

Influence of magnetic disturbance observed by Ishii-type strainmeters of three components and its correction

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Strain changes due to magnetic disturbance were observed by Ishii-type strainmeters installed last year at Kakegawa and Haruno by JMA and Shizuoka prefecture, respectively. Changes of strain are linearly related to changes of magnetic field and the proportional coefficients enter in the range $0.9\text{--}1.2\text{E-}8/100\text{nT}$ depending on the station and components. By using the relation it is possible to correct the influence of magnetic disturbance to the strain change below the order of 10^{-9} . While the influence is a noise to the observation of crustal deformation, it is expected that we may get information about the groundwater and/or stress state near the sites by investigating the response of strainmeters to the magnetic disturbance minutely.