

earth observatory


[home](#) • [data & images](#) • [features](#) • [news](#) • [reference](#) • [missions](#) • [experiments](#) • [search](#)
[glossary](#) on off

REFERENCE

ULTRAVIOLET RADIATION: HOW IT AFFECTS LIFE ON EARTH

References

Herman, J. R. and Celarier, E. Al. 1997. "Earth Surface Reflectivity Climatology at 340 nm to 380 nm from TOMS Data," *Journal of Geophysical Research* 102, pp. 28003-28011

Krotkov, N.A., P.K. Bhartia, J. Herman, Z. Ahmad, V. Fioletov. 2001. "Satellite estimation of spectral surface UV irradiance 2: Effect of horizontally homogeneous clouds and snow," *Journal of Geophysical Research*, 106

Prézelin, Barbara B.; Moline, Mark A.; and Matlick, H. Allen. 1998. Icecolors '93: Spectral UV Radiation Effects on Antarctic Frazil Ice Algae. *Antarctic Sea Ice Biological Processes, Interactions, and Variability*. American Geophysical Union, Antarctic Research Series, Vol. 73

U.S. Department of Agriculture at Colorado State University. 2001. Managing Editors James R. Slusser and Wei Gao. *The USDA UVB Monitoring and Research Program*. (Colorado State University, Natural Resource Ecology Laboratory)

Vasilkov, Alexander, et al. 2001 "Global mapping of underwater UV fluxes and DNA-weighted exposures using TOMS and SeaWiFS data products" *Journal of Geophysical Research*, 106

World Meteorological Organization, Christine A. Ennis, Coordinating Editor. 1998. *Global Ozone Research and Monitoring Project—Report No. 44*. Scientific Assessment of Ozone Depletion.

Personal Communications

Edward De Fabo
 Professor of Dermatology
 George Washington University Medical School
 Washington, DC
 Phone: 202-994-3975

Ultraviolet Radiation

[Introduction](#)

[Effects on the Biosphere](#)

[What Determines UV at the Surface?](#)

[How Much Are We Getting?](#)

[Predictions and](#)

[Monitoring](#)

[References](#)

E-mail: drmeecd@gwumc.edu

Jay R. Herman
Principal Investigator for TOMS Aerosol/UV Projects
NASA/Goddard Space Flight Center
Mailstop 916.0
Greenbelt, MD 20771
Phone: 301-614-6039
E-mail: herman@tparty.gsfc.nasa.gov

Ernest Hilsenrath
Deputy Project Scientist, EOS Aura Project
NASA Goddard Space Flight Center
Mailstop 916.0
Greenbelt, MD 20771
Phone: 301-614-6033
E-mail: Ernest.Hilsenrath.1@gsfc.nasa.gov

Deneb Karentz
Chair, Department of Biology
University of San Francisco
2130 Fulton St.
San Francisco, CA 94117
Phone: 415-422-2831
E-mail: karentzd@usfca.edu

Nikolay A. Krotkov
Senior Research Scientist
Goddard Earth Sciences and Technology Center
NASA Goddard Space Flight Center
Mailstop 916.0
Greenbelt, MD 20771
Phone: 301-614-5553
E-mail: krotkov@tparty.gsfc.nasa.gov

Sasha Madronich, Senior Scientist
Section Head, Theoretical Studies and Modeling
Atmospheric Chemistry Division
National Center for Atmospheric Research
1850 Table Mesa Drive; P.O. Box 3000
Boulder, CO 80307
Phone: 303-497-1430; Fax: 303-497-1400
E-mail: sasha@acd.ucar.edu

Barbara Prézelin
Head, Marine Primary Production Group
Department of Ecology, Evolution and Marine
Biology
University of California
Santa Barbara, CA 93106
Phone: 805-893-2879/4319; Fax: 805-893-4319 or

805-893-4724

E-mail: barbara@lifesci.ucsb.edu;
barbara@icess.ucsb.edu

Raymond C. Smith
CSL/CENTER Remote Sensing and Environmental
Optics
University of California, Santa Barbara, CA
Phone: 805-893-4709
E-mail: ray@crseo.ucsb.edu

next: [Introduction](#)

back: [Predictions and Monitoring](#)

[Subscribe to the Earth Observatory](#)

[About the Earth Observatory](#)

[Contact Us](#)

[Privacy Policy and Important Notices](#)

Responsible NASA Official: Lorraine A. Remer

Webmaster: Goran Halusa

We're a part of the [Science Mission Directorate](#)

view printable format
of full article

