TONIGHT'S SKY

December 2018

1
00:00:07,720 --> 00:00:11,340
Your guide to constellations, deep-sky objects,

2
00:00:11,340 --> 00:00:16,140
planets, and events: Tonight’s Sky.

3
00:00:16,140 --> 00:00:23,400
Highlights of the December sky:

4
00:00:38,020 --> 00:00:42,160
Look for Saturn low in the southwestern sky at dusk,

5
00:00:42,160 --> 00:00:45,920
early in the month.

6
00:00:53,800 --> 00:00:56,640
Its iconic rings are clearly visible with

7
00:00:56,640 --> 00:00:59,820
backyard telescopes in early December.

8
00:00:59,820 --> 00:01:01,440
But by the middle of the month,

9
00:01:01,440 --> 00:01:07,480
the planet slips into the glare of the Sun.

10
00:01:16,980 --> 00:01:19,980
Mars glints red in the southwestern sky

11
00:01:19,980 --> 00:01:27,320
against the stars of Sagittarius.

12
00:01:27,320 --> 00:01:36,120
Modest telescopes readily reveal its ocher disk.

13
00:01:46,540 --> 00:01:49,620

Two prominent constellations in the December night

14
00:01:49,620 --> 00:01:52,700
sky represent notable individuals of

15
00:01:52,700 --> 00:01:58,080
ancient Greek mythology.

16
00:01:59,860 --> 00:02:03,860
The great hero Perseus holds the head of Medusa

17
00:02:03,860 --> 00:02:08,140
the Gorgon.

18
00:02:08,140 --> 00:02:12,140
Located in Perseus is M34, an

19
00:02:12,140 --> 00:02:17,380
open star cluster about 1,400 light-years away from us.

20
00:02:17,380 --> 00:02:20,720
Open star clusters are groups of young stars

21
00:02:20,720 --> 00:02:22,840
that all formed at the same time

22
00:02:22,840 --> 00:02:29,080
within a large cloud of dust and gas.

23
00:02:29,080 --> 00:02:32,400
Look for it with the naked eye or with binoculars

24
00:02:32,400 --> 00:02:37,660
in a dark sky.

25
00:02:52,800 --> 00:02:56,240
Queen Cassiopeia was punished for her conceit

26
00:02:56,240 --> 00:03:02,560
and vanity by being tied to her throne.

27
00:03:04,920 --> 00:03:07,840
Cassiopeia’s “M” or “W” shape

28
00:03:07,840 --> 00:03:13,020
makes this constellation easy to identify.

29
00:03:13,020 --> 00:03:16,580
Eta Cassiopeiae is a wonderful and colorful

30
00:03:16,580 --> 00:03:18,300
double star.

31
00:03:18,300 --> 00:03:20,740
Use binoculars or a small telescope

32
00:03:20,740 --> 00:03:28,540
to discern its gold and blue hues.

33
00:03:28,540 --> 00:03:33,880
M103 in Cassiopeia is a fine open star cluster

34
00:03:33,880 --> 00:03:39,400
with a prominent red star near the center.

35
00:03:39,400 --> 00:03:47,600
Its fan shape is evident in binoculars.

36
00:03:47,600 --> 00:03:50,780
Lying between Cassiopeia and Perseus

37
00:03:50,780 --> 00:03:53,980
is the lovely Double Cluster.

38
00:03:53,980 --> 00:03:56,560

This pair of open star clusters is

39
00:03:56,560 --> 00:03:59,600
easy to see with binoculars.

40
00:03:59,600 --> 00:04:03,660
The Double Cluster resembles a handful of diamonds

41
00:04:03,660 --> 00:04:11,500
scattered on black velvet, with a ruby in between.

42
00:04:25,520 --> 00:04:28,620
Look for Venus blazing in the eastern sky

43
00:04:28,620 --> 00:04:32,120
before the chilly December sunrise.

44
00:04:32,120 --> 00:04:35,040
In the middle of the month, diminutive Mercury

45
00:04:35,040 --> 00:04:39,040
joins Venus in the morning sky, popping briefly

46
00:04:39,040 --> 00:04:45,360
above the eastern horizon before the Sun.

47
00:04:47,820 --> 00:04:49,400
A modest telescope

48
00:04:49,400 --> 00:04:52,560
will show both disks in their moon-like phases,

49
00:04:52,560 --> 00:05:00,920
as we see only part of their sunlit sides.

50
00:05:09,780 --> 00:05:11,720
The mid-December night sky

51
00:05:11,720 --> 00:05:15,960
hosts the lovely Geminid meteor shower.

52
00:05:15,960 --> 00:05:20,640
The shower peaks on the night of December 13 to 14.

53
00:05:20,640 --> 00:05:24,400
Under a dark sky, you could see as many as

54
00:05:24,400 --> 00:05:30,800
60 colorful meteors per hour.