First results from the broadband seismological network at Wayang Windu geothermal area, West Java, Indonesia

Philippe Jousset[1], Andri Hendriyana[1], Makky Jaya[1], Wahyuddin Diningrat[2], Rachmat M. Sule[3], Devy Syahbana[4], Benjamin Braeuer[1], Christopher Otto[1], Michaela Merz[1], Muksin Umar[1], Yosep Kusnadi[2], Yudi Indrianto[2], Kemal Erbas[1]

[1]Helmholtz Centre Potsdam GFZ, Germany, [2]Star Energy, Geothermal (Wayang Windu) Limited, Indonesia, [3]Institut Teknologi Bandung, Indonesia, [4]Royal Observatory Belgium, Belgium

E-mail: pjousset@gfz-potsdam.de

The understanding of structure and dynamics of geothermal reservoirs for geothermal exploration and a sustainable use of the resource requires assessment using multidisciplinary approach. We deployed a temporary network of 30 broadband and 4 short-period seismic stations with Güralp and Trillium sensors (0.008 - 100 Hz) since October 2012 which is still recording in West Java, Indonesia. The two phase liquid/vapor geothermal field is situated inside the volcanic zone in the center of West Java. The presence of a complex tectonic setting may explain the co-existence of a large variety of intense surface manifestations like geysers, hot-steaming grounds, hot water pools, and active volcanoes (including Papandayan volcano). These co-existent features around the two phase geothermal field suggest an intimate coupling between volcanic, tectonic and hydrothermal processes in this area. We describe the set-up of the broadband network and discuss first observations and results.

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