RECENT ADVANCES IN LOCAL AND GLOBAL ENVIRONMENTAL REMOTE SENSING

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Technical Commission VII Symposium 2010

KEY WORDS: Climate, Weather, Radiation, Satellite, International, Multisensor, Multispectral

ABSTRACT:

New environmental remote sensing instruments are offering opportunities for local investigation of land, ocean, and atmospheric changes. Improvements in spatial resolution, addition of new spectral bands, increases in spectral resolution, advances in calibration, and better signal detection have been realized in sensors launched by the global community of satellite operators. These advanced sensors have been used by the direct broadcast user community in the past decade to monitor real time weather developments on the regional scale and to track climate trends on the global scale. In addition to detection of cloud location and determination of cloud properties, products in clear skies include vegetation and snow cover, sea surface temperature, and atmospheric temperature ansd moisture gradients. We will briefly describe how some these products are derived, present some local examples using a freeware visualization tool, and note a few of the global trends discerned in the last decade.

TOPIC: Remote sensing applications
ALTERNATIVE TOPIC: Multi-spectral and hyperspectral remote sensing