Last Modified: 10/7/2008

Frequently Asked Questions about LNFL and LBLRTM
AER, Inc.

2 General LBLRTM Description

LBLRTM (Line-By-Line Radiative Transfer Model) is an accurate and efficient line-by-line radiative transfer model derived from

Most file names are given as "TAPEx" where x is a one- or two-digit number. The name is

Note that a limited amount of spectral output information may also be put in the TAPE6 using the MPTS/NPTS options of TAPE5 record 1.2.

4 Instructions and Tips for Running LNFL

LNFL is used to generate a unformatted file (TAPE3) of all the line parameters required by LBLRTM.

4.1 Input files for LNFL

TAPE1: The line parameter database in ASCII format (also available on www.rtweb.aer.com).

The spectral

simplify radiative transfer calculations by using approximations to represent the line-by-line characteristics of a particular spectral interval.

boundary (IMRG=40 and IOD=3) with the Jacobian taken with respect to state type xx where:

xx = -1 surface parameters
xx = 0 temperature

Multiple runs of Step C may be performed once A