My Favorite Archaeoastronomical Sites of the United States

*Archeoastronomical sites*: The US is rich in locations likely to have archeoastronomical significance. A partial list includes the following.

**Anderson Mounds.** These earthen creations (built between 250 and 160 BC) are burial sites of the Hopewell people. The Great Mound exhibits a gap that may be oriented to sunset on significant days of the solar calendar. Mounds State Park is overseen by the Indiana Department of Natural Resources.

**Big Horn Medicine Wheel.** This site is located near Lovell, Wyoming, at an altitude of 9,642 feet. It was erected by plains-dwelling Native Americans between *circa* 300 and *circa* 800 years ago. It is made up of a central cairn of stones surrounded by a circle of smaller cairns. Stones between the central and twenty-eight outlying cairns produce the appearance of spokes. Orientations between cairns mark the summer solstice. More speculatively, other alignments indicate the heliacal risings of bright stars. The Medicine Mountain National Historic Landmark is supervised by the National Forest Service. A fence has been placed around the 80-foot-diameter circle. Remoteness contributes to the Medicine Wheel’s security.

**Cahokia.** Near Collinsville, Illinois, this Mississippian Culture Native American city was built of earthen mounds and occupied *circa* 1050 – *circa* 1350. A timber circle has been excavated at Cahokia. As viewed from the center, sightlines between outlying posts and more distant mounds exhibit solar alignments. This is controversial. Other orientations are claimed as well. The Cahokia Mounds State Historic Site is designated a National Historic Landmark and a UNESCO World Heritage Site. It is managed by the Illinois Historic Preservation Division.

**Canyon de Chelly.** A collection of overhanging cliffs in northern Arizona is marked with crosses that look like stars. Some of these “stars” give the impression of constellations. The patterns were created by the Navajo in the eighteenth century. They are now preserved by the National Park Service as Canyon de Chelly National Monument and by the Navajo Nation.

**Chaco Canyon.** This assemblage of multi-story stone dwelling complexes and kivas, all connected by ancient roads, is located in Northern New Mexico. Its residents were the Ancestral Puebloans who flourished there from *circa* 850 to circa 1150. Chacoan architecture appears to take astronomical alignments in mind. Chaco Canyon is also home of the unique Sun Dagger petroglyph, which seems to have been created so that sunlight and shadow will mark astronomically important dates. Today all these buildings are part of the Chaco Canyon National Historical Park and watched over by the National Park Service.

**Chimney Rock.** This Ancient Puebloan community (*circa* 925 – *circa* 1125) is in southwestern Colorado. As observed from the Chimney Rock Pueblo itself, two tall buttes form a side-by-side
pair against the skyline. The Moon rises between these buttes near the time of the maximum (northern) lunar standstill. So designated only recently by President Barack Obama, Chimney Rock National Monument is managed by the United States Forrest Service.

**Hovenweep.** This set of six Ancient Puebloan villages was built between *circa* 1200 and *circa* 1300 on what is now the Colorado-Utah border. It looks as if within the cylindrical Hovenweep Castle, ports were placed so that sunlight would illuminate the opposite wall on astronomically significant days. Hovenweep is a National Monument curated by the National Park service and has been named an International Dark Sky Park by the International Dark-Sky Association.

**Mesa Verde.** Another Ancient Puebloan site, Mesa Verde, flourished from *circa* 600 to *circa* 1300. It consists of ground structures and cliff dwellings. The Sun Temple may incorporate solar orientations and, more controversially, lunar alignments. Today this site in Southwestern Colorado is Mesa Verde National Park, and is administered by the National Park Service. It is on UNESCO’s register of World Heritage Sites.

**Newark Earthworks.** Heath, Ohio. This Hopewell construction (before 400) is the largest pre-Columbian earthworks in the Americas. Of archaeoastronomical interest is the portion consisting of an octagon and connected circle. Newark suffers from the “Stonehenge Effect”: A large selection of potential fore- and backsights nearly guarantees an astronomical alignment. However, the principal axis of the octagon and circle points to within half a degree of moonrise at the maximum northern lunar standstill. If intentional, this makes Newark a rare orientation with respect to the Moon. The Newark Earthworks is privately owned, but designated a National Historic Landmark. (Part of it is occupied by a golf course!) It has been nominated to become a UNESCO World Heritage Site.

**Ocmulgee Mounds.** Near Macon, Georgia, lies the Ocmulgee Mounds, a Mississippian Culture site (pre-1000). Inside a close-by earth lodge, sunlight passes through the door and strikes an inner “temple” on the Vernal Equinox. The National Park Service has downgraded this site from a National Monument and now designates it a Traditional Cultural Property, but oversees it as Ocmulgee Mounds National Historical Park.

**Serpent Mound.** Near Peebles, Ohio. Serpent Mound was built by either the Adena (*circa* 800 BC – *circa* 100) or Fort Ancient culture (*circa* 100 – *circa* 1600). It is said to be the largest effigy mound in the world. The serpent is curvilinear with a spiral tail; its mouth opens wide to accept an egg-shaped figure. The mouth seems to face the summer solstice sunrise. Regardless, Serpent Mound is worth seeing for its artistry. It is a privately-owned (Arch of Appalachia), National Historic Landmark.

**Sivan Vah'Ki.** This four-story Hohokam structure (abandoned *circa* 1450) is found near Coolidge, Arizona. Windows appear to align with sunset at astronomically important times of the year. Today the building is part of Casa Grande National Monument, protected by the
National Park Service. It is on the National Register of Historic Places. A metal shelter has been built over the “Great House” to shield it from weather.

**Yellow Jacket Ruin.** This assortment of Ancient Puebloan building types was occupied between *circa* 1160 and *circa* 1280. Monoliths of stone cast shadows upon nearby buildings on significant solar dates. Today Yellow Jacket is located in southwestern Colorado and is owned by the Archeological Conservancy.

*I have visited each site except, inexplicably, Chaco Canyon.*