

This is the portal to download landslide maps generated under the DOST-Project NOAH program with main office at the National Institute of Geological Sciences (NIGS), University of the Philippines. The sub-program is entitled, **“Enhancing Philippine Landslide Hazard Maps with LiDAR and High-Resolution imagery”**, and was implemented by research scientists from NIGS.

All maps are released for the benefit of the Filipino people, taking into consideration that the landslide hazard maps are needed for the formulation of disaster risk reduction plans of local government units. These maps are delivered free of charge to public according to the data sharing policy (Open Data) enshrined in the General Appropriations Act of 2015, which states that “all government entities to adopt a policy of openness for all datasets created, collected, processed, disseminated, or disposed through the use of public funds to the extent permitted by applicable laws and subject to individual privacy, confidentiality, national security, or other legally-mandated restrictions. Openness means that datasets published by agencies shall be machine-readable, in open formats and released with open licenses”. This policy seeks to drive government decision-making based on available and sound data, establishes linkages with CSOs, the private sector, and academe, and aspires to create opportunities that benefit both the government and the public (<http://data.gov.ph>).

The policy on openness is consistent with our commitments to the international community because we deal with products that are directly related to disaster risk reduction and we should take the lead in getting best practices in DRR applied. Open Data and timely delivery of disaster products are important in DRR. Promotion and enhancement of access to these items, particularly geospatial data, discussed and emphasized in the recently drafted UN disaster risk reduction framework (Hyogo Framework for Action 2 or HFA2) are imperative for DRR. The pertinent provision in the Sendai Framework for disaster risk reduction is found in Article III (Guiding Principles) Section G, where it is stated that “Disaster risk reduction requires a multi-hazard approach and inclusive risk- informed decision-making based on the open exchange and dissemination of disaggregated data, including by sex, age, and disability, as well as on easily accessible, up-to-date, comprehensible, science-based, non-sensitive risk information, complemented by traditional knowledge”

The maps should be used responsibly, scientifically, and alongside the ISI journal articles published by the creators of the dataset. These journal articles, which need to be cited as an ethical standard when the datasets are used, are as follows:

### **Landslides (shallow and structurally-controlled):**

- M.L. Rabonza, R.P. Felix, A.M.F Lagmay, R.N. Eco, I.J. Ortiz, ang D.K. Aquino (2015). Shallow landslide susceptibility mapping using high-resolution topography for areas devastated by super typhoon Haiyan. *Landslides*, Volume 13, Issue 1 pp 201-210
- Alejandrino, A.M.F. Lagmay and R.N. Eco (in press - 2015) Shallow Landslide Hazard Mapping for Davao Oriental, Philippines Using a Deterministic GIS ,Model. In: *Communicating Climate Change and Natural Hazard Risk and Cultivating Resilience: Case Studies for a Multidisciplinary Approach* Eds. Yekaterina Y. Kontar. Springer, Berlin Germany
- Paul Kenneth Luzon, Kristina Montalbo, Jam Galang, Jasmine May Sabado, Carmille Marie Escape, Raquel Felix, and Alfredo Mahar Francisco Lagmay (2016) Hazard mapping related to structurally controlled landslides in Southern Leyte, Philippines. *Natural Hazards and Earth System Sciences*, 16, 875-883, 2016

### **Debris flow hazards in Alluvial Fans:**

- K. Rodolfo, N. Eco, A.M.F. Lagmay et al. (in press) The December 2012 Mayo River debris flow triggered by Super Typhoon Bopha in Mindanao, Philippines: Lessons learned and questions raised. NHESS
- G. Norini, M.C. Zuluaga, I. Ortiz, D.T. Aquino and A.M.F. Lagmay (2016) Delineation of alluvial fans from Digital Elevation Models with a GIS algorithm for the geomorphological mapping of the Earth and Mars. *Geomorphology* Volume 273, No. 15 134–149.

### **Map Atlas of Landslide Hazard**

- Comprises 87 volumes representing the 81 provinces of the Philippines. These volumes have been reviewed by the University of the Philippines Press but still need to be printed.
- Citation example: Alejandrino, I., Aquino-Chow, D., Ariola, H., Bonus, A., Eco, R., Escape, C., Felix, R., Ferrer, P., Gacusan, R., Galang, J., Herrero, T., Llanes, F., Luzon, P., Montalbo, K., Obrique, J., Ortiz, I., Quina, C., Rabonza, M., Realino, V., Sabado, J and Sulapas, J. (2015). *Landslide Hazard Map Atlas: Ifugao* (A.M.F. A. Lagmay, Ed.). Quezon City: University of the Philippines Press.

The maps, produced and delivered on a nationwide-scale, can be improved by the local and scientific communities for detail and accuracy. We welcome discussions on how the quality of these datasets can be upgraded.