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Assessing Volcanic Hazards using VHub online tools: El Salvador Volcanoes Case Study

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VHub is a Cyber-Infrastructure platform where all stakeholders involved in volcanic research and mitigation can collaborate in research, modeling, data sharing, education and outreach, and communication. VHub is a community-driven Cyber-Infrastructure, and any individual working on or interested in volcanic research and mitigation can join VHub without cost. The VHub community consists of volcanologists, remote sensing experts, geographers, civil engineers, and teachers, just to name a few groups. VHub members have an array of online simulation tools dealing with different volcanic processeses at their disposal. In this project we chose three El Salvador volcanoes, Santa Ana (Ilamatepec) Volcano, San Vicente Volcano and San Miguel Volcano, as case studies to show case these tools and how VHub can be used on real life cases. We used Titan2d for show deposition and inundation zone due to debris flows at the Santa Ana Volcano; we used the Energy Cone at the San Vicente Volcano for create a kmz file displaying possible inundation areas; and Tephra2 for the San Miguel volcano to create an isopath map of a fallout deposit.