

# ScienceBase Information Model

The ScienceBase Catalog contains metadata about digital and nondigital scientific data assets and the ScienceBase Repository contains a number of different types of scientific data assets. The ScienceBase Catalog provides the central information about everything in ScienceBase using a flexible information model based on the simple metadata elements of the Dublin Core Metadata Element Set. The following sections provide detailed information on the model and how it is used within ScienceBase.

## ScienceBase Item Core Model

The ScienceBase Item core is based on the Dublin Core Metadata Element Set <http://dublincore.org/documents/dces/> but also includes other elements that may or may not be associated with other metadata standards that are useful for the core attribution of ScienceBase items. It is used as a means to integrate across multiple metadata standards, conventions, and practices in describing a wide array of scientific data and information assets important to science teams using ScienceBase.

## ScienceBase Item Extensions

The ScienceBase Item Core Model describes the metadata elements that make up the core of ScienceBase and apply to every item. Extending this model are ScienceBase Item Extensions that add additional attributes to items based on specific needs. Some extensions are created to accommodate particular metadata standards in use for particular types of items. Others are generated when a new ScienceBase Harvester is established to pull in a particular information source with unique information.

## Vocabularies and code lists

Many aspects of ScienceBase are controlled by various types of controlled vocabularies and code lists inside the ScienceBase Vocabulary application <https://www.sciencebase.gov/vocab/>. These may be highly structured systems of terms such as a managed thesaurus or simple code lists of terms that apply to a particular aspect or attribute and may or may not come from an authoritative source.