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NASA APPLIED SCIENCE PROGRAM – WILDFIRES: DRIVING RESEARCH TO OPERATIONS

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THEME: Wildfire (Biodiversity-5 Special Session)

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ABSTRACT:

The National Aeronautics and Space Administration (NASA) Applied Sciences Program supports the Earth Science Division (ESD) within the NASA Science Mission Directorate (SMD). The Program serves the overall NASA science goal to expand scientific understanding of the Earth and the universe in which we live and to advance scientific understanding of the changing Earth system to meet societal needs. Within the Earth Science Division, the Applied Sciences Program serves the following strategic functions:

- Advance Earth science and technology, particularly through applied research;
- Build partnerships, especially with non-traditional partners, to broaden awareness and support for NASA Earth science;
- Enable involvement in mission planning and science teams by applications communities to build anticipation and advocacy for the missions and research results;
- Enable feedback from applications communities on NASA Earth science data sets and model outputs, helping improve the products available overall;
- Demonstrate, deliver and document socioeconomic benefits and impacts of NASA Earth science;
- Raise expectations for use and availability of Earth science products in public and private sector decision making, increasing demand for Earth science technology, observations, and research.

One of the NASA Applied Science Program topic areas is in Wildland Fire. The Wildland Fire portfolio of NASA Applied Science Program seeks to support projects that focus on applications addressing cross-cutting and multi-disciplinary issues related to wildland fires in support of management strategies and actions, business practices, and policy analysis and decisions. The portfolio includes projects that encompass pre-fire, active-fire, and post-fire assessment applications, and foster the development of enhanced and timely tools, models and data uses that can improve the understanding of fire behavior and support wildfire management and decision support systems with involvement from partnering organizations. Several of these successful project efforts will be highlighted. Additionally, NASA participates as an active partner on national and international efforts (such as IARPC, GEO, GEOSS, etc.), focused on improving earth observation strategies and capabilities for wildfires. Those program collaborations are also highlighted in this presentation.

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