

ABSTRAK

Gunung Gede-Pangrango terletak diantara Kabupaten Bogor, Kabupaten Sukabumi dan Kabupaten Cianjur dengan ketinggian 2958-3019 meter diatas permukaan laut. Penelitian ini bertujuan untuk mengidentifikasi keberadaan kaldera dan sesar, selain itu mengetahui kemunculan air terjun panas yang berkorelasi. Pada geologi daerah penelitian terlihat adanya kaldera dan air terjun panas yang akan diteliti menggunakan analisis *gradient* dan *euler deconvolution*. Data satelit yang digunakan penelitian yaitu GGMPlus dan ERTM 2160 dengan jumlah data 3480 titik. Interpretasi sesar menggunakan metode *first horizontal gradient* (FHG) terdapat di Utara Gunung Pangrango berarah Barat Laut - Tenggara dan mengelilingi Gunung Gede yang membuka ke Barat Laut. Interpretasi sesar menggunakan metode *second vertical gradient* (SVG) terdapat di Barat Gunung Pangrango berarah Barat Laut - Timur dan di Selatan Gunung Pangrango berarah Barat Daya-Timur Laut. Metode *euler deconvolution* terlihat sesar berada dikedalaman 250 meter hingga 750 meter. Serta terlihat korelasi antara letak kemunculan air terjun panas dengan sesar interpretasi SVG yang berupa beda kontak litologi antara formasi batuan aliran lava Pangrango (Paal) dan aliran lava Cibodas dari Kawah Ratu (Cbal).

Kata Kunci : *Gunung Gede-Pangrango, Metode gaya berat, GGMPlus, Analisis Gradient, Euler Deconvolution*

ABSTRACT

Mount Gede-Pangrango is located between Bogor Regency, Sukabumi Regency and Cianjur Regency with an altitude of 2958-3019 meters above sea level. This study aims to identify the existence of calderas and faults, in addition to knowing the appearance of correlated hot waterfalls. In the geology of the research area, it can be seen that there are calderas and hot waterfalls that will be studied using gradient analysis and euler deconvolution. The satellite data used in the study was GGMPlus and ERTM 2160 with a total of 3480 points. Fault interpretation using the first horizontal gradient (FHG) method is located in the North of Mount Pangrango in the Northwest-Southeast direction and surrounds Mount Gede which opens to the Northwest. Fault interpretation using the second vertical gradient (SVG) method is found in the West of Mount Pangrango in the Northwest-East direction and in the South of Mount Pangrango in the Southwest-Northeast direction. Metode euler deconvolution terlihat sesar berada dikedalaman 250 meter hingga 750 meter. The euler deconvolution method shows that the fault is at a depth of 250 meters to 750 meters. And a correlation can be seen between the location of the appearance of the hot waterfall and the SVG interpretation fault in the form of different lithological contacts between the rock formations of the Pangrango (Paal) lava flow and the Cibodas lava flow from the Ratu Crater (Cbal).

Keywords : *Mount Gede-Pangrango, gravity method, GGMPlus, Gradient Analysis, Euler Deconvolution.*