

The NARSTO Data and Information Sharing Tool

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The NARSTO Data and Information Sharing Tool (DIST) is a web-based data search and retrieval system. DIST facilitates the sharing of data, first among project investigators and sponsors, and later within the larger atmospheric research community. Users may locate data by searching an established set of metadata using free text, keyword, or fielded searches. Control of access to metadata and data is in the hands of either the data providers or a central facility. Metadata are harvested by a central system, while the data may reside either on the investigator's distributed data system or on the NARSTO central site. An overview of the DIST will be presented

DIST is simple to use; its interface is similar to that of many existing web search engines, and it has a short learning curve. Experience has shown it to be inexpensive to implement and maintain for a project. A convenient Metadata Editor tool speeds the entry of metadata, which encourages input of metadata early in data management process. The DIST is data-format independent. DIST is implemented using Internet standards, including XML, and supports international metadata standards, including FGDC and Z39.50. DIST uses and adds value to commercial-off-the-shelf software and is compatible with various internet search engines. Implementation support is available through the NARSTO Quality Systems Science Center (QSSC). The DIST is a member of the ORNL Mercury Consortium, a group of independent data projects that have banded together to maintain and develop the underlying engine to reduce individual costs.

Metadata entered into DIST by a Principal Investigator is consistent with the NARSTO Permanent Data Archive metadata needs. The use of consistent metadata entries and a standardized data format (i.e., NARSTO data exchange standard format) greatly facilitates both the sharing of data among project participants, and the flow of metadata and data to the QSSC for final checks and transmittal to the NARSTO Permanent Data Archive.

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