Poster Title: NASA Data for Your Air Quality Applications Made Easier

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Problems evident throughout Earth's systems, especially those related to air quality, require radical and rapid innovation. NASA facilitates innovation by prioritizing access to free and open data essential for monitoring and mapping complex systems and their dynamics. However, accessing and using this data can be complicated, demanding expert knowledge of the datasets and related tools.

In July 2023, ESDS revised the Air Quality Data Pathfinder, one of the 15 in the series, designed to facilitate access and use of data for various transdisciplinary Earth System Science applications. Data Pathfinders provide resources and tools for a variety of user communities around common Earth systems themes, with the goal of reducing barriers to NASA data so that users can engage in exploration, analysis, and application.

The updated Air Quality Data Pathfinder addresses specific concerns shared by the Air Quality user community over the past year, as articulated in the UNBOUND for Air Quality Report released in May 2023 by Earth Science Information Partners (ESIP). Data users reflected on difficulties accessing and using NASA data due to a lack of technical knowledge and skills, encountering limitations in data discovery due to perceived requirements, as well as misunderstanding metadata. The 2023 Air Quality Data Pathfinder attempts to address several pain points expressed by these users with the following updates:
- Data organized by resolution for easy identification
- Resources grouped by parameter
- Data tools organized by purpose
- Specific resources featured for GIS users, programmers, etc.

The Air Quality Data Pathfinder demystifies NASA data for research and applications. This resource supports users with various interests, including monitoring the movement of wildfire smoke and dust plumes, identifying concentrations of trace gases in your region, as well as understanding how these pollutant concentrations change over time, among others. From beginners to experienced data users, this pathfinder offers data access, visualization, subsetting, and more resources in one place, allowing users more time for scientific pursuits.