In Module 3.1 we learned that if the end product of our image interpretation project will use a machine learning classifier, our sample size should be related to the number of bands used by our classifier, as well as the number of classes we have in our classification schema. We learned that this is due to a need to capture the intra-class variance of some land cover classes.

Can you think of any land cover classes that can substantially vary in a certain spectral band (i.e. optical, thermal, synthetic aperture radar) depending on the time of the year? Potential examples: leaf-on, leaf-off of trees, cropland, SAR backscatter changes on a windy lake.

Acknowledgements

Collect Earth Online has received financial support from NASA, The U.S. Agency for International Development (USAID), SERVIR, the Food and Agriculture Organization (FAO), the U.S. Forest Service, SilvaCarbon, Google, and Spatial Informatics Group. It was co-developed as an online tool housed within the OpenForis Initiative of FAO.

Collect Earth Online was initially developed by SERVIR, and is now supported by a broad base of partners. CEO was inspired by Collect Earth, a desktop software developed by FAO. The development team includes Arthur Luz, Jordan Combs, Matt Spencer, Richard Shepherd, Oliver Baldwin Edwards, Sif Biri, Roberto Fontanarosa, Francisco Delgado, Githika Tondapu, Billy Ashmall, Nishanta Khanal, John Dilger, Karen Deyson, Karis Tenneson, Kel Markert, Africa Flores, Emil Cherrington, and Eric Anderson.

The Collect Earth Online curriculum was organized by SERVIR's Science Coordination Office with individual modules created by NASA's Earth Observatory, the Spatial Informatics Group, and SERVIR SCO. Individual modules were created by Crystal Wespestad (Spatial Informatics Group), Holli Riebeek (NASA Earth Observatory), Robert Simmon (NASA Earth Observatory), Billy Ashmall (SERVIR Science Coordination Office) Micky Maganini (SERVIR Science Coordination Office), NASA Earth Observatory, NASA, and the US Agency for International Development. Review of the material was conducted by SERVIR's Science Coordination Office, specifically Kelsey Herndon, Emil Cherrington, Billy Ashmall, Diana West, Katie Walker, Lauren Carey, Jacob Abramowitz, Jake Ramthun, Natalia Bermudez, Stefanie Mehlich, Emily Adams, Stephanie Jimenez, Vanesa Martin, Alex Goberna, Francisco Delgado, Biplov Bhandari, and Amanda Markert. Crucial insight regarding the development of the curriculum materials was provided by Claudia Paris and Andrea Puzzi Nicolau.

Review of the material was also conducted by Bart Krol and Laura Cray of ITC (The Faculty of Geo-information Science and Earth Observation at the University of Twente). The course and unit banner images were created by Gianluca Ambrosi of ITC.

Sources

- Development Team: https://sams.servirglobal.net/detail/7
- All other info: https://www.collect.earth/about/