GAJAH MUNGKUR COMPLEX AS A GEOTOURISM SITE BASED ON THE CHARACTERISTICS OF VOLCANIC PETROLOGY SYSTEM

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PERTEMUAN ILMIAH TAHUNAN
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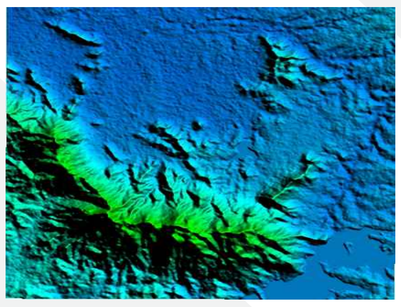
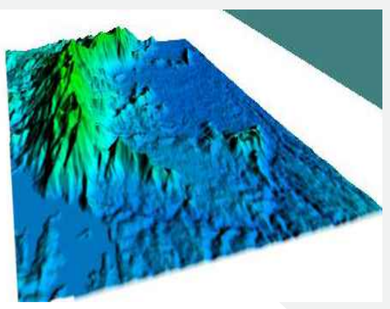
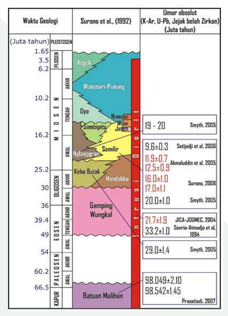
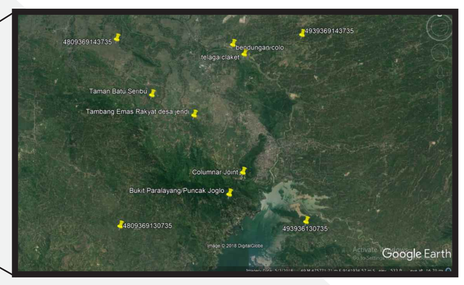
Introduction

The Gajah Mungkur complex is located in Selogiri & Bulu district, Sukoharjo & Wonogiri Regency. It is classified into Tertiary ancient volcanic order. As for the research on the surface research area where the research is conducted based on surface geology mapping. In terms of petrology and geomorphology, these locations are included in various facies zoning from the central facies to the medial facies.Gajah Mungkur paleovolcano was a Tertiary ancient volcano that located in Wonogiri and Sukoharjo Regency, Central Java. This ancient volcano was such a symbol in Wonogiri regency and its name also used as a name for a dam in Wonogiri, Gajah Mungkur Dam or Waduk Gajah Mungkur. Based on geology map on Surakarta-Giritontro sheet (Surono et al., 1992), this ancient volcano included in Mandalika and Semilir Formation.The aim of this research was to delineate the geo-tourism and geo-education prospect of Gajah Mungkur ancient volcano complex based on geology mapping and plotting of geosite. With this research, the researchers hope that the society can know and learned about geology in the research area.









Method

PRE MAPPING (STUDY LITERATURE, SCIENCE JOURNAL) → MAPPING/FIELDCHECK → GEOSITE DESCRIPTION & PLOTTING

Result

Claket Lake

Claket Lake was located at Sendang Ijo village, Selogiri district, Wonogiri regency, Central Java. The lithology around Claket Lake was volcanic breccia and andesite lava. Claket Lake can be proposed as geo-tourism. At the edge of lake, people can take a photo with background of volcanic breccia lithology from Gajah Mungkur ancient volcano complex.The place was beautiful, but the access to reach this site was needed to repaired. Cullinary resort also can build near the lake to attract people to visit this site.

Tenong & Tumbu Hill

The Selogiri region belongs to the Eastern Southern Mountains Zone which regionally has a wavy morphology with an altitude range of 150-220 m. Identification of the sequence of layers of pyroclastic and lava rock showed that the Selogiri morphology is thought to be part of a composite volcanic landscape formed by explosive eruptions. The Randukuning prospect includes Jendi Village, part of Kepatihan and Keloran Villages, Selogiri District, Wonogiri Regency .The existence of gold mining by the community which is carried out by following the shallow vein grooves indicates the presence of epithermal sedimentary systems which are formed in the porphyry deposition environment.

Randubang Collumnar Joint

Randubang Collumnar Joint geosite located in the village of Randubang, Pare Village, Selogiri District, Wonogiri Regency, Central Java Province. This site can be used as geotourism and geo-education for the society. Collumnar joints are one of the morphological formations that are closely related to volcanic activity and intrusion. Columnar joints are parallel shaped, prismatic columns, on lava flows or sometimes on other rocks, which are formed due to the results of cooling (Bates & Jackson, 1987).

Taman Batu Seribu

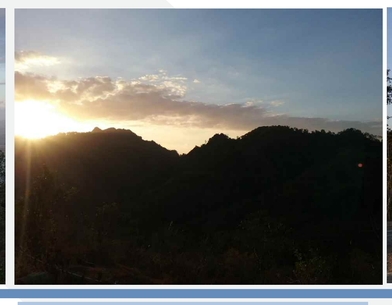
Taman Batu Seribu located in Bulu District, Sukoharjo Regency, Central Java. The people named it "Batu Seribu" or a thousand of rocks because the location is full of rock from Gajah Mungkur ancient volcano. The lithology are composed by volcanic breccia and andesite lava. Based on volcanic facies setting by Bogie and Mackenzie (1998), it was included in proximal facies.

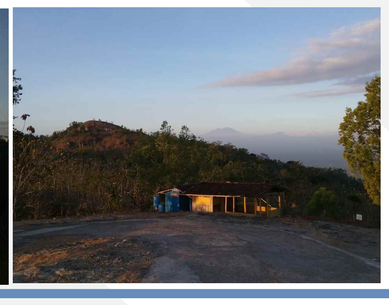
Colo Dam

One of the dams that dam up the Bengawan Solo river upstream where the constituent rocks are volcanic rocks which are included in the proximal and distal facies in the form of laharic breccias and volcanic sandstones, another uniqueness that can be enjoyed is a very beautiful view that can be enjoyed in the afternoon or in the morning, and this dam is also used as a hydropower where the electricity produced can be used by local residents and the water can irrigate the rice fields around this Colo Dam.

Joglo Paralayang Hill

Joglo Paralayang Hill was located at Sendang Village, Wonogiri Regency. It was a hill that include in Gajah Mungkur ancient volcano complex. The lithology contains of andesite volcanic breccia, tuff, and agglomerate. Based on lithology, Joglo Paralayang hill was include in proximal facies of Gajah Mungkur ancientvolcano.This hill was also used for paragliding activities. The paragliding athlete plunged from this hill using a parachute and landed on the edge of the Gajah Mungkur Dam.





Conclusion

From the results of observations and research in Gajahmungkur, it can be concluded that Gajahmungkur ancient volcano has many geotourism potentials that are rarely exposed by the people in wonogiri and surrounding areas. the constituent is adjusted to the concept of an ancient volcano where it is adapted to the pattern of the fire mountain facies, But there are still some places / objects of Geotourism that are not maintained, therefore there needs to be support from the government to manage the area to become a great geotourism objects for visited.

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