

INTISARI

PENCITRAAN RESISTIVITAS UNTUK IDENTIFIKASI BENDA-BENDA MEGALITIK DALAM TANAH DAERAH SITUS POKEKEKA, POSO, SULAWESI TENGAH

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Penelitian pencitraan resistivitas untuk identifikasi benda-benda megalitik dalam tanah daerah situs pokekeka, poso, sulawesi tengah telah dilakukan. Pada penelitian ini dilakukan pengukuran geolistrik resistivitas dengan Konfigurasi *Wenner*, panjang bentangan 55 meter dan jarak spasi elektroda 1 meter. Pengukuran dilakukan di sekitar benda-benda megalitik yang terletak di atas permukaan. Dari hasil pengukuran diperoleh data nilai resistivitas semu. Penampang citra dua dimensi (*2D*) diperoleh dari pengolahan data menggunakan *Software Res2Dinv* sedangkan analisis pencitraan *2D* dengan menggunakan *Software ImageJ*. Analisis citra meliputi pengukuran koordinat-koordinat citra *2D* yang memberi gambaran mengenai sebaran dan posisi keberadaan benda-benda megalitik yang terdapat di bawah permukaan tanah.

Hasil yang diperoleh menunjukkan bahwa metode ini mampu mengidentifikasi keberadaan benda-benda megalitik yang terdapat di bawah permukaan tanah. Berdasarkan analisis citra dua dimensi menggunakan *Res2Dinv* dan *ImageJ* dari hasil pengukuran untuk keempat lintasan dalam spasi 1 meter menunjukkan adanya benda-benda peninggalan megalitik yang terpendam di bawah permukaan tanah. Secara fisis berdasarkan analisis citra resistivitas ditandai dengan adanya variasi nilai resistivitas batuan yang cukup tinggi dibanding dengan nilai resistivitas batuan lainnya yaitu berkisar antara 1000-3500 Ω m. Pada analisis profil garis keberadaan benda-benda megalitik ditunjukkan dengan grafik hubungan jarak (meter) dengan derajat keabuan (*gray level*) diperoleh perbedaan *gray level* yang sangat jelas antara daerah gelap dan daerah terang. Dari keempat bentangan menunjukkan adanya kesamaan nilai derajat keabuan terendah (minimum) yang diartikan di area tersebut terdapat anomaly, yaitu keberadaan benda megalitik.

Kata Kunci : *pencitraan, megalitik, geolistrik, resistivitas, distribusi.*

ABSTRACT

RESISTIVITY IMAGING FOR IDENTIFICATION OF MEGALITHIC OBJECTS IN THE GROUND REGIONAL SITE POKEKEA, POSO, CENTRAL SULAWESI

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Research on resistivity imaging for identification of megalithic objects in the ground regional site pokekea, Poso, central Sulawesi has been conducted. In this research, the geoelectric resistivity was measured based on Wenner configuration, with stretch length of 55 meters and electrode spacing of 1 meter. Measurements were taken around megalithic objects that was located on the surface. From the measurement data, apparent resistivity values was obtained. Two dimension cross-sectional images were obtained from the processing data using RES2DINV software, whereas 2D imaging analysis was used ImageJ software. Image analysis measurements included measuring 2D image coordinates which gave an overview of distribution and position of the presence that contained megalithic objects in subsurface.

The results showed that this method was able to identification the presence of megalithic objects contained in subsurface. Based on a two-dimensional image analysis using RES2DINV and ImageJ from measurement results of the four track in spaced 1 meter, there were megalithic relics buried beneath the soil surface. Physically, based on resistivity image analysis, the variation of rock resistivity values that was characterized were quite high compared to the other rocks that has constituent resistivity values ranged between 1000-3500 Ωm . In line profile analysis of megalithic objects presence, that were indicated by the correlation of the graph distance (meters) with a gray degree (gray level) obtained gray level differences were very clear between the dark and light areas. From the four stretch measurement it showed that the lowest degree (minimum) of gray had similarity value each other, which was defined that in those area there were anomalies representing the existence of megalithic objects.

Keywords: *imaging, megalithic, geoelectric, resistivity, distribution.*