Description

This document describes a standard format for R2R data products. The format was designed for use with the geophysical data products, but can be expanded for use with other data types. The current format is based on "**GeoCSV -- tabular text formatting for geoscience** " and superceeds the original "**GeoWS Well Structured Text FormatVersion: 20150318**. It is recommended that the GeoCSV format is used for all R2R products that do not already have a well documented, community supported format for their data type.

Basic format follows as:

- Data, header, units and description records are comma delimited
- First record in file must be the "datset:" tag
- Comments and flagged data rows begin with a # and follow the GeoCSV text Format
- Column headers are the first row that does not start with a #
- All additional rows that do not start with a # are considered data rows

This format cannot be read directly by GeoMapApp V3.5.1 (www.geomapapp.org). Users must copy the column header record to the first line until GMA code is modified before importing the file to read GeoCSV format files.

GeoCSV R2R custom Comment Fields

The GeoCSV comments are in the format "#field: value". Fields that are already accepted as standards are described in the GeoCSV documentation.

A new field was not created for the R2R Data Processing Report. Instead, the URL of this report should be included with the GeoCSV attribution field.

R2R additions to the standard GeoCSV comment fields are:

R2R Field	Description
id	identifier (DOI) of the published product (ie. this file)
cruise_id	unique cruise identifier from R2R vocabulary, and associated DOI
device_information	free format text description for this device, ex: "magnetometer (make: my_make model: my_model)"
creation_date	ISO_8601 date/time when this file was created
input_dataset_id	comma separated list of data DOIs for the input files used
names_NERCP02	data column headers from NERC P02
field_name_cv	location of reference for controlled vocabulary, ex: "http://www.rvdata.us/voc/fieldname"

Additional fields may be created as necessary.

R2R Column Headers

Each R2R GeoCSV data files document the data columns internally as described above. All current column headers may be viewed at http://www.rvdata.us/voc/fieldname.