



+ NASA Home
 + Search NASA Web
 + Pagina en Español
 + Contact NASA



- HEADLINE NEWS

+ SATELLITE TRACKING

+ ABOUT

+ MAILING LISTS

+ STORY ARCHIVES

+ OTHER LANGUAGES

FEATURE

Equinox Sky Show

03.19.2010

March 19, 2010: When the sun sets on Saturday, March 20th, a special kind of night will fall across the Earth. It's an equal night.

Or as an astronomer would say, "it's an equinox." It's the date when the sun crosses the celestial equator heading north. Spring begins in one hemisphere, autumn in the other. The day and night are of approximately equal length.

To celebrate the occasion, Nature is providing a sky show.

It begins as soon as the sky grows dark. The Moon materializes first, a fat crescent hanging about a third of the way up [the western sky](#). Wait until the twilight blue fades completely black and you will see that the Moon is not alone. The Pleiades are there as well.



The Moon and the Pleiades are having a close encounter of rare beauty. There's so little space between the two, the edge of the Moon will actually cover some of cluster's lesser stars. According to David Dunham of the International Occultation Timing Association, this is the best Moon-Pleiades meeting over the United States until the year 2023.

Right: A similar Moon-Pleiades conjunction photographed by Marek Nikodem of Szubin, Poland, in July 2009.

The Pleiades are a cluster of young stars some 440 light years from Earth. They formed from a collapsing cloud of interstellar gas about 100 million years ago. By the standards of astronomy, that's *really* young. The Earth under your feet is almost 50 times older. Dinosaurs were roaming our planet long before the Pleiades popped into being.

Only about seven of the Pleiades are visible to the unaided eye. The "Seven Sisters" are Sterope, Merope, Electra, Maia, Taygete, Celaeno and Alcyone, named after daughters of the mythological Greek god Atlas. Together, they form the shape of a little dipper, which is why the Pleiades are often mistaken for the Little Dipper, an asterism of Ursa Minor.

Binoculars are highly recommended for this event.



First, scan the Moon. You'll see craters, mountains and lava seas. Note that you can see the entire Moon, not just the brightly-lit crescent. The Moon's dark terrain is illumined by a ghostly glow called "Earthshine." It is the light of our own blue planet shining down on the Moon.

Next, scan the sky around the Moon. The Pleiades come into sharp focus---and they are more than seven. Dozens of faint "sisters" can be seen through even modest optics.

This night doesn't sound equal. It sounds much better than that.

Experience the equinox!

Author: [Dr. Tony Phillips](#) | Credit: [Science@NASA](#)

more information

[Sky map](#) -- look west after sunset on March 20th for the Moon-Pleiades conjunction

[The last Pleiades occultation over the USA until 2023](#) -- from David Dunham of the International Occultation Timing Association

[The Pleiades](#) -- Learn more about the Seven Sisters

[The Da Vinci Glow](#) --- a.k.a. "Earthshine"

[What is an equinox?](#) -- from Wikipedia



- + Freedom of Information Act
- + Budgets, Strategic Plans and Accountability Reports
- + The President's Management Agenda
- + Privacy Policy and Important Notices
- + Inspector General Hotline
- + Equal Employment Opportunity Data Posted Pursuant to the No Fear Act
- + Information-Dissemination Priorities and Inventories
- + USA.gov - Your First Click to the US Government
- + ExpectMore - A Program Which Determines Whether Government Programs Are Effective



Curator: [Everett Alexander](#)
NASA Official: Dr. Raymond G. Clinton
Last Updated: June 9, 2005
+ Contact NASA