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Characteristics of the recent onshore tsunami deposits in coastal lowland, Wakabayashi-ku, Sendai plain, eastern Japan

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Sedimentary characteristics of the tsunami deposits caused by the 2011 off the Pacific coast of Tohoku Earthquake in coastal lowland of Wakabayashi-ku in Sendai plain were summarized as follows;

1) The area of coastal dune and beach were widely eroded by tsunami waves.
2) The sediments derived from coastal dune and beach area were distributed in inside area of coastal dunes.
3) The tsunami deposits show a fining- and thinning-landward trend.
4) Internal structures of tsunami sediments were mainly parallel lamina or massive structure. Cross-lamination structures were sometimes shown in uppermost part.
5) The tsunami deposits shown in seaward area include mud clast in the basal part, which interpreted as these formed by intensive tsunami current
6) Mud-drape layer is commonly observed in these deposits and indicates a calm period during tsunami currents and/or after tsunami.
7) The deposits from return flows of tsunami were rare in this survey.

Keywords: tsunami deposits, Sendai, The 2011 off the Pacific coast of Tohoku Earthquake