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Bringing the Crowd to Environmental Investigation and Monitoring JOHN AMOS, SkyTruth

In the nearly 70 years since scientists at the White Sands Missile Range first sent cameras into space on captured German V-2 rockets, humans have launched thousands of satellites into Earth orbit. While some look out at the heavens, many are Earth observation instruments pointing back at us and collecting images and measurements of our planet's dynamic physical and biological systems. Civilian access to, and use of, satellite imagery increased dramatically with the early 1970s advent of the Landsat satellite program, accelerating in recent years with the commercialization of high resolution "spy satellite" imagery and the advent of ubiquitous, easy-to-use web interfaces such as Google Earth. SkyTruth applies satellite remote sensing to illuminate environmental issues and incidents. New data sources expected to come on line in 2014 present opportunities for independent, third-party investigation and near-real-time response to environmental and humanitarian crises. New approaches to distributing, processing, sharing and analyzing the expected torrent of image data must be developed to take full advantage of this potential. Our goal is to build a global community of "skytruthers" regularly engaged in collaborative image analysis and mapping, and conducting routine oversight of environmental change in the places they care about.