

Geochemistry Identification of Volcanic Rocks Product of Krakatau Volcano Eruption for Katastropis Mitigation Planning

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Abstract : Since 1929, the first appearance in sea level, Anak Krakatau volcano growth relatively quickly. During the 80 years up to 2010 has reached the height of 320 meter above sea level. The possibility of catastrophic explosive eruption could happen again if the chemical composition of rocks from the eruption changed from alkaline magma into acid magma. Until now Anak Krakatau volcanic activity is still quite active as evidenced by the frequency of eruptions that produced ash sized pyroclastic deposits - bomb. Purpose of this study was to identify changes in the percentage of rock geochemistry any results eruption of Anak Krakatau volcano to see consistency change the percentage content of silica in the magma that affect the type of volcanic eruptions. Results from this study will be produced in the form of a diagram the data changes the chemical composition of rocks of Anak Krakatau volcano. Changes in the composition of any silica eruption are illustrated in a graph. If the increase in the percentage of silica is happening consistently and it is assumed to increase in the time scale of a few percent, then to achieve silica content of 68 % (acid composition) that will produce an explosive eruption will know the approximate time. All aspects of the factors driving the increased threat of danger to the public should be taken into account. Catastrophic eruption katatropis mitigation can be planned early so that when these disasters happen later, casualties can be minimized.

Keywords : Krakatau volcano, rock geochemistry, catastrophic eruption, mitigation

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