



Climate Change and Disaster Monitoring

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Abstract:

As we move into the next decade of the 21st century, climate change and the impact to our planet earth is at the forefront of the scientific community. With growing technologies including the ability to map the effects on the earth from human consumption, gas emissions, land use and environmental policies, scientists can more easily link these factors to rising temperatures and increased number of natural disasters and physical changes to our planet. Satellite imagery has proven to be an essential source of worldwide critical ground truth for observing and monitoring changes including natural and man-made disasters. In addition to providing a time stamped perspective with geographical context, satellite imagery provides reliable data such as vegetation health, environmental and habitat damage, as well as, carbon sequestration efforts through analysis of the spectral bands. With today's constellation of earth observation satellites and remote sensing techniques, government policies for land use and environmental protection can be influenced, businesses can enter into mindful management of natural resource to restore and renew and everyday people can make better choices to decrease gas emissions. Collectively all of us can make decisions to minimize the factors which are changing the climate resulting in natural disasters. This presentation addresses how DigitalGlobe imagery has been used to monitor climate change and impacts of disasters as well as provide the scientific community means for leverage the power of satellite imagery to address global change.