

**ARM FOURIER-TRANSFORM SPECTROMETER  
DATA-ANALYSIS TOOLS**

**SMITH, WILLIAM L.**

**UNIVERSITY OF WISCONSIN**

**FY 1992 191**

**FY 1991 0**

**FY 1990 0**

**12/01/91v11/30/92**

THE SCHWERTFEGER LIBRARY  
1225 W. Dayton Street  
Madison, WI 53706

**Objective:** To develop and test radiative-transfer models through the analysis of the spectral-radiance and solar-absorption data collected at the ARM sites.

**Product:** Data-analysis tools specifically tailored to retrieve atmospheric parameters (including cloud optical properties) and temperature and moisture profiles from observational data produced by the atmospheric-emitted-radiance interferometer (AERI), AERI-X, and solar-radiance-transmission interferometer (SORTI) FTIR.

**Approach:** Radiative-transfer algorithms will be developed and tested to derive atmospheric state parameters from FTIR observations. Techniques will be developed for inferring atmospheric temperature and moisture profiles, trace-gas information, and cloud radiative properties from data acquired with the AERI, AERI-X, and SORTI.

---

Send comments to [WWW Administrator](#)

This page last modified on Monday, 10-Apr-2000 17:09:31 GMT

[Security Notice](#)

All rights reserved.