

APPENDIX B. DATASETS AVAILABLE FOR DOWNLOAD

The weighted UV distributions described in this Technical Note are available for free download from the NCAR Community Data Portal, at: <http://cdp.ucar.edu>

To find the datasets, navigate the 'browse' menu through the directory structure:

ACD > ACD Models > TUV > Erythema_UV

First-time users are required to create a login.

Climatologies are available for the periods 1979-1989, 1990-2000, and 1979-2000. The 1979-2000 climatology of erythema UV is also available for download as a postscript figure.

Download filenames are of the form `clim_y1-y2.name.zip` where *y1* and *y2* are the last two digits of the first and last years of the climatology, respectively, and *name* is the three-letter abbreviation assigned to the weighting function (see Table A1). Monthly filenames are of the form `y1y2mm.name.dat` where *mm* is the month, and *y1*, *y2*, and *name* are as already defined.

Each download file contains twelve ascii files (for months January through December). Figure A1 shows the first six lines of a sample data file, including the three-line header. Total UV irradiance values are given in units of $\text{kJ/m}^2/\text{month}$ for ozone-only calculations, and for climatological cloudiness. The data are arranged by longitude and latitude, starting at the South Pole dateline and progressing east and then north.

Table B1. Abbreviations for spectral weighting function names

<i>name</i>	Weighting Name	Spectral Range	Reference
UVA	UV-a	315-400 nm	
UVB	UV-b	280-315nm	
Ery	human erythema	250-400nm	McKinlay & Diffey, 1987
VtD	previtamin D ₃ production	252-330nm	Holick <i>et al.</i> , 2006; MacLaughlin <i>et al.</i> , 1982
NMC	photocarcinogenesis (non-melanoma skin cancers)	250-400nm	CIE, 2006

Figure B1. Example data file

units: $\text{kJ.m}^{-2}.\text{month}^{-1}$

11-year climatological monthly means, 1979-1989, month = 1

lat long ozone-only ozone+cloud

-89.5 -179.375 5.501e+04 5.042e+03

-89.5 -178.125 5.501e+04 5.042e+03

-89.5 -176.875 5.501e+04 5.042e+03

(etc...)