This brief list is only an introduction to the study of astronomy of various cultures. Archaeoastronomy is the branch of archaeology that looks at the astronomical ideas and monuments of ancient cultures. Here we cite only some resources that are of interest to non-specialists and educators.

**A. General Books and Articles**

Aveni, Anothony *Conversing with the Planets*. 1992, Times Books. Celebrates the myths of many cultures; emphasizes the importance of seeing them in their own context.

Gleiser, Marcelo *The Dancing Universe: From Creation Myths to the Big Bang*. 1997, Dutton/Penguin. An exploration by a physicist of ideas from many cultures of how the universe came to be, including ancient legends and modern science.

Hadingham, Evan *Early Man and the Cosmos*. 1984, Walker & Co. A clear primer on the subject of ancient sites and the astronomical thinking of ancient cultures around the world.


Sakimoto, Phil & Rosendhal, Jeff “Obliterating Myths About Minority Institutions” in *Physics Today*, vol. 98, #9, pp. 49-53 (September 2005). The authors, formerly the heads of NASA's space science education and public outreach program, offer some frank comments about the task of developing space science programs at minority colleges and universities.
Walker, Christopher, ed. *Astronomy Before the Telescope*. 1996, St. Martin’s Press. 17 essays on how people observed and interpreted the sky before modern instruments.


**B. General Web Sites**

Ancient Observatories, Timeless Knowledge (Stanford Solar Center):

http://solar-center.stanford.edu/AO/ An introduction to ancient sites where the movements of celestial objects were tracked over the years (with a special focus on tracking the Sun.)

Astronomy Before History by Clive Ruggles and Michael Hoskin (from the Cambridge Concise History of Astronomy) -- a nice pdf file with a well-written introduction to ancient astronomy:

http://assets.cambridge.org/052157/2916/sample/0521572916web.pdf

The Center for Archaeoastronomy at the University of Maryland:

http://www.wam.umd.edu/~tlaloc/archastro/ Good site to learn more about the serious study of the astronomical relics of ancient cultures; some parts for the public, some for professionals in the field.

Cultural Astronomy Web Exhibit: http://ecuip.lib.uchicago.edu/diglib/science/cultural_astronomy/ Modules and resources on many cultures that have an astronomical tradition, created with the assistance of Chicago’s Adler Planetarium.

Indiana Jones and the Astronomy of Yore:


An Introduction to Archaeoastronomy (Clive Ruggles’ 2003 Introductory Course Notes and Images at the University of Leicester): http://www.le.ac.uk/archaeology/rug/aa/a3015/index.html

Multicultural Cosmology Education Resource Center at Pomona College:

http://www.astronomy.pomona.edu/archeo/intro.html Bryan Penprase and his collaborators have made this useful introductory site, which includes a world atlas of ancient astronomy, course outlines, a timeline and links to other resources.

Solar Folklore from the Stanford Solar Center: http://solar-center.stanford.edu/folklore/ Myths and legends about the Sun from cultures around the world.

Traditions of the Sun: http://www.traditionsofthesun.org/ The NASA Sun-Earth Connection Education Forum site offers virtual visits to Mayan astronomical sites and Chaco Canyon placed in appropriate historical, cultural, and scientific contexts.

Using Multicultural Dimensions to Teach Astronomy:


**C. Resources about Specific Cultures**

1. **Astronomy and People of Color in the U.S.**


Rall, Gloria "The Stars of Freedom" in Sky & Telescope, Feb. 1995, p. 36. On how slaves used songs with the Big Dipper to show them escape routes from the South.

Stassun, Keivan “Building Bridges to Diversity” in Mercury, May/June 2005, p. 20. The Chair of the Committee on the Status on Minorities in Astronomy for the American Astronomical Society discusses what could be done to increase the number of minority astronomers.


Committee on the Status of Minorities (AAS) Web site: http://www.aas.org/csma Discussions of and resources about minority issues in the training of professional astronomers in the U.S.

Follow the Drinking Gourd Educator’s Guide (about how slaves used a song about the Big Dipper to find their way North in the U.S.; note however, the next reference in our list for some doubts about the modern song’s antiquity):
http://www.rapides.k12.la.us/schooltech/david/UR/Educator%20Guide%201.doc

Follow the Drinking Gourd Website: http://www.followthedrinkinggourd.org/ An amateur music scholar has researched the history of the song about the Big Dipper more thoroughly and presents his work here.

2. Astronomy of Native North American Cultures

Carlson, J. "America's Ancient Skywatchers" in National Geographic, vol 177, #3, Mar 1990, p. 76.
Krupp, E. “Whiter Shade of Pale” in Sky & Telescope, July 2000, p. 86. A rock that looks like the Milky Way and was used in ceremonies by Native Americans in California.


Maryboy, Nancy & David Begay Sharing the Skies: Navajo and Western Cosmos. 2006, Indigenous Education Institute & World Hope Foundation (available from amazon.com). An authoritative compilation by Navajo and Western astronomers of illustrations, stories, and observations of Navajo constellations coupled with stories from corresponding Greek constellations and Hubble Space Telescope images of objects found in that part of the sky. This is a kit that includes an audio CD, a small poster of the Dine Universe, and learning activities.

McLeary, Timothy The Stars We Know: Crow Indian Astronomy and Lifeways. 1997, Waveland.


3. Astronomy of Central American (Maya and Aztec) Cultures

Aveni, Anthony "Emissaries to the Stars: The Astronomers of Ancient Maya" in *Mercury*, Jan/Feb. 1995, p. 15. (See the books by Aveni in the first section.)


Activity from NOVA to figure out your birthday in the Maya calendar (if you were born 1980 or after): [http://www.pbs.org/wgbh/nova/teachers/activities/pdf/2804_maya.pdf](http://www.pbs.org/wgbh/nova/teachers/activities/pdf/2804_maya.pdf)


Maya Exploration Center (Dr. Edwin Barnhart): [http://www.mayaexploration.org/](http://www.mayaexploration.org/) Includes tours of sites, resources, interviews, etc.


Venus and the Maya (David Rosenthal): [http://www.ridgenet.net/~n6tst/maya/default.html](http://www.ridgenet.net/~n6tst/maya/default.html)

4. Astronomy of South American Cultures (Inca, Nasca, etc.)


See many of the books in section A above

5. Astronomy of African Cultures


Ancient Horizons: [http://stardate.org/egypt/](http://stardate.org/egypt/) (From the University of Texas McDonald Observatory, material from a planetarium show on Egyptian astronomy and culture.)
The Dogon Tribe and the so-called “Sirius Mystery”: [http://www.ramtops.co.uk/dogon.html](http://www.ramtops.co.uk/dogon.html) and [http://chandra.harvard.edu/chronicle/0400/sirius_part2.html](http://chandra.harvard.edu/chronicle/0400/sirius_part2.html)


Doyle, Laurence and Frank, Edward “Astronomy of Africa”: [http://www.tusker.com/Archaeo/art.encyclo.htm](http://www.tusker.com/Archaeo/art.encyclo.htm) A review article from the *Encyclopaedia of the History of Science, Technology and Medicine in Non-Western Cultures*

### 6. Astronomy of India


### 7. Astronomy of Ancient European Cultures


Archaeoastronomy at Stonehenge: [http://witcombe.sbc.edu/earthmysteries/EMStonehengeD.html](http://witcombe.sbc.edu/earthmysteries/EMStonehengeD.html) (an art historian examines Stonehenge from many perspectives, including the astronomical)

Stone Pages: [http://www.stonepages.com/](http://www.stonepages.com/) (Mammoth web catalog about European stone circles and monuments, including Stonehenge and others with astronomy connections.)

### 8. Astronomy of Islamic Cultures


Arab and Islamic Astronomy (Leslie Welser): [http://www.starteachastronomy.com/arab.html](http://www.starteachastronomy.com/arab.html)


The Role of Astronomy in Islam (Dr. Shirin Haque-Copilah): [http://moonsighting.com/articles/roleofislam.html](http://moonsighting.com/articles/roleofislam.html)
Records of Eclipses in Muslim Astronomy:
http://www.muslimheritage.com/topics/default.cfm?ArticleID=810

9. Astronomy of Hawaiian, Polynesian, and Native Australian Cultures

Makemson, Maud The Morning Star Rises: An Account of Polynesian Astronomy. 1941, Yale University Press.

Introduction to Maori Star Lore (New Zealand):
Polynesian Voyaging Society: http://pvs.kcc.hawaii.edu/welcome.html

10. Astronomy of Asian Cultures


Chinese Astronomy: http://www.chinapage.com/astronomy/astronomy.html (this site is potpourri of all kinds of information)
The Mathematics of the Chinese Calendar (by Helmer Aslaksen of the National University of Singapore): http://www.math.nus.edu.sg/aslaksen/calendar/chinese.shtml
Copernicus in China (on the spread of Copernican ideas by Nathan Sivin of the University of Pennsylvania): http://ccat.sas.upenn.edu/~nsivin/cop.html
Japanese Star Lore: http://www2.gol.com/users/stever/jastro.html#Astro%20Lore
The Lunar Calendar in Japan: http://www2.gol.com/users/stever/calendar.htm
Bibliography of Korean Astronomy:
http://www.hawaii.edu/korea/bibliography/scientific_matters-astronomy.htm (This is a nice list of articles, but mostly in scholarly journals.)

D. Some Technical Volumes

Batten, Alan, ed. Astronomy for Developing Countries. 2001, International Astronomical Union. Published by the Astronomical Society of the Pacific (www.astrosoociety.org). Describes the
many challenges of starting or continuing astronomy programs in countries without an extensive science infrastructure.


David Dearborn’s bibliography of technical and nontechnical readings in archaeoastronomy can be found at: [http://archaeology.about.com/od/archaeoastronomy/a/dearborn_bib.htm](http://archaeology.about.com/od/archaeoastronomy/a/dearborn_bib.htm)

Acknowledgements: I am very grateful to David Dearborn, Phil Sakimoto, Keivan Stassun, Cary Sneider, and Jarita Holbrook for suggesting and composing several entries for this list.