

Records of mega-earthquake's faults of an ancient accretionary prism; in case of OSTs of the Shimanto Belt

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Paleothermal structures of the Shimanto Belt are clearly overprinted on primary geological units and show sharp discontinuities across the Cretaceous belt into two tectonic units. Paleothermal pattern occur throughout the belt indicate the discontinuities are due to mega-scale out-of-sequence thrusts. The geometry and displacement of each OST was calculated. I assumed that the paleothermal unit (PTU) is a thrustsheet and a geometrical model was adopted. Parameters of each PTU show similar value. This suggests that the growth of prisms until a fixed scale might have caused the development of mega-scale OSTs. I also suggest that the earthquake-related megathrust in the active recent Nankai accretionary prism off SW Japan can be compare to OSTs of the Shimanto Belt.