Estimation of stress field in the crust and slabs under central Honshu

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We estimated the stress field of the crust and the subducting slabs under Central Japan using a stress tensor inversion technique. We obtained the following results. (1) As a whole, the stress field of the crust is characterized by compressional axis oriented in the NW-SE direction. (2) The crustal stress field in southern Central Japan is influenced by the subduction of the Philippine Sea plate. (3) The tensional axis in the Philippine Sea slab is consistent with the dipping direction of the slab. (4) The compressional axis in the Pacific slab is consistent with the dip direction of the slab. (5) We also obtained determined the stress field that reflects the deformation of the Philippine Sea and Pacific slabs.