

Planning for ocean-bottom crustal-deformation observation

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Monitoring crustal deformation beneath the sea is one of the most challenging tasks for the studies of active tectonic movements. The strain accumulation beneath the sea can be observed in the array of seafloor references. There are several techniques for the ocean-bottom measurements: The technique 3) is appropriate to monitor regional crustal deformation beneath the sea. This system consists of two main components, (1) surface positioning by differential GPS and (2) precise acoustic ranging between the surface and seafloor references. A geodetic network for precise positioning of seafloor references using this system combined with other techniques is basic to the future plan for geodetic survey beneath the sea.