



October 2019 Skies

Come to our monthly Sky Watchers meetings
 Details at www.sky-watchers.co and
 Facebook: CoalCreekCanyonSkyWatchers



www.sky-watchers.co

Coal Creek Canyon, CO
10pm Early October
9 pm Mid October
8pm Late October

Sky Events - October 2019

- 3 Moon near Jupiter
- 5 First Quarter Moon
- 13 Full (Hunter's, Blood, Travel) Moon
- 20 Mercury at Greatest Eastern Elongation (best time to see Mercury in evening sky)
- 21 Last Quarter Moon
- 21, 22 Orionids Meteor Shower
- 21 Moon near Beehive Cluster
- 27 New Moon
- 28 Uranus at Opposition (best time to view)

ISS Passes

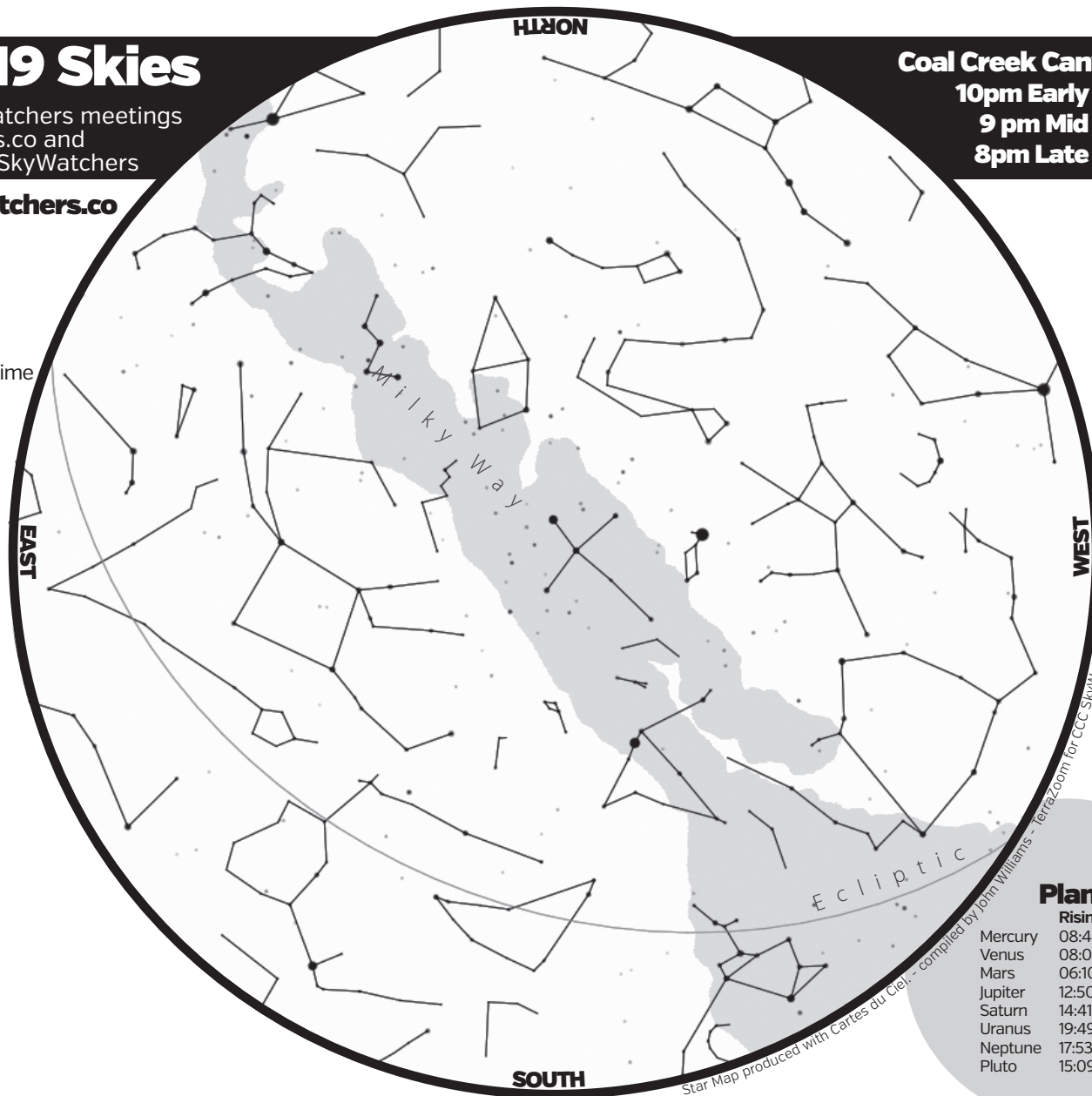
| Date | Satellite | Start/End & Direction | Magnitude |
|------|-----------|-----------------------|-----------|
| 01 | ISS | 20:20 NNW - 20:22 NNE | -1.5 |
| 02 | ISS | 19:32 NNW - 19:35 NE | -1.3 |
| 03 | ISS | 20:19 NNW - 20:22 N | -2.1 |
| 04 | ISS | 19:31 NNW - 19:35 ENE | -1.9 |
| 05 | ISS | 20:19 NW - 20:21 N | -3.2 |
| 06 | ISS | 19:30 NW - 19:35 E | -2.9 |
| 07 | ISS | 20:18 WNW - 20:21 SW | -3.1 |
| 08 | ISS | 19:29 NW - 19:35 SE | -3.9 |
| 09 | ISS | 20:18 W - 20:22 SSW | -1.2 |
| 10 | ISS | 19:29 WNW - 19:35 SSE | -1.9 |
| 12 | ISS | 19:30 WSW - 19:31 SW | -0.4 |
| 22 | ISS | 06:28 S - 06:33 E | -0.8 |
| 24 | ISS | 06:26 SW - 06:33 ENE | -2.9 |
| 25 | ISS | 05:39 S - 05:44 ENE | -1.8 |
| 26 | ISS | 06:26 WSW - 06:32 NE | -3.6 |
| 27 | ISS | 05:39 ESE - 05:43 NE | -3.8 |
| 28 | ISS | 06:26 WNW - 06:30 NNE | -2.5 |
| 29 | ISS | 05:39 N - 05:42 NE | -2.4 |

All Iridium satellites that "flare" were deorbited by end of 2018. No more Iridium flares.

Orbital Information:

Tiangong 2: decayed
 ISS: 408 x 411 km, 51.6°
 Hubble: 537 x 540 km, 28.5°

* denotes that prediction accuracy may be off by several seconds.



Planets

| | Rising | Setting |
|---------|--------|---------|
| Mercury | 08:40 | 19:21 |
| Venus | 08:05 | 19:15 |
| Mars | 06:10 | 18:20 |
| Jupiter | 12:50 | 22:06 |
| Saturn | 14:41 | 23:57 |
| Uranus | 19:49 | 09:18 |
| Neptune | 17:53 | 05:12 |
| Pluto | 15:09 | 00:30 |