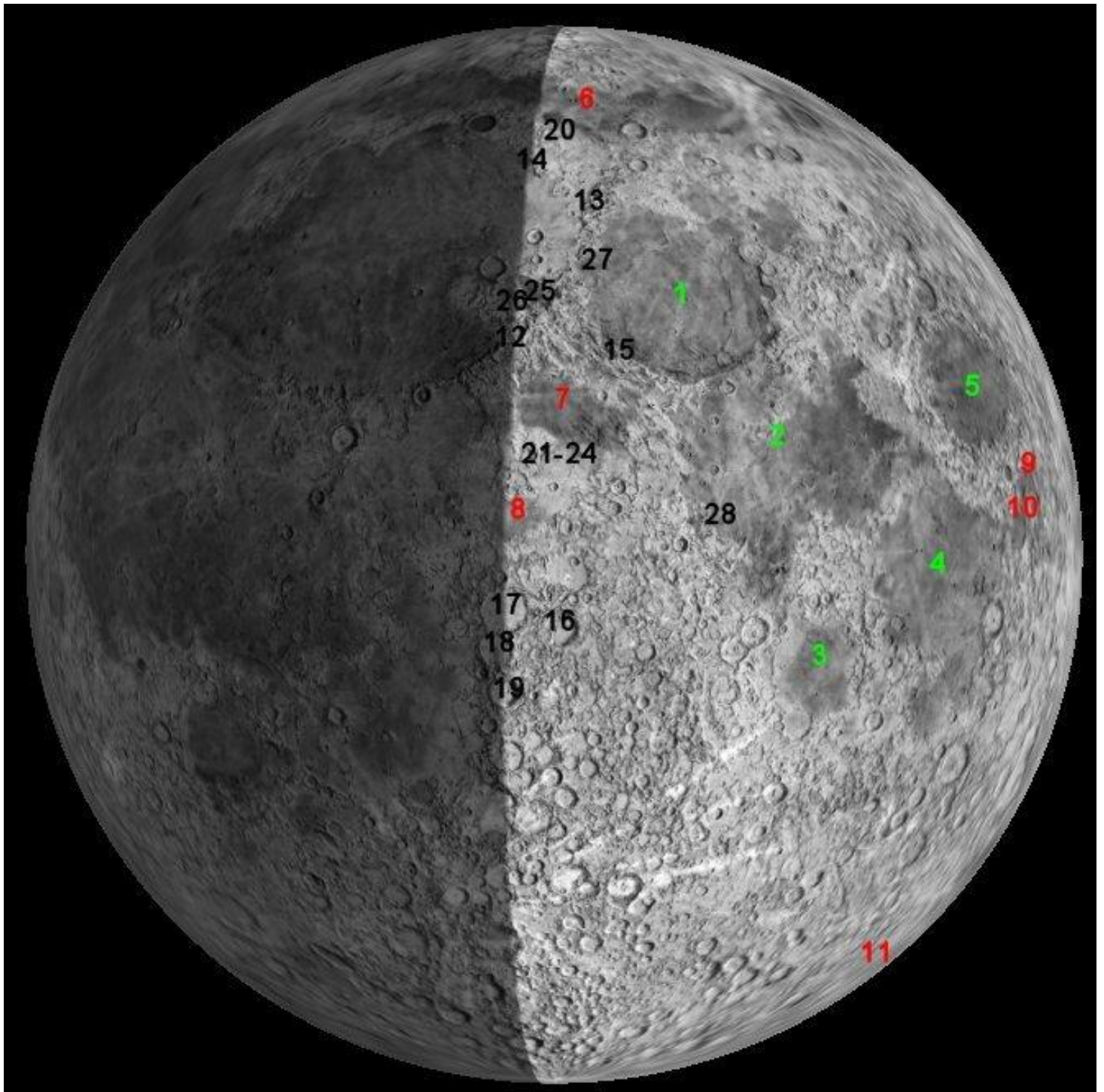


Suggested Observing List

INTERNATIONAL OBSERVE THE MOON NIGHT 22 Sept 2012 *Under the Same Moon*

The Moon on September 22, 2012 presents a wide range of fascinating features for observers using telescopes, binoculars, and even just the unaided eye. Observers using just their eyes will see a number of mare or seas, vast plains of solidified lava. Binocular observers will be able to see a number of additional smaller mare and may just be able to glimpse the elusive Mare Australe. Telescopic features include craters, mountain ranges, valleys, and volcanic features. Selected telescopic features are on the lunar terminator, the line between day and night on the Moon, where lighting makes elevated features stand out best. Note that the terminator will move from east to west throughout the day, so observers at different locations on the Earth will see the terminator in different positions and experience different visibility of features on the terminator.

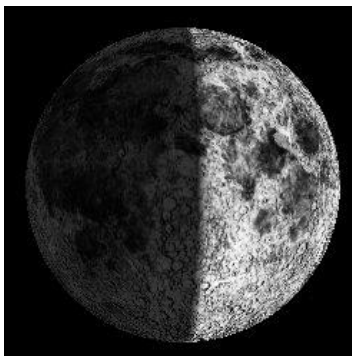


Moon as seen at 11PM CDT Sept 22 (4UT Sept 23)

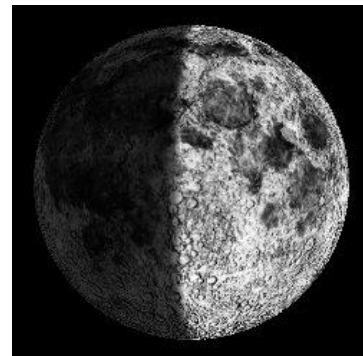
<http://observethemoonnight.org>

Unaided eye objects Binocular objects Telescopic objects

	Object	Lon	Lat	Diam/ Length (km)	Lunar 100	Rukl Chart	Description
-	Mare/highland dichotomy	-	-	-	3	-	Light highlands and dark, low mare terrain
-	Earthshine	-	-	-	2	-	Night side of the Moon faintly illuminated by sunlight reflecting off of Earth
1	Mare Serenitatis	16E	28N	674	-	24	Large lava-filled impact basin
2	Mare Tranquilitatis	30E	6N	873	-	36	Large mare about the size of the Black Sea on Earth
3	Mare Nectaris	34E	15S	350	-	58	Lava-filled impact basin south of Tranquilitatis
4	Mare Fecunditatis	48E	4S	840	-	48	Lava-filled impact basin southeast of Tranquilitatis
5	Mare Crisium	58E	16N	570	10	26	Lava-filled impact basin northeast of Tranquilitatis
6	Mare Frigoris	1E	56N	1600	26	5	Arcuate mare of uncertain origin
7	Mare Vaporum	4E	13N	245	-	33	Small mare southwest of Serenitatis
8	Sinus Medii	2E	2N	350	-	33	Small mare at center of near side of the Moon
9	Mare Undarum	68E	6N	243	-	38	Small mare southeast of Crisium
10	Mare Spumans	64E	1N	139	-	38	Small mare east of Fecunditatis
11	Mare Australe	84E	50S	880	56	69,76	Much of this mare lies on the far side of the Moon, but on nights of favorable lunar tilt (like tonight) it can just be glimpsed
12	Apennine Mountains	4W	19N	600	4	22	Spectacular mountain range reaching over 5000m heights
13	Caucasus Mountains	10E	40N	520	-	13	Prominent mountain range north of Apennines
14	Alps Mountains	0	46N	250	-	12	Prominent mountain range includes Alpine Valley
15	Haemus Mountains	11E	19N	400	-	23	On southwest edge of Mare Serenitatis
16	Albategnius	4E	11S	136	-	44	Large flat-floored crater
17	Ptolemaeus	2W	9S	153	-	44	Prominent flat-floored crater
18	Alphonsus	3W	13S	119	-	44	Large crater with prominent central peak and volcanic pits with dark haloes
19	Arzachel	2W	18S	97	-	55	Large crater with terraced walls and prominent central peak
20	Alpine Valley	3E	49N	165	19	4	Large graben in the Alps
21	Hyginus	6.3E	7.8N	10.6	-	34	Small rimless crater, possibly of volcanic origin amid Hyginus rille
22	Ariadaeus Rille	13E	7N	220	-	34	Prominent straight rille
23	Hyginus Rille	7N	7E	220	24	34	Prominent straight rille with multiple collapse pits
24	Triesnecker Rille	4E	4N	215	35	33	System of straight rilles
25	Hadley Rille	3E	25N	80	66	22	Sinuuous rille in a bay on west of Apennine Mtns; explored by Apollo 15. (challenging)
26	Bradley Rille	1E	22N	130	-	22	Prominent straight rille
27	Valentine Dome	30.5E	10.1N	30	89	13	Large volcanic dome (challenging)
28	Tranquility Base	23.5E	0.7N	-	-	35	Apollo 11 landing site



Terminator at 8UT Sept 22



Terminator at 8UT Sept 23