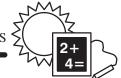
For:poppe

Printed on:Mon, Mar 30, 1998 15:39:12

From book:Space Physics curriculum

**Document:Resources and References** 

Last saved on:Mon, Jun 17, 1996 09:56:09



# Resources

<u> </u>	1
Learning Technologies, Inc. / Project STAR	59 Walden St.
kits, materials and activities for astronomy	Cambridge, MA 02140 800–537–8703
Edmund Scientific	N937 Edscorp Bldg.
diffraction gratings, colored filters, lenses, many science materials	Barrington, NJ 08007 609–573–6250
Astronomical Society of the Pacific	390 Ashton Ave.
books, software, slides, poster, video tapes, newsletter, and 24-hr astronomy hotline	San Francisco, CA 94112 415–337–2126
Sky Publishing Corp.	P.O. Box 9111
publishes <i>Sky and Telescope</i> magazine; books, sky charts, slides, reprints or activities, videos, etc.	Belmont, MA 02178–9111 800–253–0245
Roger W. Tuthill, Inc.	Box 1086 ST
telescopes, videos, solar filters and Solarskreen <sup>®</sup> materials	Mountainside, NJ 07092 908–232–1786
Edwin Hirsch, FRAS	29 Lakeside Dr.
information on the sun and solar telescope hardware such as $H\alpha$ filters.	Tomkins Cove, NY 10986 914–786–3738
Thousand Oaks Optical	Box 5044–289
carries a large assortment of precision solar filters for telescopes, $H\alpha$ filters, and mylar filters similar to Solar-skreen	Thousand Oaks, CA 91359 805–491–3642
National Geophysical Data Center	NOAA Code E/GCA, Dept. ORD
solar-terrestrial physics data available from a bulletin board system, on CD ROM, on PC floppy disk or a monthly publication	325 Broadway Boulder, CO 80303–3328 303–497–6346 Internet: info@ngdc1.colorado.edu BB: 303–497–7319
NASA Headquarters	Educational Affairs Division
ask for <i>Programs and Services Summary</i> , a full list of NASA resources	Washington, DC 20546 202–453–8386
Science Probe! Magazine	500–B Bi County Blvd.
many ideas for projects that relate to solar-terrestrial interaction that could be adapted to solar projects	Farmingdale, NY 11735 516–293–0467
Astronomy Magazine	Kalmbach Publshing Co.
general astronomy publication and astronomy related products. Forum is available on CompuServe.	21027 Crossroads Circle Box 1612 Waukesha, WI 53187 800–533–6644
Black Forest Observatory	12815 Porcupine Lane
many educational astronomy products	Colorado Springs, CO 80908 719–495–3828



Helmer Enterprises	3333 Holy Branch Ct., Suite 453
solar viewers and filters	Sacramento, CA 95834 916–567–0350
Colorado Space Grant Consortium	University of Colorado at Boulder
many resource contacts from individuals to clubs to government agencies	Campus Box 10 Boulder, CO 80309–0010 303–492–3141
NASA Teacher Resource Center	AP42
teacher resources for all aspects of space science	NASA Lyndon B. Johnson Space Center Houston, TX 77058
Martin Marietta Astronautics Group	Public Relations Department
materials related to their current projects	P.O. Box 179 Denver, CO 80201
Ball Aerospace Systems Group	Public Relations Department
many educational materials, activity packets, slides, etc.	Boulder, CO 80306 303–939–4410
Science Graphics	P.O. Box 7516
science teaching slide sets	Bend, OR 97708 503–389–5652
Tersch Enterprises	P.O. Box 1059
educational slides on astronomy	Colorado Springs, CO 80901 719–597–3603
Hansen Planetarium Publications	1845 South 300 West #A Salt Lake City, UT 84115 801–483–5400
many slides, photos, maps, posters, etc.	
Andromeda Software, Inc.	P.O. Box 605
many low cost science programs for a variety of personal computers. Catalog is frequently updated.	Amherst, NY 14226–0605
Zephyr Services	1900 Murray Ave., Dept. A Pittsburgh, PA 15217 800–533–6666
computer software and videos related to astronomy	
Vernier Software Company	2920 S.W. 89th Street Portland, OR 97225 503–297–5317
computer sensors and probes; data analysis software that could be adapted to projects	
The Electronics Goldmine	P.O. Box 5408 Scottsdale, AZ 85261 602–451–7454
electronic parts that could be adapted to solar projects, such as photovoltaic solar cells, and Geiger counter kits for solar flare experiments	
Warner New Media	3500 Olive Ave.
The View from Earth CD-ROM for the Mac contains interactive menus on the solar system and the Sun	Burbank, CA 91505 818–955–9999
Software Marketing Corp.	9830 S. 51st St. A131
Orbits program for the PC (not Windows) contains lots of interactive menus on the solar system and the Sun	Phoenix, AZ 85044 602–893–2400



# References

There are many additional excellent books on these subjects. Check your local library.

### The Sun/Solar

Bray, R.J. and R.E. Loughead, Sunspots, John Wiley and Sons, Inc., NY, 1965.

Eddy, J., A New Sun: The Solar Results from Skylab, NASA SP-402, 1979.

Gibson, E.G. The Quiet Sun, NASA SP-303, 1973.

Giovonelli, Secrets of the Sun.

Kuiper, The Sun, University of Chicago Press, 1953.

Nicolson, I., The Sun, Rand-McNally and Company, 1982.

Noyes, R.W., The Sun, Our Star, Harvard University Press, 1982.

Priest, E.R. (ed.), *Solar Flare Magnetohydrodynamics*, The Fluid Mechanics of Astrophysics and Geophysics, Vol. 1, Gordon and Breach Science Publishers, NY, 1981.

Svestka, Z., Solar Flares, American Science and Engineering Inc., Cambridge, MA 02139.

White, O.R., Solar Output and Its Variation, Colorado Associated University Press, Boulder, CO, 1977.

#### Geomagnetic

Chapman, S., and Bartels, J., *Geomagnetism*, International Series of Monographs on Physics, Vols. I and II, Oxford University Press, London, England, 1940.

Matsushsita, S., and Campbell, W.H., (eds.), *Physics of Geomagnetic Phenomena*, Vols. 1 and 2, International Geophysics Series, Academic Press, NY, 1967.

Parkinson, W.D., Introduction to Geomagnetism, Scottish Academic Press Ltd., Edinburgh, Scotland, 1983.

#### Magnetosphere/Ionosphere

Brekke, A., Egeland, A., The Northern Lights, Springer-Verlag, 1983.

Brier, H.S., Orr, W.I., VHF Handbook for Radio Amateurs, Radio Publication Inc., 1974.

Chamberlain, J.W., *Physics of the Aurora and Airglow*, International Geophysics Series, Vol. II, Academic Press, NY, 1961.

Davies, K., Ionospheric Radio, Peter Peregrinus Ltd., London, England, 1990.

Eather. R.H., Majestic Lights, American Geophysical Union, Washington, D.C., 1980.

Gassman, G.J., The Effect of Disturbances of Solar Origin on Communications, Pergamon Press, 1963.

Lanzerotti, L.J., (ed.) "Impacts of Ionospheric/Magnetospheric Process on Terrestrial Science and Technology," in *Solar System Plasma Physics*, Vol. III, North Holland Publishing Co., 1979

Massey, H.S.W., Boyd, R.L.F., The Upper Atmosphere, Chapter 9, Benham and Company Limited, 1959.

McCormac, B., Omholt, A., Atmospheric Emissions, Van Nostrand Reinhold Company, 1969.

Pope, J.H., Grubb, R.H. *Effects of Solar Disturbances on Radio Communication with Aircraft*, C55.13/2:ERL NSSL–56, available through the Government Printing Office.

Ratcliffe, J.A., *An Introduction to the Ionosphere and Magnetosphere*, Cambridge University Press, London, England, 1972.

Saveskie, P.N., Radio Propagation Handbook, Tab Books Inc., Blue Ridge Summit, PA 17214

The Radio Amateurs Handbook, American Radio Relay League, Newington, CT, 06111

## **Energetic Particles**

Barish, R.J., Understanding In-Flight Radiation, In-Flight Radiation Services, Inc., NY, 1989.

Beir, V., *Health Effects of Exposure to Low Levels of Ionizing Radiation*, National Academy Press, Washington D.C., 1990.

Hundhausen, A.J., Coronal Expansion and Solar Wind, Springer-Verlag, NY, 1972.

Lanzerotti, L.J., Solar System Plasma Physics, North Holland Publishing Company, NY, 1979.

Zirker, J.B., Coronal Holes and High Speed Wind Streams, Colorado Associated University Press, Boulder, CO, 1977.

"Health Effects of Low Level Ionizing Radiation," Physics Today, August, 1991.

# **Additional Readings**

Allen, C.W., Astrophysical Quantities, Third Ed., The Athlone Press, London, England, 1973.

Brown, S., All About Telescopes, Edmund Scientific Co., Barrington, NJ, 1967.

Bruzek, A., and Durrant, J., *Illustrated Glossary for Solar and Solar-Terrestrial Physics*, Astrophysics and Space Science Library, Vol. 69, D. Reidel Publishing Co., Boston, MA, 1977.

Donnelly, R.F., (ed.) *Solar Terrestrial Predictions Workshop Proceedings*, Vols. I–IV, U.S. Dept. of Commerce, NOAA/ERL, U.S. Government Printing Office, 1979.

Gauthreax, Jr., S.A., Animal Migration, Orientation and Navigation, Chapter 5, Academic Press, New York, 1980.

Gilliland, J.M., *Solar-Terrestrial Physics: A Glossary of Terms and Abbreviations*, Royal Aircraft Establishment Technical Report 67158, Ministry of Technology, Farnborough, Hants., England, 1967.

Gnevyshev, M.N. and OI', A.I., Editors, *Effects of Solar Activity on the Earth's Atmosphere and Biosphere*, Israel Program for Scientific Translations, Keter Publishing House Jerusalem Ltd., 1977.

Harding, R., Survival in Space, Routledge, NY, 1989.

Hess, W.T., and Mead, G. (eds.) Introduction to Space Science, Gordon and Breach Science Publishers, NY, 1968.

Herman, J.R. and Goldberg, R.A., Sun, Weather, and Climate, NASA SP-426, U.S. Government Printing Office, 1978.

Johnson, N.L. and McKnight, D.S., Artificial Space Debris, Orbit Book Co., 1987.

Jursa, A.S., *Handbook of Geophysics and the Space Environment*, Air Force Geophysics Laboratory, Air Force Systems Command, USAF, 1985.

Kundu, M.R., and Gergely, T.E., *Radio Physics of the Sun*, IAU Symposium No. 86, International Astronomical Union, D. Reidel Publishing Co., Boston, MA, 1980.



Mangis, S.J., Introduction to Solar-Terrestrial Phenomena and The Space Environment Services Center, U.S. Government Printing Office, Washington, D.C., 1975.

McCormac, B.M., (ed.) Weather and Climate Responses to Solar Variations, Colorado Associated University Press, Boulder, CO, 1983.

McKinnon, J.A., *August 1972 Solar Activity and Related Geophysical Effects*, NOAA Technical Memorandum ERL SEL–22, U.S. Government Printing Office, Washington, D.C., 1972.

Roth, G.D., (ed.) Astronomy: A Handbook, Sky Publishing Corporation, Cambridge, MA, 1975.

The International System of Units (SI), NBS Special Publication 330, 1986.