

震災によって作られた俳句の理解に関する研究 Studies on the understanding of haiku composed by earthquake disaster of East Japan on 11. 3. 2011

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震災によって作られた俳句の理解に関する研究

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2011年3月11日に東日本は震災と福島原子力第一発電所の被害により、大きな影響を受けた。この震災の後に多くの俳人が、地震と原子力発電所の事故による影響を俳句に詠んだ。これらの俳句のうち、雑誌に発表された234句を収集しホームページに公表したものをデータとすることにした。これをコピーし、俳人と一般人の19人に見せ、理解できる句と、感動した句を選んでもらった。合計で2354句が選ばれた。一人平均で124句が選ばれた。

俳句に対する理解は平均10.1人で、8人に最大値を持ち、13人にもう一つの山を持つ2峰型の分布をなした。半数以上の人が理解できた句は132句(56.4%)と比較的多く、俳句は現在でも日本人に理解できる心の伝達手段であることが分かった。また、感動した句は0に最大値を持ち、平均1.4人で、人数の増加に伴い減少する分布を示した。2人以上の人が一致して感動した俳句は91句(38.9%)であった。多くの人に均等に感情を伝えるには、難しい手段であることが分かった。評価した人数と感動した人数の相関を取ると、0.515で、弱い関連を示した。このことは多くの人が理解できた俳句が、感動を与える俳句ではないことを示している。

俳句会での評価方法に従い、理解できた俳句に1点、感動した句に2点を与え、総合点を計算した。総合点と感動した人数の相関は0.731を示し、少し強い関連が得られた。これは、2点と言う得点加算の結果である。それほど強い関連でないことから、感動した句には個人差が影響し、評価者間で一致しなかったことを示す。

回答者を要因にして主成分分析を行なうと、固有値1.0以上で6軸が得られた。このことは回答者による評価の違いが多く有ることを示している。最大固有根は最大の説明力を持つ軸であり、評価の厳しさを示すことが分った。残りの5軸は俳句に対する評価者の好みが見れたものと思われる。

最も評価が高かった俳句は21点を獲得し以下の3句であった。

①泥の遺影泥の卒業証書かな 曾根新五郎

②淡雪や瓦礫めぐりて母探す 柏原眠雨

③泣きはらす子らにひかりあれ卒業歌 上郡長彦

①は津波に抱って泥だらけになった死んだ人の写真と、死んだ人の卒業証書が被災地に散らばっている光景であった。

②は地震で壊れた自宅や近所を、瓦礫を除去しながら、行方不明の母を捜すところへ、雪が降ってきた情景であった。

③は卒業を迎えた生徒が泣きながら、卒業歌を歌っているの、この子らに光あれと祈る句である。

何れも悲しさに心を打たれたものと思われる。

参考文献

震災俳句：<http://blog.goo.ne.jp/humon007/e/fcc6b3e8f8dc3ca1cbc6a2177d6d0637>

謝辞：俳句の調査には蔵前俳句会(東京工業大学)とブルーリッジ俳句会(バージニア州ロアノク市)の協力を得た。

キーワード: 東日本大震災, 俳句, 理解と感動

Keywords: earthquake disaster of East Japan on 11. 3. 2011, haiku poet, understandings and deep impressions

Hazard Mapping of Structurally Controlled Landslides in Leyte, Philippines Using High Resolution Digital Elevation Model

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Structurally controlled landslides are one of the most destructive natural hazards that have occurred in the Philippines. The 2006 Guinsaugon Landslide, which was produced by the displacement of the Philippine fault, is a classic example of such hazard that took more than 1,000 lives and displaced more than 19,000 residents in the municipality of St. Bernard, Southern Leyte. Frequent monitoring and assessment should be done across the Philippine archipelago. The purpose of this study is to locate structurally controlled landslide prone areas with the aid of Coltop3D, Matterocking and Conefall using a high resolution digital elevation model (5 m resolution Interferometric Synthetic Aperture Radar images). The study area is set in the municipality of Ormoc, Leyte where the Philippine fault also cuts through and trending northwest. Discontinuity sets were identified using Coltop3D software that simulates a 3D model of the digital elevation model showing the dip and dip direction of different discontinuities. Lineation analysis and rose diagrams were made to verify the discontinuity sets in the area. Matterocking computes and estimates the locations where rock instabilities can occur according to the identified discontinuity sets that may allow sliding. Conefall was then used to compute and estimate the potential rockslide extent. Results show that the area has zones of potential rockslides with generated simulation of rockslide propagation extent. There is a high probability of landslides in Ormoc area where continuous monitoring of such danger zones should be done.

キーワード: structurally controlled landslides, geohazard, philippine fault, discontinuities, landslide mapping, structures
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Developing Automatic Delineation of Alluvial Fans for Rapid Hazard Assessment in Aurora Province, Philippines

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On Nov. 14, 2004, flashfloods from Subsob River struck Barangay(village) Paltic in Dingalan, Aurora Province around 4 a.m. when most residents were asleep - leaving hundreds homeless and 135 people dead. The series of floods caused by Violeta, Winnie, and Yoyong until December 2004 killed at least 300 people in Dingalan, Aurora alone. Mud buried 300 houses and residents were forced to stay on rooftops or seek higher ground. Because of these incidents, measures were devised to improve available geohazard maps to raise public awareness about landslides, debris flows and alluvial fans. This study developed a method to rapidly identify alluvial fans, thereby, hastening geohazard mapping in the region. Alluvial fans are fan shaped geologic formations deposited from tributaries from a mountainous terrain which flows out from the sudden break of a slope. Intense rainfall increases the discharge of sediments and water on these areas which could induce disastrous events such as flooding and debris flows. In this study, manual and automated methods in delineating fans in Aurora Province were compared. Manual delineation of alluvial fan boundaries were done through the contour lines generated from the 10-meter synthetic aperture radar (SAR)-derived digital elevation model (DEM). However, manual mapping of alluvial fan boundary which makes use of topographic interpretation of geomorphic features is subjective and time consuming. Biases were addressed by the second method by including factors such as 1) fan area of slope ranging from 1 to 8 degrees, 2) contributing stream networks from fan apex to fan toe, and 3) the fan potential lateral extent within the buffer zones based on the relief of the sediment source area in the GIS-based model. The outputs were compared with the manually delineated fans. Manual delineation identified 14 alluvial apex of 14 alluvial fans in 6 municipalities affecting 36 barangays. On the other hand, automated method identified 183 apex of 126 alluvial fans in 7 municipalities affecting 105 barangays. Although greater number of fans and wider fan area were identified using the automated method, manual delineation is still needed to check the results especially in volcanic regions. In addition, inactive alluvial fans are not accounted by the automated method.

キーワード: alluvial fan, natural hazard mapping, geohazard, GIS, Aurora, Philippines
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Strong Explosive Eruptions of Kamchatkan Volcanoes in 2013 Strong Explosive Eruptions of Kamchatkan Volcanoes in 2013

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There are 30 active volcanoes in the Kamchatka, and three of them (Sheveluch, Klyuchevskoy, and Karymsky) continuously active. In 2013, two of the Kamchatkan volcanoes ? Sheveluch and Klyuchevskoy - had strong explosive eruptions.

Powerful explosive eruption of volcanoes is the most dangerous for aircraft because in a few hours or days in the atmosphere and the stratosphere can produce about several cubic kilometers of volcanic ash and aerosols. Ash plumes and the clouds, depending on the power of the eruption, the strength and wind speed, can travel thousands of kilometers from the volcano for several days, remaining hazardous to aircraft.

The eruptive activity of Sheveluch Volcano began since 1980 (growth of the lava dome) and is continuing at present. Strong explosive events of the volcano occurred in 2013: on June 26, on October 18, and on December 03: ash plumes rose up to 10 km a.s.l. and extended about 200-400 km, respectively, to the south-west, south-southeast, and north of the volcano. A form of pyroclastic flow deposits with run-out 12 km accompanied these explosive eruptions. Ashfalls occurred at Klyuchi Village (on June 26) and Ivashka Village (on December 03). Activity of the volcano was dangerous to international and local aviation.

Klyuchevskoy volcano had two eruptions in 2013: moderate Strombolian explosive eruption from October 14, 2012, till January 15, 2013; and strong Strombolian-Vulcanian explosive and effusive eruption from August 15, 2013, till December 20, 2013. There were four lava flows to effuse on the north-west, west and south-western volcanic flanks. Probably a flank eruption began at the pass between Klyuchevskoy volcano and Kamen volcano on October 06. Culmination of strong Vulcanian explosive activity of the volcano occurred on October 15-20: ash column rose up to 10-12 km a.s.l. and ash plumes extended to the different directions of the volcano according to cyclonic activity in the this area. Phreatic ash plumes on the fronts of lava flows rose up to 5 km a.s.l. Weak ash falls were noted at Klyuchi Village on October 09 and 13, and Mayskoe Village on October 16. Activity of the volcano was dangerous to international and local aviation.

キーワード: explosive eruption, volcano, Kamchatka, Sheveluch, Klyuchevskoy
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