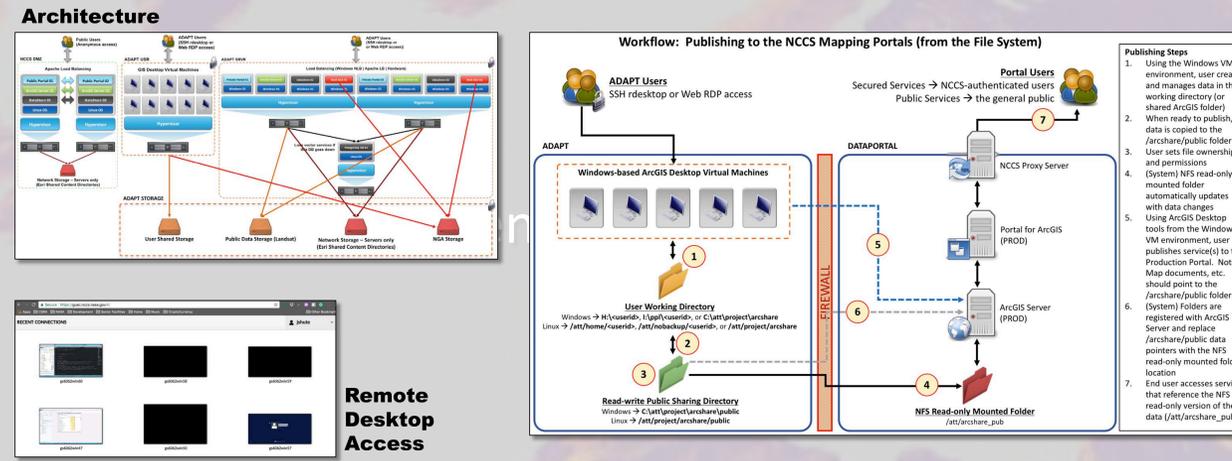


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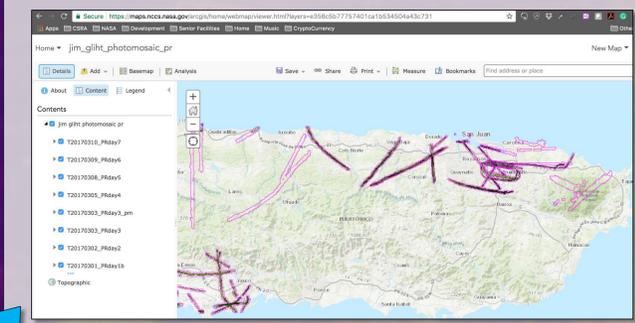
Abstract

The NASA Center for Climate Simulation (NCCS) at Goddard Space Flight Center is building and maintaining an Enterprise GIS capability for its stakeholders, including NASA scientists, industry partners, and the public. This platform is powered by three GIS subsystems operating in a highly available, virtualized environment: 1) the Spatial Analytics Platform is the primary NCCS GIS and allows users to discover the vast DigitalGlobe/NGA raster assets within the NCCS environment; 2) the Disaster Mapping Platform provides mapping and analytics services to NASA's Disaster Response Group; and 3) the internal (Advanced Data Analytics Platform/ADAPT) enterprise GIS provides users with the full suite of Esri and open source GIS software applications and services. All systems benefit from NCCS's cutting-edge infrastructure, which includes an InfiniBand network for high-speed data transfers; a mixed/heterogeneous environment featuring seamless sharing of information between Linux and Windows subsystems; and in-depth system monitoring and warning systems.

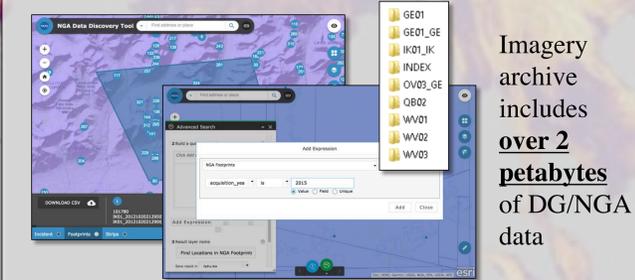
System Information



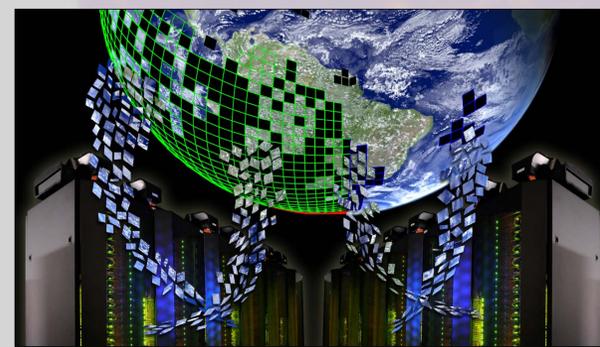
G-LiHT: Goddard's LiDAR, Hyperspectral & Thermal Imager



ABOVE: Arctic Boreal Vulnerability Experiment DigitalGlobe/NGA Data Discovery Tools

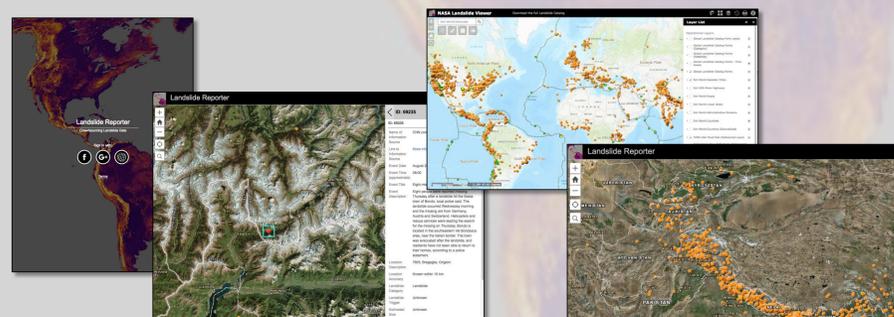


NCCS High-Performance Computing

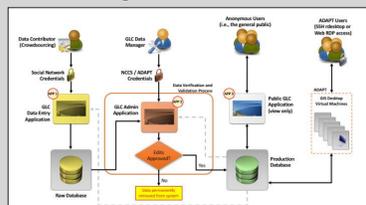


NASA Global Landslide Catalog¹

The Global Landslide Catalog (GLC) was developed with the goal of identifying rainfall-triggered landslide events around the world, regardless of size, impacts, or location. The GLC considers all types of mass movements triggered by rainfall, which have been reported in the media, disaster databases, scientific reports, or other sources. The GLC has been compiled since 2007 at NASA Goddard Space Flight Center. This is a unique dataset with the ID tag "GLC" in the landslide editor.



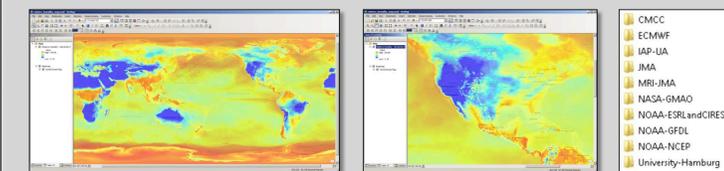
Powered by Citizen Scientists



NASA Earth Science Disasters Program



MERRA-2: Modern-Era Retrospective Analysis for Research and Applications, Version 2



Summary

The NCCS Spatial Analytics Platform has direct access to several large NCCS datasets including DigitalGlobe/NGA, Landsat, MERRA, and MERRA-2. Via this enterprise geospatial platform, Earth scientists have full access to vast data repositories and the industry-leading tools required for successful management and analysis of these multi-petabyte, global datasets.

For Additional Information

<https://maps.nccs.nasa.gov>
james.k.shute@nasa.gov

¹ Kirschbaum, D. B., Adler, R., Hong, Y., Hill, S., & Lerner-Lam, A. (2010). A global landslide catalog for hazard applications: method, results, and limitations. *Natural Hazards*, 52(3), 561–575. doi:10.1007/s11069-009-9401-4. [1]