NASA LANCE

Supporting NRT decision-making since 2009 with accessible, reliable, trustworthy data

THE GOAL

Provide global near real-time (NRT) data products within three hours of satellite observation to meet the timely needs of applications users

DESIGN

All NRT data available under one umbrella, generated using a common set of requirements to ensure consistency, collaboration and sustainability in the the provision reliable, accessible data

CHARACTERISTICS

A user working group provides overall guidance - including assessing product quality & recommending potential enhancements – to LANCE on behalf of the applications user communities to ensure a user-centered evolution of the system

The LANCE Team

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https://www.earthdata.nasa.gov/lance



NASA's Land, Atmosphere, Near Real-Time Capability for Earth observations (LANCE) has been facilitating data-driven decision making since its inception in 2009.



LANCE was specifically designed to facilitate NRT decision making by leveraging the existing data archiving capabilities within NASA's Earth Science ecosystem and, in doing so, reduce the 'time to action' for decision makers.



By embedding a user-driven approach into the continual evolution of LANCE – and consistently providing reliable, accessible, available data and information over the last fifteen-plus years – LANCE has built, and represents, a trusted data and information source for an increasingly diverse set of users.



The distributed nature of LANCE, provisioning data from multiple processing and archiving elements throughout the US, relies on teamwork to ensure the efficient functioning of LANCE.



LANCE employed a consistent set of requirements for all data products to ensure they are consistently stewarded, represent peer-reviewed products and reflect robust data ethics.



As NRT decision-making necessities ever more multi-disciplinary approaches, LANCE continues to provide accessible, reliable, trustworthy data.

LANCE Data and imagery available from the following Sensors (Platforms): AIRS (Terra); AMSR2 (JAXA GCOM-W1); ATLAS (ICESat-2); MLS (Aura); MODIS (Terra/Aqua); MOPITT (Terra); OMPS (Suomi NPP); OMI (Aura); SMAP; VIIRS (Suomi NPP/NOAA-20 & -21)