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**Seismo-Electromagnetic Signatures Prior to and During the
June 4, 2000's Earthquake (Mw 7.9) in Bengkulu, Indonesia**

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Significant geoelectric potential changes have been observed prior and during the Mw 7.9 of June 4, 2000 earthquake in southern Sumatran plate boundary, Indonesia. The mainshock occurred in the intra-oceanic slab and triggered the aftershocks that mainly occurred in the subduction interface of Sumatra island at a distant of more than 150 km from our five monitoring sites. We obtain a valuable set of electric and magnetic data for a couple of hours before, during and after the mainshock. In particular, changes of electric and magnetic field of about 5 to 10 mV/100 m were observed about 90 minutes before the mainshock at all monitoring sites. A monitoring instrument located at the so-called sensitive site record a remarkable change of geoelectric potential of up to 140 mV/100 m in less than 60 sec after the mainshock. We interpret these signal changes in terms of the electroseismic effect. Our data indicate that the onset time of the arrived signals is only a few second during 60 sec after the origin time of mainshock. Smaller electric field changes were also observed after large aftershocks. These provide evidence that supports the existence of electroseismic effect resulting from electric current, generated by the liquid motion in seismic field.

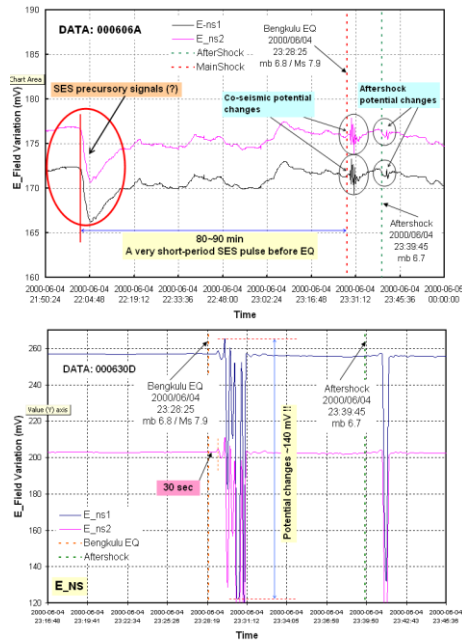


Figure 1. Examples of geoelectric potential changes of about 80-90 min prior (Site A) and 30 to 60 sec just after (Site D) the arrival time of mainshock.