Tectonic landforms around northern part of the active faults zone of eastern boundary of the Shonai plain

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The active fault system located eastern part of the Shonai plain and western part than the Sakata thrust zone is classified three part(area A,B,C).The faults of area A are small and discontinuity faults that may relate to volcano. Most master faults of this area locate western hillside and fault surface is supposed to dip to east. And there are back thrusts at eastern hillside(conjugate faults).Most master faults of area B locate eastern hillside to develop from the east-dipping fault that may migrate to plain side from Sakata thrusts,and fault surface is supposed to dip to west (wedge thrust).At the area C there are blind faults that migrate from Sakata thrust under the alluvial plane surface(Tohgou,2007).

The depth of slip plane is 1.2˜1.5km at area B and is 2.0˜3.5km at area C (after Sato and Hirata 2000,Ikebe at al 2002).

It is shown that there are some landforms that may reflect crustal movement at alluvial plain and coastal sand dune area,northwest part of Shonai plain.But it is unknown that the relationship this crustal movement and faulting at the eastern boundary of the plane.