## **EVIDENCE OF IMPLEMENTATION FOR ICARTT FILE FORMAT STANDARDS**

Ali Aknan, Gao Chen, James Crawford Eric Williams

NASA Langley Research Center NOAA Oceanic and Atmospheric Research,

Hampton, VA 23693 Earth System Research Laboratory
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ali.a.aknan@nasa.gov, gao.chen@nasa.gov, eric.j.williams@noaa.gov

james.h.crawford@nasa.gov

## **A**BSTRACT

The ICARTT file format is text-based, self-describing, and relatively simple to use file structure, which was developed to fulfill the data management needs for the International Consortium for Atmospheric Research on Transport and Transformation (ICARTT) campaign in 2004. Thereafter, the ICARTT file format standards have been implemented in numerous airborne field campaigns sponsored by NASA, NOAA, NSF and international partners.

This document describes recent implementations of the ICARTT file format standards and three examples of application.

## 1. IMPLEMENTATIONS OF ICARTT DATA FILE PROTOCOL

The description of ICARTT file format standards and file scanning tool can be found at: <a href="http://www-air.larc.nasa.gov/">http://www-air.larc.nasa.gov/</a> and <a href="http://www-air.larc.nasa.gov/tools.htm">http://www-air.larc.nasa.gov/</a> and <a href="http://www-air.larc.nasa.gov/tools.htm">http://www-air.larc.nasa.gov/tools.htm</a>, respectively.

During the multi-agency TexAQS 2006 field study, researchers from Universities and the Texas Commission on Environmental Quality (TCEQ) implemented the ICARTT format for field data and final data file exchanges. TCEQ data are archived in ICARTT format, as well as an internal proprietary format, on the TCEQ password-protected data server.

The ICARTT file format standards were implemented during the MILAGRO and INTEX-B (2006) campaigns for data exchange and archival purposes at field, preliminary and final data submission phases. The implementation plans are described at <a href="http://www-air.larc.nasa.gov/missions/intex-b/intexb.html">http://www-air.larc.nasa.gov/missions/intex-b/intexb.html</a> and <a href="http://data.eol.ucar.edu/master-list/?project=MILAGRO">http://data.eol.ucar.edu/master-list/?project=MILAGRO</a>.

The ICARTT file format structure has recently been used during the NASA ARCTAS and NOAA ARCPAC campaigns, two major components of the International Polar Year 2008 Project. The data management plan, file format standards, and archived data are provided at: <a href="http://www-air.larc.nasa.gov/missions/arctas/arctas.html">http://www-air.larc.nasa.gov/missions/arctas/arctas.html</a> and <a href="http://www.esrl.noaa.gov/csd/arcpac/">http://www.esrl.noaa.gov/csd/arcpac/</a>, respectively.