

The NARSTO Atmospheric Measurements Template - Instructions

Template date: 2005/04/29 (Version 2.302)

This Instructions worksheet was last updated: 2005/04/29

1. Introduction

- 1.1 This template is used by a number of data collection and quality assurance centres (QACs). The current list of centres is as follows:
- **NARSTO**: Quality Systems Science Center (QSSC), Oak Ridge National Laboratory
 - **NatChem**: Meteorological Service of Canada, Environment Canada
 - **WDCA**: Global Atmosphere Watch - World Data Centre for Aerosols, Ispra, Italy
- 1.2a The Data Exchange Standard (DES) template is designed to help **data originators** create DES files. When the template has been filled in with metadata and data, a copy is saved in **ASCII CSV** (comma-separated values) format. The **ASCII** file is the final storage format for the archive. The **ASCII** file(s) are submitted to the **QAC**, where they are run through a set of quality assurance tests. The **QAC** provides the results of the QA tests (and some QACs also provide statistical summaries and time series plots) to the **data originator**. The **data originator** reviews the reports, makes corrections as needed, and resubmits the file(s) to the **QAC**. After a final check, the **ASCII** file(s) becomes the master copy of the data and are placed in the archive.
- 1.2b The **latest version** of this template will be available from the NARSTO QSSC (see link near end of instructions). However, if you are already using Version 2.212 or later, it is not necessary for you to retrofit the latest version to files or installations for which you have already set up the template. When feasible, especially if you are setting up for a new season or a new instrument or installation, please obtain and use the latest version. This is especially important because an in-use template may have some key phrases deleted that need to be included in the new type of file. The "Template history of changes" worksheet will help you see what has changed from the older to the current version.
- 1.3 This Workbook contains multiple worksheets. The worksheet titles are listed in tabs at the bottom of the window. We suggest you review the worksheets, especially the examples. Contact your QAC for more examples if needed. You may wish to print the following worksheets:
- **Instructions**
 - **Frequently Asked Questions**
 - **Worksheets** starting with the characters **val_**. These worksheets contain the pick-lists for the key characteristics and a few other fields.
- The Excel comment boxes may be printed by clicking on **File, Page Setup**, and the **Sheet** tab and choosing the appropriate item from the "Comments:" picklist.
- 1.4 **Key characteristics** are a set of descriptive key phrases in the main data table, beginning with ***TABLE COLUMN OBSERVATION TYPE**. These are intended to allow data users to identify data in which they are clearly not interested, vs. data in which they might be interested after further investigation of details of sampling, methodology, etc. The worksheet titled **Detailed metadata** contains a possible layout and content of a companion detailed metadata document. To use this layout, copy and paste the detailed metadata worksheet to a Word document using **Paste Special as unformatted text** and complete the appropriate sections for the dataset(s). This file, or an SOP or similar document with the essential descriptive information, must accompany the data files. It provides critical information for data users so that they can determine whether the data are useful for their purposes and so they can use the data appropriately. The final version would ideally be provided by the data originator in **PDF** format (**PDF-A** format when it becomes available).
- 1.5 This template, with its comments and other advice, replaces the **former NARSTO Data Management Handbook, which is no longer available. The last handbook revision** (Rev. Ed. 2b, February 4, 2000) lacks many enhancements to the Data Exchange Standard and the template.