

NASA ESDIS DOI Landing Page Recommendations

ESDSWG DOI Landing Page Working Group 2014

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Scope and Background

Document Scope

NASA Earth Science Distributed Active Archive Centers (DAACs) are charged with a variety of duties that include the archiving, presentation, and distribution of data from NASA's past and current Earth observing missions and field programs. NASA's Earth Science Data System (ESDS) program provides guidelines across the various data centers to promote consistency in levels of service offered from DAAC to DAAC, and to promote consistency in the presentation of those services.

Ensuring that data sets are both discoverable and discernable are key to successfully *presenting* and *distributing* a DAAC's data. Recognizing the value of Digital Object Identifiers (DOIs) in the citation and referencing of data sets, the Earth Science Data and Information System (ESDIS) Project, through the Earth Science Data System Working Group (ESDSWG), has chartered a working group to generate a specification (required elements) for a Digital Object Identifier (DOI) landing page.

This document captures that specification. It catalogs the results of the working group, listing out required and recommended elements to be presented by a DAAC when a user attempts to resolve a DOI to a data set. It is intended to facilitate consistency across DAACs in the presentation of DOI landing pages for NASA data sets.

It is important to note that this document does not intend to specify the presentation or rendering of required or recommended elements. That is left up to the implementations by the participating DAACs.

DOI Background

From the DOI.org Web site, a Digital Object Identifier can be applied to any entity requiring a unique, network-available name. A DOI is a unique name that references an *object* (which is any entity, be it physical, digital, or abstract), and it is a *digital identifier* in that it is network actionable (that is, it can be hyperlinked to additional resources and information). A DOI *landing page* is the Web page to which a DOI resolves (for example, the Web page returned when a user follows the hyperlink associated with the DOI).

When a user resolves a DOI (takes the link and arrives at a resulting Web page), they are arriving at what is referred to as a DOI Landing Page. DOI Landing Pages need to represent the data set which is persistently identified by the DOI, and it is the intent of ESDIS, and the recommendation of the 2014 DOI ESDSWG, that the Landing Pages contain a required minimal set of elements so that users have some minimum threshold of expectations met, and that there is consistency in the level of service across the various ESDIS DAACs when resolving DOIs.

Landing Pages and Data set Information Pages

It should be noted that the function of a DOI Landing Page is not the same as a Data Set Information Page, but the two pages can be (and often are) one in the same. A Data Set Information Page typically has extensive information about a particular data set – much more than is required in the resolution of a

DOI – and is intended to be fairly comprehensive in the information provided directly and/or linked. A DOI Landing Page serves a different purpose. It is intended to provide confirmation to a user that they have arrived at the proper landing page for the DOI specified, to provide rudimentary information on the nature of the *object* being *identified*, and provide a path forward to additional information in pursuit of the object itself. It is typical for a DAAC Data Set Information Page to contain all of the elements required of a DOI Landing Page, and much more. As a result, most DAACs will likely find that their existing implementations of Data Set Information Pages more than adequately meet the requirements for a DOI Landing Page.

Required and Recommended Elements

The following elements are considered *required* or *recommended* (as noted) on a DOI Landing Page. Rationale describing the intent and driver for each follows.

DOI

- *Definition:* The DOI value, nominally in the form of the ESDIS prefix and the DAAC-specific suffix.
- *Rationale:* Provides confirmation that the user has arrived at the appropriate landing page.
- *Usage:* Required

Data Set Long Name

- *Definition:* The descriptive title of the data set represented by the DOI.
- *Rationale:* Assists the users in identifying the data set.
- *Usage:* Required

Version Number

- *Definition:* The major version (collection) of the data set represented by the DOI.
- *Rationale:* Denotes the uniqueness and data production provenance of the data set.
- *Usage:* Required

Data Set Description

- *Definition:* A brief description of the data set, which should include significant changes made within that version.
- *Rationale:* Provides a more detailed explanation of the data set referenced, so that the user can move from an arbitrary DOI to a more complete understanding of the data.
- *Usage:* Required

Data Access

- *Definition:* A link to or access instructions for the data files.
- *Rationale:* Provides access to the data or notification of how to obtain the data or, where appropriate, that the data are no longer accessible.
- *Usage:* Required

Data Citation

- *Definition:* The official citation for the data set. (*Note: Defining the official NASA ESDIS Data Citation format is outside of the scope of this working group.*)
- *Rationale:* Provides an immediate confirmation that the user has arrived at the appropriate landing page. It is expected that the Citation will be more easily recognizable than the DOI as users will often search for a data set after finding a reference (citation) in a journal, paper, etc.
- *Usage:* Required

Associated Landing Pages

- *Definition:* Links to DOI landing pages for other versions of the data set represented by the DOI.
- *Rationale:* Identifies the data set lineage through the information contained on the landing pages for other versions of the data sets.
- *Usage:* Recommended