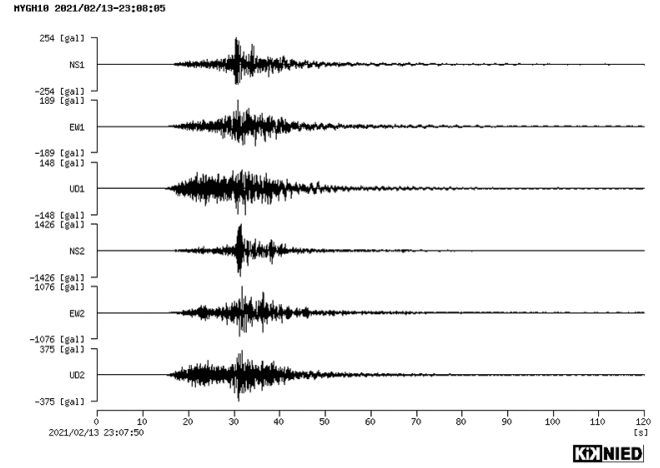


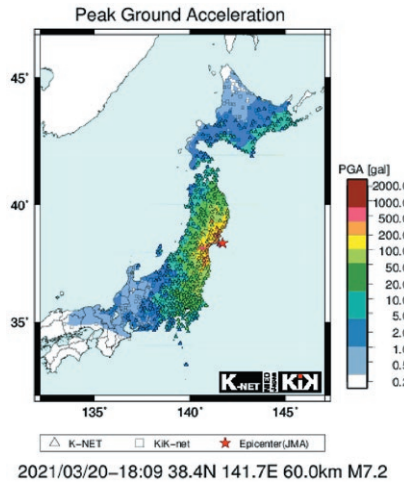
口絵1 強震観測網(△: K-NET, □: KiK-net)により観測された福島県沖の地震の地表における最大加速度の分布

Fig. 1 Peak ground acceleration map derived from strong-motion records of K-NET and KiK-net in the Fukushima Offshore Earthquake.



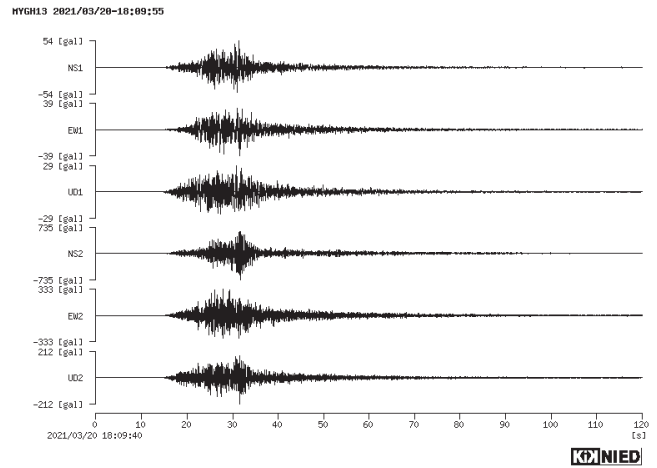
口絵2 KiK-net 山元(MYGH10)の福島県沖の地震の加速度波形

Fig. 2 Strong-motion accelerograms recorded at KiK-net Yamamoto (MTGH10) in the Fukushima Offshore Earthquake.



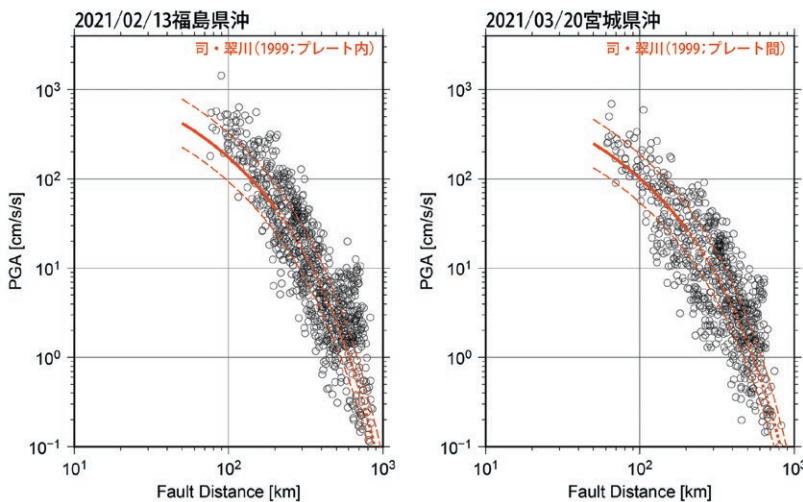
口絵3 強震観測網(△: K-NET, □: KiK-net)により観測された宮城県沖の地震の地表における最大加速度の分布

Fig. 3 Peak ground acceleration map derived from strong-motion records of K-NET and KiK-net in the Miyagi Offshore Earthquake.



口絵4 KiK-net 南三陸(MYGH10)の宮城県沖の地震の加速度波形

Fig. 4 Strong-motion accelerograms recorded at KiK-net Minami-sanriku (MTGH13) in the Miyagi Offshore Earthquake.



口絵5 2021年福島県沖および宮城県沖の地震の加速度最大振幅の距離減衰特性

実線は司・翠川(1999)の経験式による予測値を, 点線はその誤差範囲(±σ)を表す。

Fig. 5 Attenuation relationship relations of Ground surface accelerograms in the 2021 Fukushima Offshore Earthquake and in the 2021 Miyagi Offshore Earthquake. The solid line represents the predicted value based on the empirical formula of Shi and Midorikawa (1999), and the dotted line represents the error range (±σ).



口絵 6 山元町 JR 常磐線坂元駅西側地区の建物被害 (2021.2.17 撮影)

Fig. 6 Damage of houses in the western area of Sakamoto Station on the Yamamoto-cho JR Joban Line (Taken on February 17, 2021).



口絵 7 山元町 JR 常磐線坂元駅西側周辺の墓石の倒壊 (被害大) (2021.2.17 撮影)

Fig. 7 Collapse of tombstones around the west side of Sakamoto Station on the Yamamoto-cho JR Joban Line (large damage) (Taken on February 17, 2021).



口絵 8 福島県相馬市市街地近辺における墓石の回転 (2021.2.16 撮影)

Fig. 8 Rotation of tombstones near the city center of Soma City, Fukushima Prefecture (Taken on February 16, 2021).



口絵 9 スポーツアリーナそま(第二体育館)の避難所内全景(2Fより) (2021.2.16 撮影)

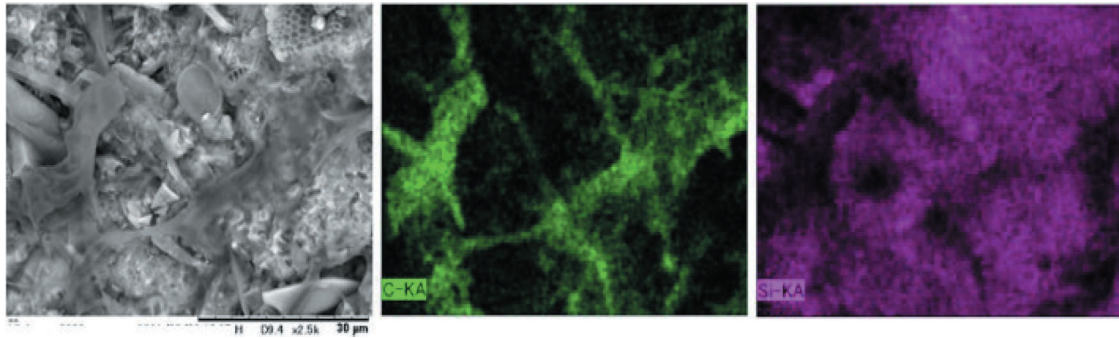
Fig. 9 Panoramic view of the evacuation center of Sports Arena Soma Second Gymnasium (from the 2nd floor) (Taken on February 16, 2021)



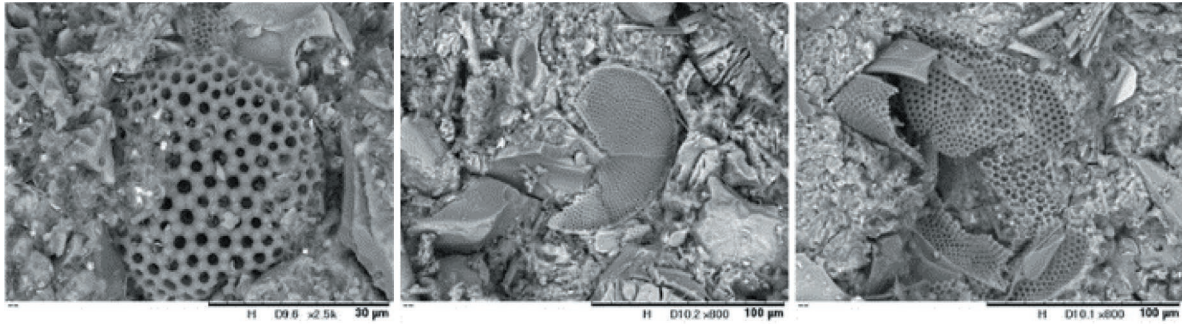
口絵 10 松川浦大橋東側全景(福島県沖の地震で崩壊地点)
Fig. 10 Site ①: Full view of East side at the Matsukawaura-Ohhashi point.



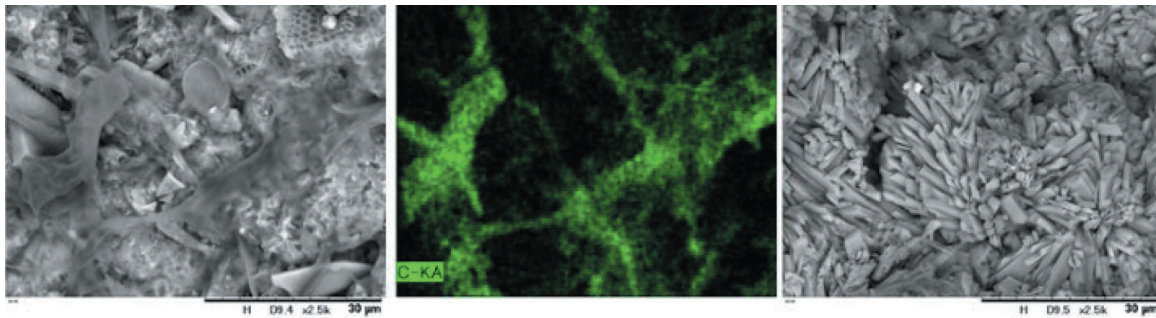
口絵 11 松川浦大橋東側(クローズアップ)
Fig. 11 Close up of Fig. 10.



口絵 12 EDX 解析結果の比較(褐色部分)
Fig. 12 Comparison of EDX analytical results (Brown parts).



口絵 13 SEM 画像解析
Fig. 13 SEM image analysis.



口絵 14 EDX 解析結果
Fig. 14 EDX analytical results.

被害が軽微な地域
Minor damage areas.



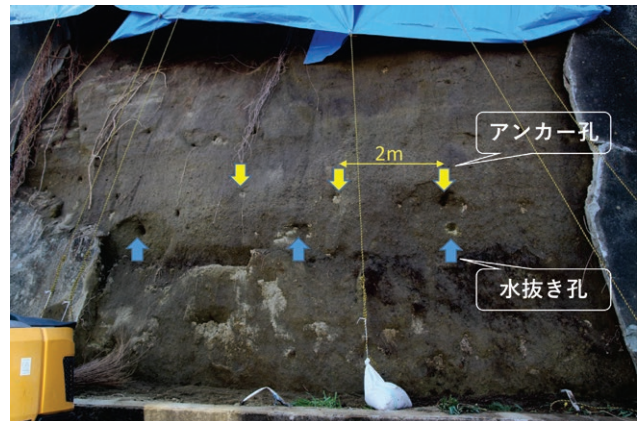
家屋の棟部分が損傷している地域
Damaged area of the house ridges.

口絵 15 福島県相馬郡新地町：道路を挟んで損傷が軽微な地域(左)と住宅損傷が多数発生した地域(右)
Fig. 15 Shinchi Town, Souma-gun, Fukushima Pref.; Minor damage areas (left) and Damaged areas of the house ridges (right) across the road.

2021 年宮城県沖の地震 The 2021 Miyagi Offshore Earthquake



口絵 16 崩壊状況 3月20日 18:21 近隣住民が撮影
Fig. 16 Collapsed point (photo. taken at 18:21, March 20, Courtesy by resident).



口絵 17 アンカー孔痕と水抜き孔痕
Fig. 17 Anchor hole marks and drain hole marks.



口絵 18 左・右側モルタル切断面と背後地盤との間の状況
Fig. 18 Both sides close up of the mortar sections and rear soils.



口絵 19 法面上部：コンクリートでの補強あり
Fig. 19 Upper slope: There is concrete reinforcement.