

Some comments on the level-coded volcano information and scenario oriented countermeasures during volcanic unrests

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The September 1, 2004 eruption of Mt. Asama became the first application of so-called color-code alert system (level=0 to 5) of volcanic activity by JMA. JMA applied alert level 3 for Mt. Asama at the time of the eruption. Level 3 is originally designed for the smaller eruption from which rock ejecta should be limited far inside 3km radius from the crater. However, small stones fell upon near the settlements and the roads at 4-5km distance ranges, indicating level 4 at the original alert level scheme. Local government took an action for the ban for climbers, that is supposed to be taken at level 3. On the other hand, JMA couldn't upgrade the alert level to 4, because of serious direct linkage of local community risk managements.

Scenario type risk management always requires flexible consideration, because the ongoing actual case might not be covered by the pre-assumed story. Limited past case story often played biased judgment for the course of volcanic activity. Disagreement between the scenario and actual volcanic activity should be openly discussed and informed to the society. We have examined some case studies of volcanic alert level application.

Recently, more simplified 4 alert level system (red, orange, yellow and green) is proposed for future worldwide standard scales, not only at land but also at air. Because even after the establishment of Volcanic Ash Information Centers in the world, encounter of airplane with volcanic ash is reported still intermittently, so more sophisticated international warning system must be developed.