site No. 5). (a) View looking southeast from the southwest location of measurement point 5A. Points 5A and 5B are outside the frame on the left side of (a) and the right side of (f). (b) Measurement point 5A. The location where dead grasses were distributed in the middle of the slope (dashed yellow line) was measured. (c) Spatial relationship between points 5A (foreground) and 5B (background). (d) Measurement point 5B. According to an eyewitness, the day after the earthquake, mud on the mural was observed at the height indicated by the dashed yellow line. (e) View looking east from the southeast location of point 5C. The building on the left has a piloti structure. (f) Measurement point 5C. The location of the centerline of the sloped road (dashed yellow line) was measured.

Site No. 101 (Himi fishing port)



写真 A6. 富山県の氷見漁港の南方の砂浜 (調査地点番号: 101) の様子. 写真右側に海, 左側に内陸が広がる. 写真左部の地面に段差があるが, 地元の住民によれば, もともとこうした地形だったとのこと.

Photo A6. View of the sand beach to the south of Himi fishing port, Toyama Prefecture (site No. 101). The right side of the photo is the sea, and the left side is inland. Some steps can be seen on the left side of this photo, but they are unchanged before and after the tsunami according to a local resident.

Site No. 102 (Amaharashi Coast)

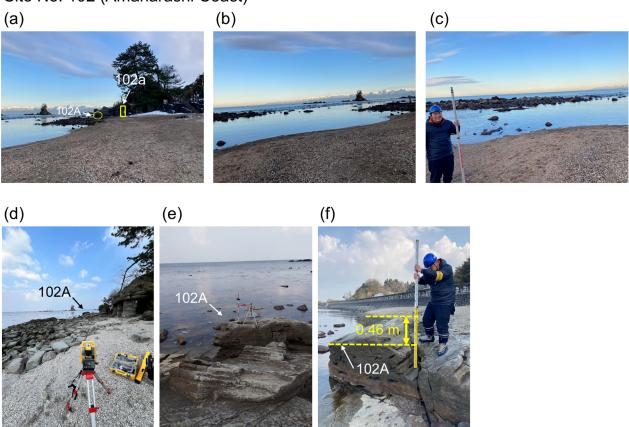


写真 A7. 富山県の雨晴海岸 (調査地点番号: 102) の津波高の測定点及びその周辺の様子. (a), (b), (c)は, 義経岩の西の位置からそれぞれ東, 北東, 北を向いて見える様子. これらの写真は, 地震後比較的早い 2024年1月17日に撮影したものだが, 海岸に津波の痕跡は見当たらなかった. (d-f) 測定点 102A. (d) と(e)は, ライブカメラの被写体の岩の頂部の高さを測定する様子. (f)は, 岩の頂部から, 津波の映像で同定された浸水上限までの高さ (黄破線) を測定する様子.

Photo A7. Views of the Amaharashi Coast, Toyama Prefecture (site No. 102) for measuring the tsunami height. (a–c) Views taken from the west of Yoshitsune rock, looking (a) east, (b) northeast, and (c) north. These photos were taken on 17 January, 2024, relatively soon after the earthquake, but no trace of the tsunami was found on the coast. (d–f) Measurement point 102A. (d, e) Measurement of the height of the top of the rock captured by the live camera. (f) Measurement of the height from the top of the rock to the upper limit of the inundation (dashed yellow lines) as identified from video footage of the tsunami.

Site No. 102 (Amaharashi Coast)

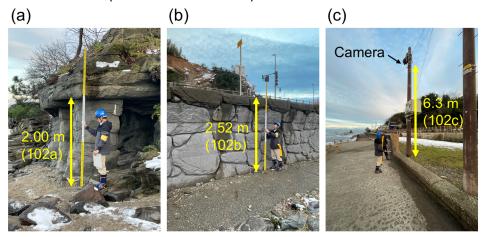


写真 A8. 富山県の雨晴海岸 (調査地点番号: 102) のライブカメラとその被写体の測定点及びその周辺の様子. (a) 測定点 102a. 義経岩を構成する石柱の高さを測定した. (b) 測定点 102b. 遊歩道から護岸の上面までの高さを測定した. (c) 測定点 102c. ライブカメラ直下の地面からカメラまでの高さを測定した.

Photo A8. Views of the Amaharashi Coast, Toyama Prefecture (site No. 102) for measuring the heights of the live camera and the objects captured by it. (a) Measurement point 102a, where we measured the height of a stone pillar comprising Yoshitsune rock. (b) Measurement point 102b, where we measured the height from the promenade to the top of the seawall. (c) Measurement point 102c, where we measured the height from the ground just below the live camera to the camera.

Site No. 103 (Fushiki Port tide gauge station)



写真 A9. 富山県の伏木富山港伏木検潮所 (調査地点番号: 103) 及びその周辺の様子.

Photo A9. View of the Fushiki Port tide gauge station in the Port of Fushiki-Toyama, Toyama Prefecture (site No. 103).

Site No. 104 (Minato Bridge)

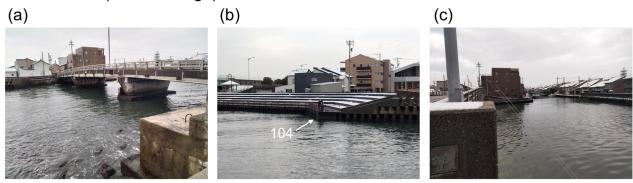


写真 A10. 富山県の湊橋 (調査地点番号: 104) の測定点及びその周辺の様子. (a) 湊橋. (b) 測定点 104. (c) 湊橋の西北西側の袂から南東を向いて見える様子. 内川が南東に向かって広がっている.

Photo A10. Views of the Minato Bridge, Toyama Prefecture (site No. 104). (a) Minato Bridge. (b) Measurement point 104, located on the southwest side of the bridge. (c) View from the west-northeast foot of the Minato Bridge looking southeast. The Uchikawa River extends toward the southeast.

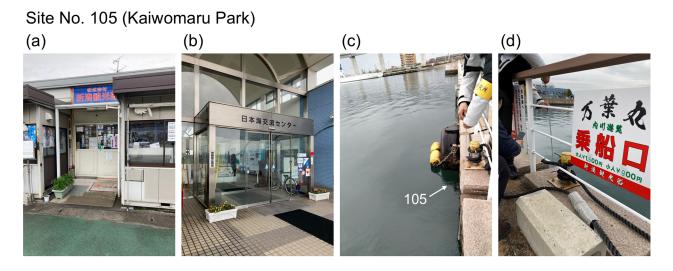


写真 A11. 富山県の海王丸パーク (調査地点番号: 105) の測定点及びその周辺の様子. (a) 観光船のチケット売り場. (b) 日本海交流センター. (c)と(d)は測定点 105. (c) 測定の様子. (d) 測定場所は, 観光船の乗船口.

Photo A11. Views of Kaiwomaru Park, Toyama Prefecture (site No. 105). (a) The ticket office for a pleasure boat cruise. (b) Japan Sea Center. (c) Measurement point 105. (d) The measurement location was at the boarding gate of the boat.

Site No. 106 (Shinminato Port tide gauge station)

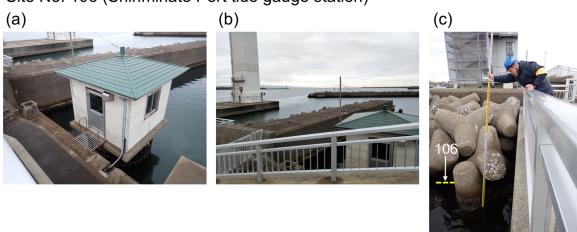


写真 A12. 富山県の伏木富山港新湊検潮所(調査地点番号: 106)の測定点とその周辺の様子. (a) 新湊 検潮所. (b) 検潮所の南の位置から北を向いて見える様子. 測定点 106 は(b)の枠外左側にある. (c) 測定 点 106. 消波ブロックに付着した複数の水痕のうちの最上部のもの(黄破線)の高さを測定した.

Photo A12. Views of the Shinminato Port tide gauge station in the Port of Fushiki-Toyama, Toyama Prefecture (site No. 106). (a) The Shinminato Port tide gauge station. (b) View taken from the south of the station looking north. Measurement point 106 is outside the frame on the left side of this photo. (c) Measurement point 106. The height of the uppermost watermark on the wave-dissipating block (dashed yellow line) was measured.

Site No. 107 (Shinminato Marina)

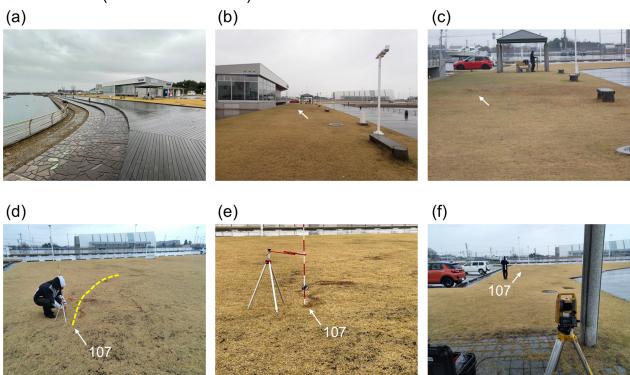


写真 A13. 富山県の新湊マリーナ (調査地点番号: 107) の測定点とその周辺の様子. (a) 測定点 107 周辺の様子. 写真の左から,海,低い堤防,石のタイルが敷かれた 4 段の護岸,ウッドデッキ,芝生. (b) 芝生に点在した枯れ葉の例 (白矢印). 写真左側のレストランの従業員によると,地震の後日に芝生上にごみが散乱しているのを発見し,枯れ葉の塊はその一部とのこと. (c) 枯れ葉 (白矢印) に注目した(b) の拡大図. (d) 測定点 107. 枯れ葉が黄破線に沿って分布している. この場所は,(c)に写った東屋の奥に位置する. (e) 枯れ葉に注目して(d)を拡大した図. (f) 測定点 107 の測定風景.

Photo A13. Views of Shinminato Marina, Toyama Prefecture (site No. 107). (a) View around measurement point 107. From left to right: the sea, a low vertical embankment, a four-tiered seawall with stone tiles, a wooden deck, and a grass area. (b) An example of dead leaves scattered on the grass area (white arrow). According to employees in the restaurant shown on the left side of the photo, days after the earthquake, they found trash, including these leaves, scattered on the grass area. (c) Enlarged view of (b) focusing on the dead leaves (white arrow). (d) Measurement point 107, where dead leaves were distributed along the dashed yellow line. The measurement point was located in the background of the pavilion shown in (c). (e) Enlarged view of (d) focusing on the dead leaves. (f) The measurement for point 107.

Site No. 108 (Hagiura Bridge water-level gauge station)

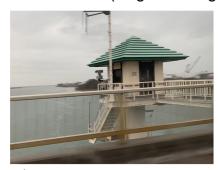


写真 A14. 富山県の萩浦橋水位観測所(調査地点番号: 108)及びその周辺の様子.

Photo A14. View of the Hagiura Bridge water-level gauge station, Toyama Prefecture (site No. 108).

Site No. 109 (Toyama tide gauge station)



写真 A15. 富山県の富山検潮所 (調査地点番号: 109) 及びその周辺の様子.

Photo A15. View of the Toyama tide gauge station, Toyama Prefecture (site No. 109).

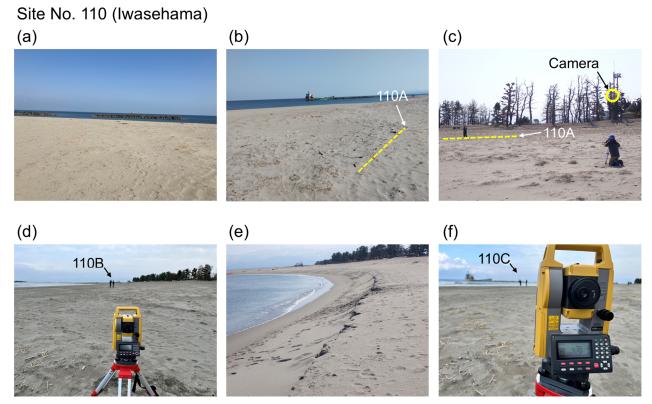


写真 A16. 富山県の岩瀬浜 (調査地点番号: 110) の津波高と地盤高の測定点及びその周辺の様子. (a) 岩瀬浜から北を向いて見える様子. (b) 測定点 110A. 列をなした木片群が観察される. (c) 測定点 110Aの測定風景. 丸で囲まれた位置にライブカメラがある. (d) 測定点 110Bの測定風景. (e) 汀線の様子. 海岸線の手前に段差がある. (f) 測定点 110Cの測定風景. 測定点は(e)の段差の上側である.

Photo A16. Views of the Iwasehama, Toyama Prefecture (site No. 110) for measuring tsunami height and ground height. (a) View of the Iwasehama looking north. (b) Measurement point 110A, where wood chips were aligned (dashed yellow line) at the location reached by the tsunami at the time of maximum runup in the camera footage. (c) View of the measurement for point 110A. The solid yellow circle indicates the location of the live camera that captured the tsunami arriving at the Iwasehama. (d) Measurement point 110B, the middle location between the runup limit (point 110A) and the coastline. (e) View of the coastline. The step was formed in front of the coastline. (f) Measurement point 110C, whose location is the upper side of the step shown in (e).

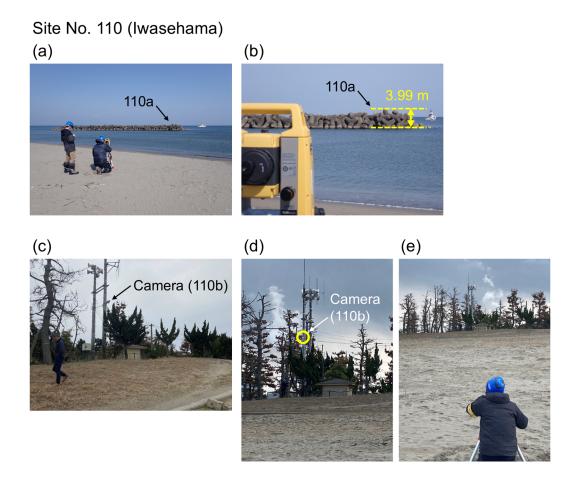


写真 A17. 富山県の岩瀬浜 (調査地点番号: 110) のライブカメラとその被写体の測定点及びその周辺の様子. (a) 測定点 110a の測定風景. 測定対象は海域の消波ブロック群のため, 測定にはトータルステーションを用いた. (b) 測定点 110a. 消波ブロック群の海面付近から頂部までの高さを測定した(黄破線). (c) 測定点 110b. ライブカメラの設置高を測定した. (d)と(e)は, 測定点 110b の測定風景.

Photo A17. Views of the Iwasehama, Toyama Prefecture (site No. 110) for measuring the heights of the live camera and its object. (a) View of the measurement at measurement point 110a. Because the objects at this point were wave-dissipating blocks deployed in the sea area, the measurement was performed using the total station. (b) Measurement point 110a. The height of the wave-dissipating block group was measured from near the sea surface to the top (dashed yellow lines). (c) Measurement point 110b, where the height of the live camera was measured. (d–e) Views of the measurement at point 110b.

Site No. 111 (Ikuji tide gauge station)

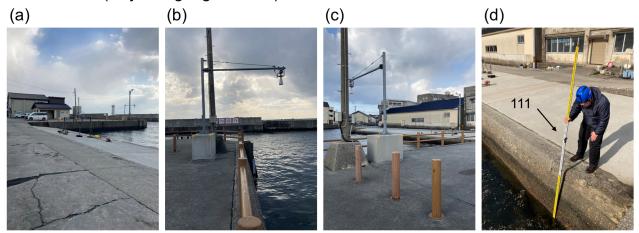


写真 A18. 富山県の生地検潮所(調査地点番号: 111)の測定点及びその周辺の様子. (a) 検潮所周辺の様子. (b)と(c)は潮位計. (d) 測定点 111.

Photo A18. Views of the Ikuji tide gauge station, Toyama Prefecture (site No. 111). (a) View of the tide gauge station. (b, c) Views of tide gauges. (d) Measurement point 111.