Monitoring Volcanoes Unit 2: Monitoring Kilauea Monday Morning Meeting – Seismic Expert Group Exercise

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*Based on the reading provided, answer the following as you work with your group of fellow topic experts:*

# Monitoring Volcanoes with Seismicity

1. How does a seismometer work?
2. How is magma movement inside a volcano detected by a seismometer?
3. What does RSAM stand for and what do changes in RSAM mean?
4. Predict what an increase in RSAM activity indicates about magma inside the volcano?
5. What are sources of non-volcanic movement that RSAM might detect in addition to volcanic processes?
6. Use Figure 5 to describe how the seismicity changes over time, and where you might expect an eruption would have occurred. Explain your reasoning.
7. Briefly describe the advantages and disadvantages of using Seismicity (RSAM) to monitor volcanoes.
8. In the space below, describe any questions that came up in your group discussion and the answers that your group determined based on those questions (or if you were unable to answer them).

# Examine the Seismic (RSAM) data from Kilauea, and address the following:

1. Are there any changes in RSAM levels over time in the data you have? What are those changes and when did they occur?
2. Over what time frame are RSAM data collected and over what period of time would it take to establish a pattern?

11. What is your overall interpretation of the RSAM data in terms of the potential for volcanic activity at Kilauea during this time period?