

Home

Online Library ACP

- ▣ Recent Final Revised Papers
- ▣ [Volumes and Issues](#)
- ▣ Special Issues
- ▣ Library Search
- ▣ Title and Author Search

Online Library ACPD

Alerts & RSS Feeds

General Information

Submission

Review

Production

Subscription

Comment on a Paper

Impact
Factor
4.865

ISI
indexed



▣ [Volumes and Issues](#) ▣ [Contents of Issue 7](#)

Atmos. Chem. Phys., 5, 1855-1877, 2005
www.atmos-chem-phys.net/5/1855/2005/

© Author(s) 2005. This work is licensed under a Creative Commons License.

Technical note: The libRadtran software package for radiative transfer calculations - description and examples of use

B. Mayer¹ and A. Kylling^{2,3}

¹Deutsches Zentrum für Luft- und Raumfahrt (DLR), Institut für Physik der Atmosphäre, Oberpfaffenhofen, Germany

²St. Olavs Hospital, Trondheim University Hospital, Norway

³previously at: Norwegian Institute for Air Research (NILU), Kjeller, Norway

Abstract. The libRadtran software package is a suite of tools for radiative transfer calculations in the Earth's atmosphere. Its main tool is the uvspec program. It may be used to compute radiances, irradiances and actinic fluxes in the solar and terrestrial part of the spectrum. The design of uvspec allows simple problems to be easily solved using defaults and included data, hence making it suitable for educational purposes. At the same time the flexibility in how and what input may be specified makes it a powerful and versatile tool for research tasks. The uvspec tool and additional tools included with libRadtran are described and realistic examples of their use are given. The libRadtran software package is available from <http://www.libradtran.org>.

▣ [Final Revised Paper](#) (PDF, 1441 KB) ▣ [Discussion Paper](#) (ACPD)

Citation: Mayer, B. and Kylling, A.: Technical note: The libRadtran software package for radiative transfer calculations - description and examples of use, Atmos. Chem. Phys., 5, 1855-1877, 2005. ▣ [Bibtex](#) ▣ [EndNote](#) ▣ [Reference Manager](#)

Search ACP

Library Search

Author Search

News

- ▣ [Sister Journals AMT & GMD](#)
- ▣ [Financial Support for Authors](#)
- ▣ [Journal Impact Factor](#)
- ▣ [Public Relations & Background Information](#)

Recent Papers

01 | ACP, 12 Feb 2009:
Evaluating the performance of pyrogenic and biogenic emission inventories against one decade of space-based formaldehyde columns

02 | ACP, 11 Feb 2009:
Investigation of NO_x emissions and NO_x-related chemistry in East Asia using CMAQ-predicted and GOME-derived NO₂ columns

03 | ACPD, 10 Feb 2009:
Long-term study of VOCs measured with PTR-MS at a rural site in New Hampshire with urban influences