

**TABLE 7: Total Lunar Eclipse of 2021 Nov 19  
Crater Immersion and Emersion Times**

<b>UT1 of Immersion</b>	<b>Crater Name</b>
07:27	Aristarchus
07:33	Riccioli
07:35	Grimaldi
07:35	Kepler
07:36	Plato
07:38	Pytheas
07:39	Timocharis
07:42	Copernicus
07:45	Autolycus
07:45	Billy
07:45	Aristoteles
07:47	Eudoxus
07:54	Manilius
07:54	Endymion
07:57	Menelaus
08:01	Plinius
08:04	Dionysius
08:05	Campanus
08:10	Proclus
08:13	Censorinus
08:15	Taruntius
08:19	Messier
08:22	Goclenius
08:25	Tycho
08:27	Langrenus

<b>UT1 of Emersion</b>	<b>Crater Name</b>
09:33	Riccioli
09:33	Grimaldi
09:35	Billy
09:38	Tycho
09:39	Campanus
09:50	Kepler
09:52	Aristarchus
10:00	Copernicus
10:03	Pytheas
10:09	Timocharis
10:16	Plato
10:18	Autolycus
10:19	Manilius
10:20	Dionysius
10:23	Menelaus
10:26	Eudoxus
10:26	Aristoteles
10:27	Plinius
10:28	Censorinus
10:30	Goclenius
10:34	Messier
10:36	Taruntius
10:36	Langrenus
10:37	Endymion
10:38	Proclus

Predictions include a ~1% enlargement of the umbral shadow due to Earth's atmosphere.

"Eclipses During 2021", Fred Espenak, **Observer's Handbook 2021**, Royal Astronomical Society of Canada