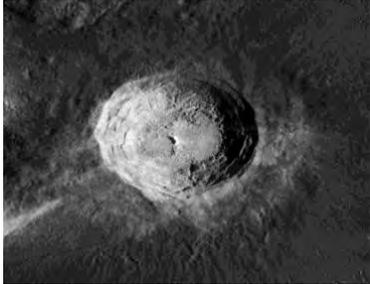
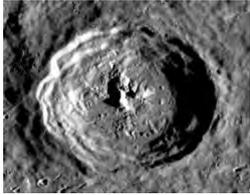


# Riccioli Catalog of Craters

Crater/ Eponym/ Date      Ideas/ Contributions      Crater detail/ Diameter/ When to observe

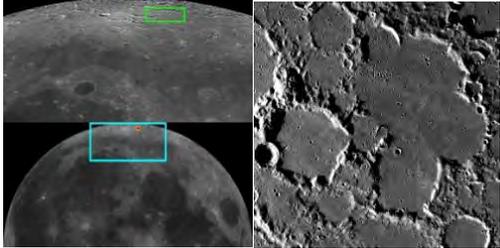
## Octans I

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Pythagoras<br/>570-495 BCE</p>   | <p>"...those called Pythagoreans ...supposed the elements of numbers to be the elements of all things that are."<br/><br/><a href="#">Aristotle, <i>Metaphysics</i> 1.5 985b23–28; 33–986a2</a></p>                                                                                                                                                                                                                                                                                                                                | <p>Eratosthenian-age, terraced rim with double peak, 144.55km. Day 13. (LC 18-30)</p>  <div style="border: 1px solid black; padding: 5px;"> <p>By Tomruen - Own work,<br/>CC BY-SA 4.0,<br/><a href="https://commons.wikimedia.org/w/index.php?curid=76693284">https://commons.wikimedia.org/w/index.php?curid=76693284</a></p> </div> |
| <p>Aristarchus<br/>310-230 BCE</p>  | <p>"His [Aristarchus'] hypotheses are that the fixed stars and the Sun remain unmoved, that the Earth revolves about the Sun on the circumference of a circle, the Sun lying in the middle of the orbit..."<br/><br/><a href="#">Archimedes, <i>The Sand-Reckoner</i></a></p>                                                                                                                                                                                                                                                      | <p>Brightest crater. Polygonal shaped, Copernican-age. Central peak complex composed of anorthositic rock (bright white). Sharp rim crests, terraced walls. 39.99km. Day 12 (LC 17-18)</p>                                                                                                                                                                          |
| <p>Eratosthenes<br/>276-194 BCE</p> | <p>"...the method of Eratosthenes, which is this Syrene and Alexandria lie, he says, under the same meridian circle. Since meridian circles are great circles in the universe, the circles of the earth which lie under them are necessarily also great circles. Thus, of whatever size this method shows the circle on the earth passing through Syene and Alexandria to be, this will be the size of the great circle of the earth."<br/><br/><a href="#">Cleomedes, <i>On the orbits of the heavenly bodies</i>, I, 10.</a></p> | <p>Eratosthenian-age, classic circular crater, terraced walls, rumpled ejecta blanket, central peak complex. 58.77km. Day 9. (LC 14-42)</p>                                                                                                                                                                                                                        |

# Riccioli Catalog of Craters

Crater/ Eponym/ Date      Ideas/ Contributions      Crater detail/ Diameter/ When to observe

## Octans II

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                           |
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| <p>Thales<br/>625-545 BCE</p> | <p>Father of Science<br/>Eclipse of May 28, 585 BCE</p> <p>“While they were still struggling for the upper hand in this war, during a battle begun in the sixth year, it happened that when the fighting had been joined, day suddenly became night. A prediction that this inversion of the day was going to happen, was made publicly by Thales of Miletus in announcements to the Ionian people...”</p> <p>Herodotus 1.74, translated by <a href="#">Thomas Worthen</a>.</p> | <p>Copernican-age, terraced walls, hummocky floor, central peak complex, 30.75km. Day 4. (LC 9-30)</p>                                                                                                                 |
| <p>Meton<br/>c. 460 BCE</p>   | <p>Co-discoverer, with Euctemon, of the 19-year lunisolar cycle (LC-71).</p>                                                                                                                                                                                                                                                                                                                                                                                                    | <p>Nectarian-age, assemblage of 8 overlapping flooded craters. 124.70km. Day 6.</p>                                                                                                                                    |
| <p>Plato<br/>428-348 BCE</p>  | <p>The Academy</p> <p>“Time then has come into being along with the universe, that being generated together, together they may be dissolved, should a dissolution of them ever come to pass.”</p> <p>38d–40a, as quoted by R. D. Archer-Hind, <i>The Timaeus of Plato</i> (1888)</p>                                                                                                                                                                                            | <p>Imbrian-age, large, flooded crater, has long pinnacle-like shadows on Day 8. Dark, flat basaltic floor. Look for Plato’s Hook, a shadow effect from solar illumination on summits of western rim. (LC 13-52)</p>  |

# Riccioli Catalog of Craters

| Crater/ Eponym/ Date                                   | Ideas/ Contributions                                                                                                                                                                                                                                                                                                                                                              | Crater detail/ Diameter/ When to observe                                                                                                                                                                                               |
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| <p>Aristoteles</p> <p>Aristotle</p> <p>384-322 BCE</p> | <ul style="list-style-type: none"> <li>- The Lyceum</li> <li>- The Golden Mean</li> <li>- "Since there must always be motion without intermission, there must necessarily be something eternal, whether one or many, that first imparts motion, and this first mover must be unmoved."</li> </ul> <p><b>Physics</b>, Book VIII, Ch. 6 (<i>A New Aristotle Reader</i>, p. 127)</p> | <p>Eratosthenian-age, with ejecta blanket into Mare Frigoris, headstone-shaped, NW wall vs SW wall contrast, 87.57 km, Day 6 (<b>LC 11-66</b>)</p>  |
| <p>Eudoxus</p> <p>408-355 BCE</p>                      | <ul style="list-style-type: none"> <li>- Student of Plato</li> <li>- Aratus' poem Phaenomena based on Eudoxus' book</li> <li>- Concentric circles</li> </ul>                                                                                                                                                                                                                      | <p>Copernican-age, terraced walls, hummocky floor, sharp rim crests, 70.16km, Day 6 (<b>LC 11-66</b>)</p>                                          |

# Riccioli Catalog of Craters

Crater/ Eponym/ Date

Ideas/ Contributions

Crater detail/ Diameter/ When to observe

## Octans III

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| <p>Endymion</p> <p>Greek mythological shepherd, loved by the moon-goddess Selene, and condemned to eternal youth and sleep by Zeus.</p> <p>The New Almagest says he made his lunar observations around 1445 BCE.</p> | <p>“Sometimes she is low down, sometimes she is high up, and that not according to one uniform course, being at one time raised up to the heavens, at other times almost contiguous to the mountains; now elevated in the north, now depressed in the south; all which circumstances having been noticed by Endymion, a report was spread about, that he was in love with the moon. We are not indeed sufficiently grateful to those, who, with so much labour and care, have enlightened us with this light.”</p> <p><a href="#">Pliny's Natural History, Book II, Ch.6</a></p> <p>“Endymion... was believed to have been the first to observe the course of the Moon”</p> <p>Riccioli, <i>New Almagest</i>, CHRONICI PARS II . XXXIII</p>                                                                                                                                                                                                                                                                                                                               | <p>Nectarian-age broken walls, Eratosthenian-age lava-filled floor. 122.10km, Day 3. (LC, 8-19)</p>                                     |
| <p>Hercules</p> <p>The mythological hero of Twelve Labors fame or the astronomer of 1560 BCE? Riccioli seems to say that Hercules succeeded Atlas as an astronomer.</p>                                              | <p>“To appoint me penalties and tasks earth is not broad enough for Juno’s hate. I have seen places unapproached by any, unknown to Phoebus, those gloomy spaces which the baser pole hath yielded to infernal Jove; and if the regions of the third estate pleased me, I might have reigned. The chaos of everlasting night, and something worse than night, and the grim gods and the fates – all these I saw and, having flouted death, I have come back. What else remains? I have seen and revealed the lower world. If aught is left to do, give it to me, O Juno; too long already dost thou let my hands lie idle. What dost thou bid me conquer?”</p> <p><a href="#">HERCULES FURENS, Seneca the Younger, TRANSLATED BY FRANK JUSTUS MILLER</a></p> <p><b>Hercules μωσαυντις . idest Musarum ductor ad aliorū Her-<br/>culum discrimen , tantum promouit celestis sphaeræ do-<br/>ctrinam , et Atlanti in sustentando cælo successisse di-<br/>ctus sit : floruit Anno ante Christum 1560.</b></p> <p>Riccioli, <i>New Almagest</i>, CHRONICI PARS II. XXXVI</p> | <p>Eratosthenian-age, with terraced walls. Note Hercules G, a Copernican-age cone crater, in the floor. 68.32 km. Day 4 (LC 9-30)</p>  |

# Riccioli Catalog of Craters

| Crater/ Eponym/ Date                                                                                                               | Ideas/ Contributions                                                                                                                                                                                                                                                                                                                                                                   | Crater detail/ Diameter/ When to observe                                                                                                                                                             |
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| <p>Atlas</p> <p>Per Riccioli in <i>Almagestum Novum</i>, King of Mauritania and inventor of the celestial sphere, c. 1580 BCE.</p> | <p>"[Atlas] perfected the science of astrology and was the first to publish to mankind the doctrine of the sphere. and it was for this reason that the idea was held that the entire heavens were supported upon the shoulders of Atlas, the myth darkly hinting in this way at his discovery and description of the sphere." <a href="#">Bibliotheca historica</a>, Book III 60.2</p> | <p>Upper-Imbriam-age, with terraced walls and a fractured floor. Note Rimae Atlas. 88.12km. Day 4. (LC 9-27)</p>  |
| <p>Messala</p> <p>Masha'allah ibn Atharī (c.740-d.815 AD)</p> <p>Persian Jewish astrologer, astronomer, and mathematician</p>      | <ul style="list-style-type: none"> <li>- Contributed to the 762 founding of Baghdad through electional astrology- the choosing of auspicious days</li> <li>- Court astrologer for Abbasid caliphate</li> <li>- Wrote a treatise on the astrolabe that may have been source for Chaucer</li> </ul>                                                                                      | <p>Pre-Nectarian-age, heavily cratered floor, 122.40km, Days 1 and 2 (LC 7-79)</p>                               |

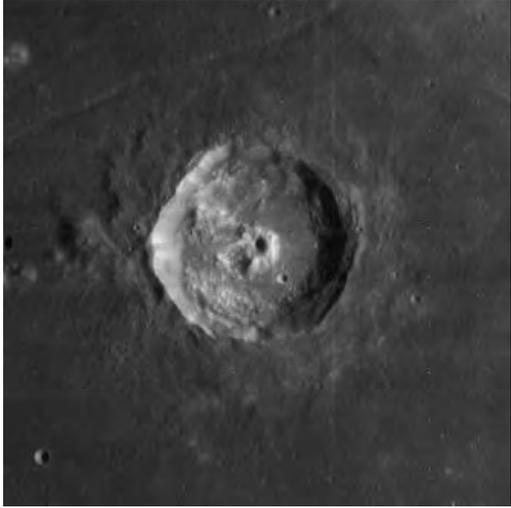
# Riccioli Catalog of Craters

Crater/ Eponym/ Date

Ideas/ Contributions

Crater detail/ Diameter/ When to observe

## Octans IV

|                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                  |
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| <p>Plinius<br/>Pliny the Elder<br/>23-79</p>                                                                                                                       | <p>Wrote <i>Naturalis Historia</i> (Natural History), considered the first encyclopedia.</p> <p>“It is madness to harass the mind, as some have done, with attempts to measure the world, and to publish these attempts; or, like others, to argue from what they have made out, that there are innumerable other worlds, and that we must believe there to be so many other natures, or that, if only one nature produced the whole, there will be so many suns and so many moons, and that each of them will have immense trains of other heavenly bodies. As if the same question would not recur at every step of our inquiry, anxious as we must be to arrive at some termination; or, as if this infinity, which we ascribe to nature, the former of all things, cannot be more easily comprehended by one single formation, especially when that is so extensive. It is madness, perfect madness, to go out of this world and to search for what is beyond it, as if one who is ignorant of his own dimensions could ascertain the measure of anything else, or as if the human mind could see what the world itself cannot contain.”</p> <p>CHAP. 1. (1.)—<a href="#">WHETHER THE WORLD BE FINITE, AND WHETHER THERE BE MORE THAN ONE WORLD.</a></p> | <p>Eratosthenian-age, steep crater walls, rumbled ejecta blanket. Terraced. Massive, twin central peak complex. 41.31km. Day 6. (LC 11-48).</p>                                                               |
| <p>Plutarch<br/>46-119<br/><br/>Greek Middle Platonist philosopher, historian, biographer, essayist, and priest at the Temple of Apollo in Delphi. (Wikipedia)</p> | <p>Works include <i>De facie in orbe lune</i>, <i>Parallel Lives</i> and <i>Ethica</i>.</p> <p>“...the external sea (our ocean) is reflected on the moon.” From <a href="#">ON THE APPARENT FACE IN THE ORB OF THE MOON.</a></p> <p>“It is a true proverb, that if you live with a lame man, you will learn a limp.” From <a href="#">Ethica.</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>Copernican-age, with sharp rim crests and terraced walls. Note satellite cone crater Plutarch M on rim. This crater will appear foreshortened as it is near the limb. 69.59km, Days 1-2. (LC 7-72).</p>  |

# Riccioli Catalog of Craters

| Crater/ Eponym/ Date                                    | Ideas/ Contributions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Crater detail/ Diameter/ When to observe                                                                                                                                                                                                                                              |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Cleomedes</p> <p>Mid-1<sup>st</sup> century- 400</p> | <p>Wrote the Stoic astronomical handbook <i>The Heavens</i>.</p> <p>“And that the cosmos has Nature as that which administers it is evident from the following: the ordering of the parts within it; the orderly succession of what comes into existence; the sympathy of the parts in it for one another; the fact that all individual entities are created in relation to something else; and, finally, the fact that everything in the cosmos renders very beneficial services.”</p> <p><i>The Heavens</i>, Chapter One, Line 11. From <i>Cleomedes’ Lectures on Astronomy: A Translation of The Heavens</i>.</p>                                                                                                      | <p>Nectarian-age, has a degraded mountain ring. Note bright cone crater Cleomedes B near central peak and Rima Cleomedes I in the floor of the crater. 130.77km. Day 3. (LC 8-15).</p>             |
| <p>Proclus</p> <p>Proclus Lycius</p> <p>412-485</p>     | <p>Greek Neoplatonist philosopher</p> <p>“For since all things are from The One, and from the duad after The One, are in a certain respect united to each other, and have an opposite nature; as in the genera of being, there is a certain opposition of sameness to difference, and of motion to permanency, but all things participate of these genera.”</p> <p>From <a href="#">THE COMMENTARIES OF PROCLUS ON THE TIMAEUS OF PLATO</a>,<br/>Translated from the Greek<br/>By Thomas Taylor</p> <p>The One: τὸ ἓν</p> <p>Henology: Reiner Schürmann describes it as a "metaphysics of radical transcendence" that extends beyond being and intellection. Source: <a href="#">Wikipedia</a></p> <p>Henosis: ἕνωσις</p> | <p>Located on the western edge of mountains around Mare Crisium; Copernican-age. Proclus is one of the brightest features on the Moon. Note star-like ray system. 26.91km, Day 4. (LC 9-22).</p>  |

# Riccioli Catalog of Craters

Crater/ Eponym/ Date

Ideas/ Contributions

Crater detail/ Diameter/ When to observe

Langrenus

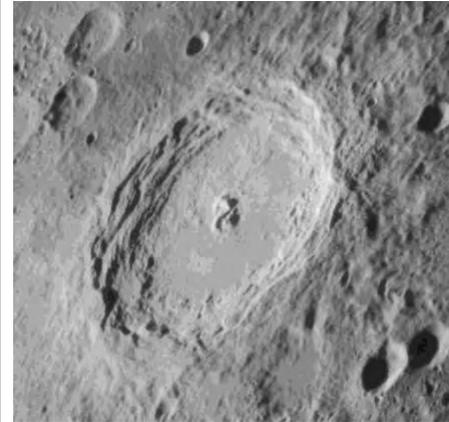
Michiel van Langren

1598-1675

Cartographer and astronomer in the service of the Spanish Monarchy.  
Published Moon Map in 1645.



Complex, terraced walls with valleys, extensive ejecta blanket, central peaks are designated Langrenus  $\alpha$  and Langrenus  $\beta$ . Crater floor has several bright spots. 131.98km, Days 1 and 2. (LC-7-39)



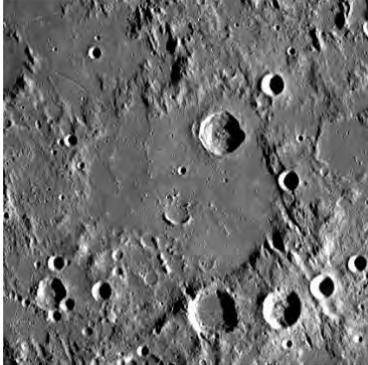
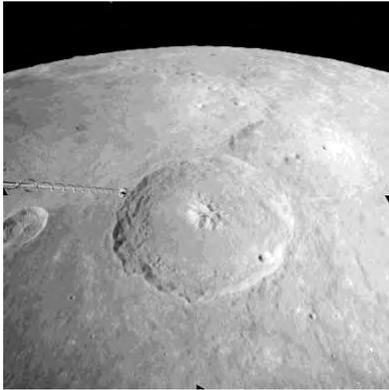
# Riccioli Catalog of Craters

Crater/ Eponym/ Date

Ideas/ Contributions

Crater detail/ Diameter/ When to observe

## Octans V

|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                     |
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| <p>Hipparchus<br/>190- 120 BCE</p>                           | <ul style="list-style-type: none"> <li>- Precession of the equinoxes</li> <li>- Star Catalog based on magnitude</li> <li>- Founder of trigonometry</li> <li>- Parallax</li> <li>- "Father of Astronomy"</li> </ul> <p>"I have also composed a work on the length of the year in one book, in which I show that the solar year (by which I mean the time in which the sun goes from a solstice back to the same solstice, or from an equinox back to the same equinox) contains 365 days, plus a fraction which is less than <math>\frac{1}{4}</math> by about <math>\frac{1}{300}</math><sup>th</sup> of the sum of one day and night, and not, as the mathematicians suppose, exactly <math>\frac{1}{4}</math> day beyond the above-mentioned number [365] of days."</p> <p>As quoted by Ptolemy in the <a href="#">Almagest</a>, page 139, translated by G.J. Toomer.</p> | <p>Nectarian-age, 143.95km, degraded walls. Note the ghost crater Hipparchus X on the floor. Day 8 (LC 13-27).</p>                               |
| <p>Theophilus<br/>Theophilus of Alexandria<br/>c.350-412</p> | <ul style="list-style-type: none"> <li>- 23<sup>rd</sup> Pope of Alexandria</li> <li>- Oversaw the destruction of the Serapeum</li> <li>- He devised a table computing the dates of Easter for the years 380-479</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <p>Copernican-age, 98.59km. Terraced walls with valleys in-between. Complex central peak complex with surrounding hills. Day 6 (LC 11-26).</p>  |

# Riccioli Catalog of Craters

Crater/ Eponym/ Date      Ideas/ Contributions      Crater detail/ Diameter/ When to observe

Octans VI

|                                                                 |                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Ptolemaeus<br/>Claudius Ptolemy<br/>(c. 100 – c. 170 AD)</p> | <p>“...the heaven is spherical in shape, and moves as a sphere; the earth too is sensibly spherical in shape, when taken as a whole; in position it lies in the middle of the heavens very much like its centre; in size and distance it has the ratio of a point to the sphere of the fixed stars; and it has no motion from place to place.”</p> <p><a href="#">Almagest</a>, I.2</p> | <p>The crater has a low, irregular outer rim that is heavily worn and impacted with multiple smaller craters... The largest of the peaks along the rim, designated Ptolemaeus Gamma (<math>\gamma</math>), has an altitude of 2.9 km and is located along the northwest rim. The crater has no central peak, a lava-flooded floor, and lacks a ray system. Impact sites of this form are often classified as walled plains, due to their resemblance to the maria.</p> <p>The somewhat dark-hued floor of Ptolemaeus is notable for several ghost craters, formed where lava has covered a pre-existing crater. 154km. (<a href="#">Wikipedia</a>). Days 8 or 21</p>                                                                                                                                                                                                                                                                                                         |
| <p>Thebit<br/>Thabit ibn Qurra<br/>(c. 826-901)</p>             | <ul style="list-style-type: none"> <li>- Reformed Ptolemaic system</li> <li>- Translated Greek astronomy texts into Arabic</li> <li>- Determined sidereal year as 365d6h9m12s</li> <li>- Sabian, born in Turkey, became scholar in Baghdad (<i>Luna Cognita</i>, Vol 2, 13-14)</li> </ul>                                                                                               | <p>The rim of Thebit is generally circular in outline, with a double-notch in the southwest wall. A prominent bowl-shaped crater, Thebit A, lies across the west-northwestern rim. The west-northwestern rim of this crater is overlain in turn by the even smaller Thebit L. Together this forms an elegant arrangement that makes Thebit relatively simple to identify. The floor of Thebit crater is rough and has no central peak. The rim displays a terrace, and has a hilly outer rampart. 57km. (<a href="#">Wikipedia</a>). Days 8 or 21.</p>                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p>Albategnius<br/>Al-Battani<br/>(c. 858-929)</p>              | <ul style="list-style-type: none"> <li>- Kitāb az-Zij ("Book of Astronomical Tables")</li> <li>- Discovered cause of annular eclipses</li> <li>- Data used by Copernicus (<a href="#">Wikipedia</a>)</li> </ul>                                                                                                                                                                         | <p>The level interior of Albategnius forms a walled plain, surrounded by the high, terraced rim. The outer wall is somewhat hexagon-shaped, and has been heavily eroded with impacts, valleys and landslips. It attains a height above 4,000 metres along the northeast face. The rim is broken in the southwest by the smaller crater Klein.</p> <p>Offset to the west of the crater's midpoint is its central peak, designated Alpha (<math>\alpha</math>) Albategnius. It is longest in extent in the north–south direction, extending for just under 20 kilometres, and has a width about half that. The peak rises to an altitude of roughly 1.5 km, and there is a tiny, relatively fresh crater at the top.</p> <p>Albategnius is believed to have been featured prominently in an early sketch drawing by Galileo in his book <i>Sidereus Nuncius</i> published in 1610, appearing along the lunar terminator. (<a href="#">Wikipedia</a>). 129km. Days 8 or 21.</p> |

# Riccioli Catalog of Craters

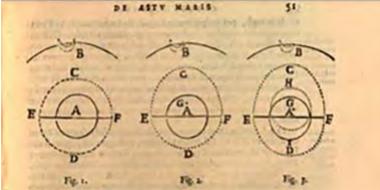
| Crater/ Eponym/ Date                                                            | Ideas/ Contributions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Crater detail/ Diameter/ When to observe                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Pitatus</p> <p>Pietro Pitati</p> <p>(c. 1550)</p>                            | <ul style="list-style-type: none"> <li>- Involved in calendar reform and attempt to correct date for Easter</li> <li>- Compiler of ephemerides and almanacs</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p>Pre-Imbrian-age, hexagonal-shaped crater. Situated in highlands of southern part of Mare Nubium. Floor of crater is flooded. Notice rills concentric with base of interior wall. 100.63km. Day 9. (LC 14-18).</p>  |
| <p>Maginus</p> <p>Giovanni Antonio Magini</p> <p>(1555-1617)</p>                | <ul style="list-style-type: none"> <li>- Italian astronomer, astrologer, cartographer, and mathematician</li> <li>- In 1588 he was chosen over Galileo Galilei to occupy the chair of mathematics at the University of Bologna</li> <li>- Magini supported a geocentric system of the world, in preference to Copernicus's heliocentric system. Magini devised his own planetary theory, in preference to other existing ones. The Maginian System consisted of eleven rotating spheres, which he described in his <i>Novæ cœlestium orbium theoricæ congruentes cum observationibus N. Copernici</i> (Wikipedia)<a href="https://en.wikipedia.org/wiki/Giovanni_Antonio_Magini">https://en.wikipedia.org/wiki/Giovanni_Antonio_Magini</a></li> </ul> | <p>Nectarian-age, oval crater with deteriorated walls. East of central peak complex are ghost crater rings. 155.58km. Day 8. (LC 13-6).</p>                                                                          |
| <p>Longomontanus</p> <p>Christen Sørensen Longomontanus</p> <p>(1562 –1647)</p> | <ul style="list-style-type: none"> <li>- Assistant to Tycho</li> <li>- Wrote <i>Astronomia Danica</i>:<br/>                     “The work was eagerly received in seventeenth-century astronomical literature...The book mainly compared the three world systems of the time, these included the Copernicus, Tycho Brahe and Ptolemy schools of thought. But unlike Tycho's, the geoheliocentric model of Longomontanus gave the Earth a proper daily rotation... It is therefore sometimes called the 'semi-Tychonic' system.”</li> </ul>                                                                                                                                                                                                            | <p>Nectarian-age, battered interior walls with a gray, pockmarked floor. Note Longomontanus L at base of northwestern interior wall. 145.50km. Day 9. (LC 14-5).</p>                                                                                                                                     |

# Riccioli Catalog of Craters

Crater/ Eponym/ Date

Ideas/ Contributions

Crater detail/ Diameter/ When to observe

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|                                                      | <p><a href="#">(Wikipedia)</a></p>                                                                                                                                                                                                                                                |                                                                                                                                                         |
| <p>Moretus<br/>Theodorus Moretus<br/>(1602–1667)</p> | <p>Taught mathematics, theology and natural philosophy in Prague</p> <p>“Æfuum Maris motrix eft Luna .”</p> <p><i>Tractatus physico-mathematicus de aestu mari</i>, <a href="#">page 21</a></p>  | <p>Eratosthenian-age, large central peak shaped like a pyramid, complex inner wall that is terraced and shows valleys. 114.45km. Day 8. (LC 13-4).</p>  |

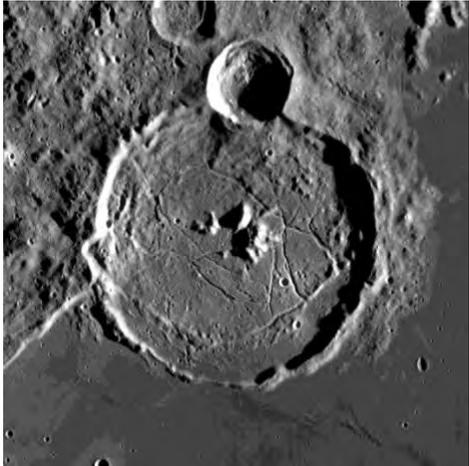
# Riccioli Catalog of Craters

Crater/ Eponym/ Date

Ideas/ Contributions

Crater detail/ Diameter/ When to observe

Octans VII

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| <p>Gassendi<br/>Pierre Gassendi<br/>1592-1655</p> | <ul style="list-style-type: none"> <li>- Observed transit of Mercury predicted by Kepler</li> <li>- Explained parhelia as due to ice crystals (Wikipedia)</li> </ul> <p>“NO man so fit to receive and retain the impressions of Truth, as He,* who hath his Virgin mind totally dispos sessed of Praejudice: and no Thesis hath ever, since the Envy of Aristotle was so hot, as to burn the Volumes of Democritus and most of the Elder Philosophers, which might have con served its lustre,* been more Eclipsed with a praesumption of sundry Incon gruities, then this noble one, that A toms are the First and Catholique Prin ciple of Bodies.”</p> <p><a href="#">Physiologia Epicuro-Gassendo-Charltoniana, or, A fabrick of science natural, upon the hypothesis of atoms founded by Epicurus repaired [by] Petrus Gassendus ; augmented [by] Walter Charleton ...</a></p> <p>Charleton, Walter, 1619-1707</p> | <p>Imbrian-age, partially-flooded crater on shore of Mare Humorum. Note Rimae Gassendi on floor, and central peak complex. Note oval satellite crater Gassendi A. 111.39km,</p>  |
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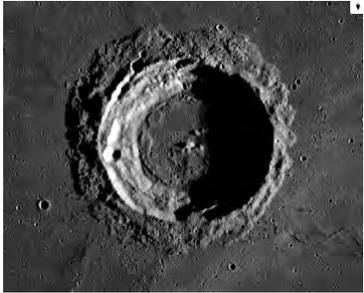
# Riccioli Catalog of Craters

Crater/ Eponym/ Date

Ideas/ Contributions

Crater detail/ Diameter/ When to observe

Octans VIII

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|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Seleucus<br/>Seleucus of Seleucia (c. 190 BC - c. 150 BC)</p> | <p>Does the earth move like the sun, moon, and five planets, which for their motions he calls organs or instruments of time? Or is the earth fixed to the axis of the universe; yet not so built as to remain immovable, but to turn and wheel about, as Aristarchus and Seleucus have [p. 439] shown since; Aristarchus only supposing it, Seleucus positively asserting it?</p> <p><a href="#">Plutarch, Plat. 8.1</a></p> <p>He is said to have made the correlation between the Moon and tides, with this quote from <a href="#">Strabo, Geography, 1.1.9</a>: "In support of his[Hipparchus'] opinion that the ocean does not behave uniformly he appeals to the authority of Seleucus of Babylon."</p> | <p>Imbrian-age, bright crater rims with central peak. The crater rises sharply from surrounding mare. Encircled by a rumple zone. 45.10km, Day 13 (LC 18-24).</p>      |
| <p>Copernicus<br/>(1473 – 1543)</p>                              | <p>"For when a ship is floating calmly along, the sailors see its motion mirrored in everything outside, while on the other hand they suppose that they are stationary, together with everything on board. In the same way, the motion of the earth can unquestionably produce the impression that the entire universe is rotating."</p> <p><a href="#">On the Revolutions of the Celestial Spheres, Book 1, Ch. 8</a></p>                                                                                                                                                                                                                                                                                   | <p>Copernican-age, with rays extending for hundreds of kilometers, 96.07km. Terraced interior walls, central peak complex of 3 mountain ridges. Day 9 (LC 14-37)</p>  |
| <p>Stadius<br/>Johannes Stadius<br/>1527-1579</p>                | <p><i>Ephemerides novae et auctae</i>, published in 1554 and used by Brahe.</p> <p>"At nos Copernici rationem, ob praedictionum cosiderationem, praeferimus, &amp; Canonem subijcimus." <i>Ephemerides</i>, <a href="#">page 110</a>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p>Eratosthenian-age, heavily cratered ghost ring (covered by lava flows), with floor pitted by secondary craters. 68.48km, Day 9. (LC 14-40).</p>                                                                                                        |

# Riccioli Catalog of Craters

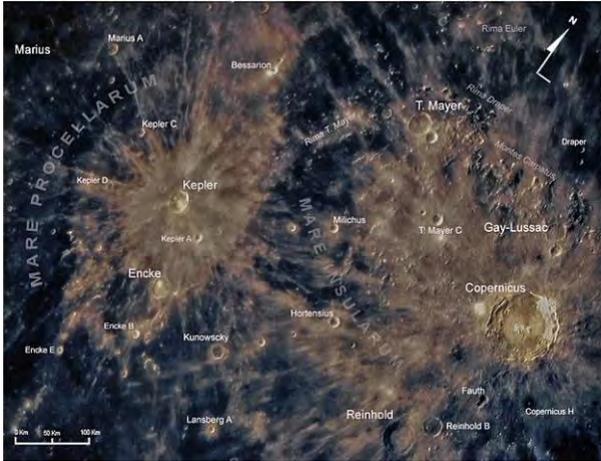
Crater/ Eponym/ Date

Ideas/ Contributions

Crater detail/ Diameter/ When to observe

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| <p>Reiner Gamma*</p> <p>This feature is a lunar swirl, Riccioli thought it was a crater and named it after Galileo.</p> <p>Wilhelm Beer and Johann Mädler moved Galilaei to its present location.</p> <p>Galileo Galilei</p> <p>1564-1642</p> | <p>If what we are discussing were a point of law or of the humanities, in which neither true nor false exists, one might trust in subtlety of mind and readiness of tongue and in the greater experience of the writers, and expect him who excelled in those things to make his reasoning most plausible, and one might judge it to be the best. But in the natural sciences, whose conclusions are true and necessary and have nothing to do with human will, one must take care not to place oneself in the defense of error; for here a thousand Demostheneses and a thousand Aristotles would be left in the lurch by every mediocre wit who happened to hit upon the truth for himself. Therefore, Simplicio, give up this idea and this hope of yours that there may be men so much more learned, erudite, and well-read than the rest of us as to be able to make that which is false become true in defiance of nature.</p> <p><a href="#"><i>Dialogue Concerning the Two Chief World Systems</i></a> (1632)</p> <p>Salviati, p. 61</p> | <p>LC 18-21: "Reiner Gamma is a whitish, flat, tadpole-shaped, very high-albedo enigmatic feature of unknown origin...Scientists have speculated that this is the remains of a comet." It has a strong magnetic field. Day 13.</p>  |

# Riccioli Catalog of Craters

| Crater/ Eponym/ Date                                               | Ideas/ Contributions                                                                                                                                                                                                                                                                                                                                                                           | Crater detail/ Diameter/ When to observe                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| <p>Kepler</p> <p>Johannes Kepler</p> <p>1571-1630</p>              | <p>“Gravity is a mutual affection between cognate bodies towards union or conjunction (similar in kind to the magnetic virtue), so that the earth attracts a stone much rather than the stone seeks the earth.”</p> <p><a href="#">Astronomia Nova</a></p>                                                                                                                                     | <p>Copernican-age, 29.49km. From LC 16-18: “Kepler is the focus of what is probably the second, after Copernicus, most prominent gray splash-ray pattern on the Moon.” Surrounded by a hilly ejecta blanket. Day 11.</p>  <p>By Selinous - Own work, CC BY-SA 4.0,<br/> <a href="https://commons.wikimedia.org/w/index.php?curid=110458884">https://commons.wikimedia.org/w/index.php?curid=110458884</a></p> |
| <p>Riccioli</p> <p>Giovanni Battista Riccioli</p> <p>1598-1671</p> | <p>“Reasoning and intrinsic arguments alone considered, and every authority set aside, the hypothesis supposing the immobility or quiet of the Earth absolutely must be asserted as true...”</p> <p><i>Setting Aside All Authority: Giovanni Battista Riccioli and the Science against Copernicus in the Age of Galileo</i>, location 221 on Kindle Reader</p> <p>by Christopher M. Graney</p> | <p>Pre-Nectarian-age. Note dark area on northern half of floor, and hilly southern half. North of Riccioli is the visually interesting crater within a crater, Riccioli CA within Riccioli C. 155.66km. Day 14. (LC 19-5,6).</p>                                                                                                                                                                                                                                                                 |

# Riccioli Catalog of Craters

Crater/ Eponym/ Date

Ideas/ Contributions

Crater detail/ Diameter/ When to observe

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