The 2011 Tohoku tsunami attacked the sawtooth coastline of Sanriku and invaded along the steep coastal valleys. We tried to understand onshore tsunami behavior on such typical valley of this area based on investigation of geological features left by the tsunami. For some sites, the tsunami heights were more than 30 m above the sea level and the inundation distances were more than 1km from the beach. Inundation boundaries on the valley walls were clearly traces by continuous debris composed by broken branches, woods, and fallen leaves covering the surface at the time of the tsunami inundated. On some steep slopes, the surface vegetation and soil were significantly eroded away. Some freshly formed gullies are evident on the surface of the slope. Bent plants also helped our interpretation of the onshore tsunami behavior. On gentle topography, the tsunami left continuous sand deposits on the surface. The thicknesses of the deposits are less than 20 cm and it thicker where there exists large dune or sandy beach at the valley mouth. For most of the cases, the deposit thickness tends to decrease with distance from the sea. Near to the inundation boundary, the tsunami deposit distribution become patchy or only sand particles are scattered on land.