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Do we ever see the back side of the moon

Even thousands of years ago, humans drew pictures to track the changes of the Moon. What’s actually happening is that from our spot on Earth, we see different parts of the Moon lit up by the Sun as the Moon travels in its orbit. Though they don’t know why, the near side also has more radiation than the far side, perhaps contributing to why the near side didn’t cool as fast.
12. China’s Chang’e missions have discovered a layered structure of dust, soil, and broken rocks on the far side, along with a large impact crater. Credit: NASA/Goddard Space Flight Center/Arizona State University
How did the Moon form? Credit: NASA/GSFC/Arizona State University
Why does it look like the Moon is changing shape? That means the same side is always turned toward us. Earth’s gravitational pull holds it in place. In subsequent years, assisted by subsequent spacecraft, astronomers also found that the far side features more craters and more crust, raising all sorts of questions about the origins of the moon’s asymmetries. The side we never see is called the “far side.” This far side has long intrigued humans, being the source of many questions about what might be found on its surface, particularly in many old science fiction stories and films. We know that the Moon’s dark areas, called maria - which is Latin for seas - are not actually seas. “The moon does rotate, but it rotates at the same speed that it rotates around the Earth.” The moon completes one full rotation on its axis in the time it takes to orbit the Earth. The licensor cannot revoke these freedoms as long as you follow the license terms.
14. How long is a day on the moon? Indeed, no matter where you are on Earth, no matter what time of year you observe it, you will always see the same face of the Moon. This phenomenon is far from enigmatic, it is simply due to the fact that the rotation period of our satellite is equal to its revolution period, or a little more than 27 days. What elements are found on the moon? What is libration? Instead, it’s simply permanently turned away from our line of sight. The spring-like motion is referred to as lunar libration. Yes, astronauts in lunar orbit, like those on the Apollo missions, were able to see the far side. This graphic shows all eight moon phases we see as the Moon makes a complete orbit of Earth about every four weeks. No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. But because the moon is tidally locked, taking the same amount of time to rotate around its axis as to revolve around Earth, it tends to show a single side to its observers on Earth.
Read More: Here Are 4 Reasons Why We Are Still Going to the Moon
Debunking the Dark Side of the Moon
Almost completely concealed, the side of the moon that faces away from Earth is a constant source of curiosity. Soviet spacecraft Luna 3 captured the first images of the far side in 1959. In other words, the Moon rotates on its axis and, during exactly the same period of time, around the Earth. Credit: NASA/JPL-Caltech/UCLA/MPS/DLR/IDA
There are still many questions left to answer about the Moon. The sky appears black on the Moon because it lacks a significant atmosphere. “Energy has to come from somewhere, so it comes from the rotation of the body.” The moon’s rotation relative to Earth slowed down, until it eventually reached zero.
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The moon is also slowing Earth’s rotation. Orbit refers to a celestial body’s path around another object, such as the Moon orbiting the Earth. It doesn’t generate its own light. But regardless of what you see on the lunar surface, we all view the same side of our natural satellite. Additionally, the near side is marked by large mare (volcanic plains), which cover up some of the older impact craters. Mare deposits of dark basalt fill many large basins on the nearside, whereas the highlands of the farside are made from a light-colored mineral called feldspar. This force has gradually slowed down the Moon’s rotation until it reached a point where its rotational period matched its orbital period. With fewer maria, it’s harder to pick out shapes like a face or a rabbit in the lunar far side, but there’s still plenty to see.
3 April 2025. “That would be the shape if all the fluids and solids could respond instantaneously,” Tyler told Live Science.
But the fluids and solids that make up both the moon and Earth can’t respond instantaneously. On July 20, 1969, NASA astronauts Neil Armstrong and Buzz Aldrin were the first people to set foot on the dusty surface of the Moon. Why is the far side more heavily cratered than the near side? This may result from even another difference: The lunar crust is thinner on the nearside, which means that the mantle (the once molten, denser layer that underlies the crust) is closer to the surface there. You can see the lunar module, “Eagle,” in the background. What did China find on the far side of the moon? Yes, scientists have discovered water in the form of ice, mainly in the permanently shadowed craters at the Moon’s poles, and within tiny glass beads on the surface. Scientists believe that the Moon formed early in the solar system’s history after Earth and an object about the size of Mars smashed into each other. Gravity exists as a gradient. Since then, missions like the Lunar Reconnaissance Orbiter have been able to tell us much more about the side we never see - and the far side doesn’t look anything like the near side.
9. The mystery continues to unfold, inviting us to explore further into the depths of our solar system. It’s a result of meteoritic impacts and the moon’s natural processes. Why is it difficult to land on the far side of the Moon? The Allure of the Lunar Far Side
The far side of the Moon continues to be a significant focus of scientific exploration for many reasons:
Understanding Lunar Formation
The geological differences between the near and far side provide invaluable data to understand the moon’s formation. Because these two periods are synchronized, the moon always presents the same face to us. Later, people used their observations of the Moon to create calendars. Libration is a slight wobbling motion of the Moon that allows us to sometimes see about 18% of the far side from Earth. Subsequently, in 1968, a human was able to observe the far side of the Moon for the first time, by three Americans during NASA’s Apollo 8 mission. This fascinating celestial phenomenon has captivated us for years and continues to inspire scientific inquiry. And a series of new spacecraft have taken things a step further: In January 2019, China’s Chang’e 4 spacecraft became the first to successfully land on the far side of the moon, while China’s Chang’e 6 became the first to retrieve far-side samples in June 2024.
Read More: Sealed for 50 Years, Rare Apollo Lunar Sample Will Have Its Opening Day
Unearthing Soil from the Far Side
Landing in the South Pole-Aitken Basin, one of the oldest and largest impact basins on the far side of the moon, both Chang’e 4 and Chang’e 6 were launched to study the stuff of the far side surface. Since then, several other spacecraft have snapped photos of the lunar far side, including NASA’s Lunar Reconnaissance Orbiter and China’s Chang’e 4. The first spacecraft to land on the far side of the moon. The images show that the moon’s far side is covered in craters and has fewer large, dark spots — called maria — than the near side. The side we cannot view from Earth is often, albeit inaccurately, referred to as the “dark side.” It’s not dark in the sense of perpetual night, as it experiences day and night like any other celestial body. But despite that, the signs of this spinning are surprisingly subtle. But why is the dark side of the moon, as it’s known, so elusive to the Earthbound? When the “near side” of the moon (the one we see) is experiencing a full moon from Earth, the “far side” is experiencing a “new moon.” The terms “near side” and “far side” are more precise and accurately reflect the lunar hemispheres. “Rocks are not elastic. The Moon does not shine with its own light. For example, NASA’s Lunar Reconnaissance Orbiter has been circling the Moon and sending back measurements since 2009.
3. From Earth, it might look like the Moon is changing shape each night - from a tiny sliver to a half moon to a full moon and back again.
8. As the Moon travels around Earth, different parts of it are lit up by the Sun. No warranties are given. These resources are valuable for future space exploration. It simply reflects light coming from the Sun. Since then, many satellites have sent back pictures and other data showing that the far side of the Moon differs from the nearside. Yes, unmanned spacecraft, like China’s Chang’e-4 mission, have landed on the far side, and deployed rovers and other instruments to study this region. Modern Exploration and Discoveries
Today, numerous space probes have thoroughly mapped the far side of the moon, using advanced imaging technologies. If given enough time, the moon could slow our planet’s rotation enough that it could become tidally locked to the moon, and only one side of our planet would ever see the moon. And while it inspires its fair share of conspiracies, it’s also credibly cited as a spot for looking for alien life, since it faces away from our steady stream of radio chatter. When the two bodies pull on each other, they create friction that slows the rotation of both objects. There is no direct line of sight, requiring relay satellites. Consequently, we only ever see one side of the moon. The moon rotates very slowly compared to Earth. Astronaut Buzz Aldrin set up several scientific experiments while on the surface of the Moon during the historic Apollo 11 mission. Adapt — remix, transform, and build upon the material for any purpose, even commercially. And the other 82 percent is occasionally observable, too, thanks to the fleets of spacecraft that map the moon’s surface from space.
In the 1950s, for instance, the Soviet Luna 3 spacecraft snapped photos of the far side of the moon for the first time. Instead, the far side of the moon transitions through the same sequence of lunar days and lunar nights as the near side, each experiencing two weeks of lunar day and two weeks of lunar night in turn.
Read More: 5 Ways Life on Earth Would Be Different If We Had Two Moons
Has Anyone Seen the Far Side of the Moon?
Naturally, to say that the far side of the moon is almost always unseen is not the same as saying it is never seen. Much like a race car drifts when it turns on the curved portions of an oval racetrack, the moon does have a tendency to want to spin faster. Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.
Conclusion
The “dark side” of the moon is a misnomer for the far side that remains hidden from Earth’s view due to tidal locking. While the far side of the moon is dark in the sense that it’s unfamiliar, it isn’t dark in the sense that it’s deprived of sunlight, as is sometimes surmised. We don’t see the far side because “the moon is tidally locked to the Earth,” said John Keller, deputy project scientist for NASA’s Lunar Reconnaissance Orbiter project. These explorations have revealed unique geological features, such as the South Pole-Aitken basin, a massive impact crater that could hold vital information about the moon’s history. Like Earth, it gets plenty of sunlight. This uneven distribution in gravity causes a torque, or a rotational force, making the moon spring back into place. Known as “synchronous rotation,” this is why we only ever see the Moon’s nearside from Earth. Credit: NASA/JPL-Caltech
Chances are that when you imagine the night sky, one of the first things that comes to mind is the Moon “glowing” in the darkness. Scientists believe the moon was molten, or hot liquid when it first formed, and then it cooled. This was a groundbreaking moment in lunar exploration. This image appeared in a 1902 French film called “Le Voyage dans la Lune” (“A Trip to the Moon”). However, no human has ever landed there. The Moon is the only other planetary body that humans have visited. “For one reason or another, one side was favored over the other,” Keller said. The license may not give you all of the permissions necessary for your intended use. Unveiling the Far Side
Despite being out of direct view from Earth, the far side of the moon is not entirely a mystery. Scientists are actively studying the differences in crustal thickness, impact crater density, and the composition of the far side to develop a more complete picture of its origins. But that wouldn’t happen for another 50 billion years — long after the death of the sun about 5 billion years from now.
Although we’ll never see the far side of the moon directly from Earth, spacecraft have photographed it.
Related: Will Earth ever lose its moon?
For example, “the moon is pulling on the ocean, so part of the ocean is trying to propagate in a way that would, ideally, create a bulge that was staying right under the moon,” Tyler said. When we watch the moon on Earth, we almost always see the same swath of its surface, since the moon rotates around its axis and revolves around Earth in around the same time, completing one rotation and one revolution every 27 days.
Of course, the moon changes constantly in other ways, appearing in the sky at different times and along different paths depending on the day, and in different degrees of illumination, from full illumination to none at all. These differences in the path and phase of our natural satellite result from the relative positions of the moon, Earth, and Sun in their orbits, constantly circling, moon around Earth and Earth around Sun. Scroll or pinch to zoom in and out. While Chang’e 4 accomplished the task with a rover — still operational — armed with a radar, a spectrometer, and other scientific instruments that scan the moon’s surface and subsurface and identify its minerals, Chang’e 6 collected and returned samples of rock and regolith with a robotic arm and scoop.
Both achievements are part of an ongoing mission to untangle the mysteries of the moon and its origins, far side and near. Around 16 percent is occasionally observable on Earth thanks to inconsistencies in the moon’s movement, slight twists and turns that show off slivers of the far side surface. The side we don’t see gets just as much light, so a more accurate name for that part of the Moon is the “far side.” We only ever see one side of the Moon because as it orbits around Earth, it also rotates on its own axis at the same speed. How Tidal Forces Caused Locking
Over billions of years, the Earth’s gravitational pull has exerted a powerful tidal force on the Moon. The attraction between the moon and Earth distorts both bodies and stretches them slightly toward each other, into a shape resembling an American football, said Robert Tyler, a physical oceanographer at NASA’s Goddard Space Flight Center. But because it isn’t a perfect sphere, as it turns, a smaller portion of the moon moves in toward Earth and a larger portion moves away. Has any human ever seen the far side of the moon? The visible side of the Moon is known to all, unlike the hidden side which very few humans have been able to see. Credit: NASA
What do we know about the Moon? Credit: NASA/JPL-Caltech
The “far side” of the Moon looks very different than the near side (see the first photo in this article). This image is based on data from NASA’s Lunar Reconnaissance Orbiter spacecraft. Indeed, the Moon rotated more quickly on its axis millions of years ago, but these tidal forces slowed its rotation until it reached a point of equilibrium and had the same period as its revolution around our blue planet.
When was this hidden face first observed?
Thus, the back of the Moon is never oriented toward the surface of our planet, and we always see the same side of our satellite, which has allowed us to map it for a long time. This marked a milestone in lunar exploration. This synchronization is what we call tidal locking. Beyond the “Dark Side”
Misconception
It’s important to address the misnomer of the “dark side.” This term creates an inaccurate perception that this hemisphere of the moon is shrouded in perpetual darkness. Telescopes placed there could probe deeper into the cosmos, without disruption from Earth’s signals. These early images revealed a heavily cratered landscape, strikingly different from the smoother, mare-filled near side. The Moon has inspired wonder and creativity for thousands of years. Share
Alike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. Notice how few dark areas the far side has. Review the sources used below for this article:
Sam Walters is a journalist covering archaeology, paleontology, ecology and evolution for Discover, along with an assortment of other topics. They have also explored the potential of resources in this area. Is there water on the moon? The nearside is darker than the farside (which is ironic, as a nickname for the farside is “the dark side of the Moon” even though it’s actually the brighter side of our satellite). Asteroid impacts could more easily fracture the crust down to the level of the mantle on the nearside, allowing magma to rise up to fill impact basins and form mare deposits. This means that although the Moon is rotating, it always keeps one face toward us.
4. Today, we study the Moon using telescopes and spacecraft. However, the moon is tidally locked to our planet. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. Frequently Asked Questions (FAQs)
Here are 15 frequently asked questions to help further clarify the mysteries surrounding the Moon’s “dark side”:
1. The Mechanics of Tidal Locking
Understanding Rotational and Orbital Periods
To grasp the concept of tidal locking, it’s crucial to understand the difference between rotation and orbit. This is due to variations in the Moon’s orbital speed and its tilt. Explore the Moon!
Click and drag to rotate the moon. La carte de la face visible de la Lune, avec toute les formations synmpa que vous pouvez y observer !
La plupart sont même visibles à l’œil nu !
pic.twitter.com/NL3pFzWHE2— OliveAstro (@OliveAstro) January 30, 2022
This synchronous rotation of the Moon around the Earth has a physical explanation, being the result of the tidal forces that act between our planet and its satellite. Notably, NASA’s Lunar Reconnaissance Orbiter (LRO) has provided incredibly detailed images.
6. Your tax-deductible donation ensures our vital reporting continues to thrive.
11. We even know that there is quite a bit of frozen water tucked away in craters near the Moon’s poles. The moon is tidally locked with Earth, meaning its rotational period (the time it takes to spin once on its axis) is the same as its orbital period (the time it takes to orbit the Earth). From these photos, astronomers found that the far side features fewer of the mare plains, or maria, that span the near side — as smooth and vast as oceans or seas when viewed from above and formed from flows of ancient lava. What is special about the Shackleton Crater?
From the August 2012 issue
Sara O’Connor, Gresham, Oregon
By Astronomy Staff | Published: August 28, 2012 | Last updated on May 18, 2023
Earth orbits the Sun once every 365 days (a year) and spins on its axis once every 24 hours (a day).
15. In 1959, the Soviet Luna 3 first photographed the farside, and in 1968, as NASA’s Apollo 8 orbited the Moon, human eyes first viewed it. Shackleton Crater is located at the Moon’s South Pole and is believed to contain substantial ice deposits within its permanently shadowed regions (PSRs). NASA this week released photographs of the far side of the moon, providing a lunar perspective we rarely get to see. When scientists test the South Pole-Aitken samples from Chang’e 6, for instance, they could find fragments of the moon’s interior, disrupted and brought to the surface by the impact that formed the basin. Instead, they are craters that lava seeped into billions of years ago. Recent missions, such as China’s Chang’e missions, have even landed on the far side, deploying rovers to collect data and samples. It rotates around its axis, and it revolves around Earth.
10. How do we study the Moon? Think of its imperfections, its spots and splotches, carved out and cratered from the impacts of asteroids, meteorites, and comets. Credit: NASA
Visualization Technology Applications and Development (VTAD)
It’s no wonder that we are fascinated. If you touch the spinning top to slow it down, that’s similar to what Earth’s gravity did to the moon’s rotation.
5. The Moon appears to glow because it reflects sunlight, making it visible from Earth. Chances are that your imagination conjured something surprisingly similar to mine, and to the imaginations of countless others. The reason for this similarity is simple: We almost always see the same surface when we stare at the moon, the same patterns of craters and cavities, thanks to the way that the moon moves, rotating and revolving around Earth. These ice deposits are being investigated for their potential use as resources for future lunar missions. This is the face of the Moon that we see from Earth. Early Exploration Through Space Probes
For centuries, humanity could only speculate about the far side of the Moon. Ten other American astronauts followed.
2. If the moon were a perfect sphere, then the gravity felt on the far side and the near side (or Earth’s side), would cancel each other out. Credit: NASA/JPL-Caltech
Is there actually a “dark side” of the Moon?
13. Since then, numerous missions have allowed us to learn more about the far side of the Moon and also to map it precisely. Why does the sky look black on the Moon? Indeed, it wasn’t until the mid-20th century that we learned more about this invisible side of our satellite.
La Lune comme vous ne lavez jamais vue (face cachée exposée)
pic.twitter.com/OnD1UUV55— SpaceScience (@SpaceScience) January 21, 2022
On 7 October, 1959, the Soviet probe Luna 3 was the first to take images of this side, which led to the first atlas of the far side of the Moon being published by the USSR Academy of Sciences on November 6, 1960. Is the far side of the Moon always dark? The atmosphere on Earth scatters sunlight, making our sky appear blue during the day. No. The Moon rotates on its own axis at the same rate that it orbits around Earth. Before joining the Discover team as an assistant editor in 2022, Sam studied journalism at Northwestern University in Evanston, Illinois. These changes in the Moon’s appearance from our view on Earth are called moon phases. Over time, frictional forces, including gravity, helped mold the moon into the shape it is now — spherical, but not a perfect sphere. A day on the Moon is approximately 29.5 Earth days. How can we explain this phenomenon? The laws of physics called into question
The Moon is the natural satellite of the Earth, a celestial body that has always fascinated humanity, appearing in different forms depending on its phases, in other words depending on how it is illuminated by the Sun, our star.
However, while this star fascinates us with its beauty among the stars, it is also fascinating to note that we always see the same face of our satellite. Potential for Radio Astronomy
The far side is shielded from Earth’s radio interference, making it an ideal location for advanced radio astronomy. For example, we were able to discover that this side contains the largest known impact crater in the solar system, called the “South Pole-Aitken Basin.” It has even been considered to install a gigantic radio telescope there, with the advantage of being protected from possible interference from Earth.
Reference of the article: Pourquoi voit-on toujours la même face de la Lune ? 20 minutes et agences. That means we always see the same side of the Moon from our position on Earth. Today, we know that the Moon is covered by craters as well as dust and debris from comets, asteroids and meteoroid impacts. With each new mission, our knowledge of the far side of the moon deepens, revealing potential resources and geological wonders that will undoubtedly play a critical role in our future space exploration endeavors. But “the tides are dragging across the seafloor and trying to get around continents.” It takes time and energy to move the tidal bulge — the end of the football — in response to the moon’s motion around our planet.
Several spacecraft have visited the far side of the moon. Why is there a far side of the moon, and why is it so unfamiliar?
Read More: Our Moon on Earth
Why We Always See the Same Side of the Moon
The moon is always spinning. Has anyone landed on the far side of the moon? There is no wind or air on the Moon to help “erase” craters, so the surface is covered with the remains of old and new impacts. The Moon orbits Earth once every 27.3 days and spins on its axis once every 27.3 days. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. Tellingly, it’s called “the dark side of the moon” almost as much as it’s called “the far side of the moon,” thanks to its reputation of mystery.
But to describe it in that way can cause confusion, and is sometimes frustrating for astronomers. The far side’s crust is thicker than the near side, making it more susceptible to impact craters. The Earth, for instance, rotates once every 24 hours, creating our day-night cycle. First, the dark side isn’t really any darker than the near side. (Image credit: NASA/Goddard Space Flight Center/Arizona State University)
The same thing happens as rocks on the moon shift in response to Earth’s pull. Support PBS News Hour now. They collected hundreds of pounds of lunar soil and rock samples, conducted experiments and installed equipment for follow-up measurements. Since then, many more missions have observed the far side of the moon, shooting new images and shining new light on its surface.
7. So, what about the other surface of our only natural satellite? The first images of the far side of the moon were taken in 1959 by the Soviet Luna 3 spacecraft. — Veronica Bray, Lunar and Planetary Laboratory, Tucson, Arizona
Share — copy and redistribute the material in any medium or format for any purpose, even commercially. We have remotely explored both sides of the Moon with orbiting satellites. Water is a critical resource that could potentially be used for drinking, producing rocket fuel, and other necessities. Not only that, they could discover more about the differences between the two lunar surfaces, comparing the composition of far side soil with previously collected near side samples.
Tough to see and tough to study, astronomers say that the far side of the moon is more inaccessible than the near side, making the achievements of Chang’e 4 and Chang’e 6 all the more impressive. Lunar regolith is the layer of loose, fragmented rock and dust that covers the Moon’s surface. One of the biggest challenges in landing on the far side is maintaining communications with Earth. Turning to satellites to organize their far side operations (it’s impossible to communicate with the spacecraft that land there otherwise), the missions brought back incredible insights and an intriguing idea: While still strange and unfamiliar, the moon’s mysterious side may not stay mysterious forever.
Read More: Samples From the Moon’s Far Side Have Just Arrived to Earth
Article Sources: Our writers at Discovermagazine.com use peer-reviewed studies and high-quality sources for our articles, and our editors review them for accuracy and trustworthiness. No. It experiences day and night, just like the near side. The question of why we never see the “dark side” of the moon has captivated curious minds for generations. The simple, yet fascinating answer lies in a phenomenon known as tidal locking. The lunar surface contains elements such as hydrogen, oxygen, silicon, iron, magnesium, calcium, aluminum, manganese, and titanium. Long ago, scientists believe, the moon had its own spin. Rotation refers to a celestial body’s spin around its own axis. That means it takes just as long for the moon to rotate about its axis as it does to orbit Earth — roughly one month.
Tidal locking occurs thanks to gravitational attraction between two celestial bodies. What is lunar regolith? When they get flexed, the energy is going to be used up,” Matija Cuk, an orbital dynamicist at the SETI Institute, told Live Science. Take a moment to imagine the moon, conjuring its speckled surface inside your mind. And the most exciting days of lunar activity may still lie ahead as NASA sends humans on the next missions to the Moon and eventually on to Mars!
NASA Science
The far side of the moon has lots of craters and fewer dark spots than the side that faces Earth. But the dark side cooled first, making it older with more craters, Keller said. Tristan Bergen
Meteoroid France 10/04/2025 12:00 5 min
Did you know that we always see the same side of the Moon from Earth, regardless of the time of year? We know that the Moon has almost no atmosphere and only about one-sixth of Earth’s gravity. The Moon is Earth’s only natural satellite and one that we can easily see most nights. How was the far side of the Moon first photographed? (Image credit: NASA’s Scientific Visualization Studio)
Some people see a face in the moon; others see a rabbit or a toad. Resource Extraction for Future Missions
The discovery of potential water ice in permanently shadowed regions (PSRs) on the far side could be crucial for future human activities on the lunar surface. What makes the Moon glow? So why don’t we ever see the far side of the moon?
From Earth, it appears as if the moon doesn’t rotate at all, but it does spin on its axis, just like Earth does. Think of it like a spinning top. All of the manned space missions to the Moon have landed on the nearside due to communication needs, so humans have physically explored this side much more. The impact sent chunks of Earth and the impactor into space that were pulled together by gravity, creating the Moon. The “dark” in the term refers to the side we never see from Earth due to tidal locking. Half a billion years ago, Earth might have had a 21-hour day, Tyler said. Why does the moon glow? In fact, scientists say it’s a perfect place for finding faint radio signals from the Sun and from other stars that are difficult to detect on Earth, due to its relative “radio” darkness. “Spared from these signals and separated, almost entirely, from the sight of observers on Earth, the far side of the moon is something strange and set apart. The images were snapped by the Deep Space Climate Observatory satellite, positioned between the sun and the moon with the Earth as its backdrop. It remained unobserved until 1959, when the Soviet Union’s Luna 3 spacecraft successfully photographed it. The moon’s shape is key to keeping it in sync with the Earth. The Moon has always held a special place in our imaginations and in daily life. The Soviet Luna 3 spacecraft first photographed the far side in 1959. In reality, both sides of the moon experience approximately two weeks of daylight followed by two weeks of night, just like Earth does, although the length of their “day” and “night” is much longer. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

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