

The background of the image is a dark night sky filled with numerous stars of varying brightness. A dark, silhouetted horizon line, possibly representing trees or a distant landmass, is visible in the lower third of the frame. The overall color palette is dominated by deep blues, blacks, and greys, with the red text providing a strong contrast.

TONIGHT'S SKY

Feb. 2012

1
00:00:11,749 --> 00:00:09,669
constellations

2
00:00:14,150 --> 00:00:11,759
deep sky objects

3
00:00:17,510 --> 00:00:14,160
planets and events

4
00:00:37,830 --> 00:00:17,520
tonight's sky highlights of the february

5
00:00:41,990 --> 00:00:40,310
after the sun sets on these cold

6
00:00:44,470 --> 00:00:42,000
february days

7
00:00:48,630 --> 00:00:44,480
look for two bright stars

8
00:00:53,270 --> 00:00:48,640
blazing above the western horizon

9
00:01:11,109 --> 00:00:53,280
these aren't stars at all but planets

10
00:01:11,119 --> 00:01:20,789
jupiter appears higher up

11
00:01:20,799 --> 00:01:31,190
use a telescope to get a better view

12
00:01:36,710 --> 00:01:33,830
mars appears in the east late in the

13
00:01:39,030 --> 00:01:36,720

evening and climbs higher during the

14

00:01:41,990 --> 00:01:39,040

morning hours

15

00:02:03,830 --> 00:01:42,000

a telescope will help uncover some of

16

00:02:09,589 --> 00:02:06,630

the winter night sky filled with

17

00:02:18,869 --> 00:02:09,599

brilliant stars presents one of the best

18

00:02:22,550 --> 00:02:21,350

orion the great hunter of greek

19

00:02:28,070 --> 00:02:22,560

mythology

20

00:02:32,309 --> 00:02:30,710

this constellation is among the easiest

21

00:02:34,869 --> 00:02:32,319

to recognize

22

00:02:36,470 --> 00:02:34,879

it is full of young stars

23

00:02:38,710 --> 00:02:36,480

dying stars

24

00:02:42,070 --> 00:02:38,720

and many nebulae

25

00:02:45,390 --> 00:02:42,080

beetlejuice one of orion's shoulders is

26

00:02:49,190 --> 00:02:45,400

a red supergiant star about

27

00:02:52,150 --> 00:02:49,200

650 times bigger than the sun

28

00:02:55,190 --> 00:02:52,160

it shines with the brightness of tens of

29

00:02:58,390 --> 00:02:55,200

thousands of suns

30

00:03:00,710 --> 00:02:58,400

beetlejuice is near the end of its life

31

00:03:03,110 --> 00:03:00,720

with the fuel at the star's core

32

00:03:05,589 --> 00:03:03,120

practically depleted the core has

33

00:03:07,910 --> 00:03:05,599

contracted and heated

34

00:03:12,630 --> 00:03:07,920

causing the outer gaseous layers of the

35

00:03:20,550 --> 00:03:16,550

rigel one of orion's knees is a triple

36

00:03:23,589 --> 00:03:20,560

star system made up of two smaller stars

37

00:03:26,949 --> 00:03:23,599

orbiting a blue supergiant

38

00:03:28,390 --> 00:03:26,959

rigel's blue supergiant star has a short

39

00:03:31,350 --> 00:03:28,400

lifespan

40

00:03:32,789 --> 00:03:31,360

blue supergiant stars are much hotter

41

00:03:36,789 --> 00:03:32,799

than our sun

42

00:03:43,110 --> 00:03:40,149

orion's belt is easy to spot

43

00:03:44,710 --> 00:03:43,120

it is made up of three stars

44

00:03:48,630 --> 00:03:44,720

ulnatak

45

00:03:54,949 --> 00:03:51,589

from the left side of orion's belt look

46

00:03:57,830 --> 00:03:54,959

down to the great orion nebula

47

00:04:00,550 --> 00:03:57,840

although barely visible to the naked eye

48

00:04:02,229 --> 00:04:00,560

it is the brightest diffuse gas cloud in

49

00:04:05,509 --> 00:04:02,239

the night sky

50

00:04:08,630 --> 00:04:05,519

nebula is latin for cloud

51
00:04:18,629 --> 00:04:08,640
a small telescope unveils the details

52
00:04:23,270 --> 00:04:21,830
embedded inside the orion nebula is the

53
00:04:27,030 --> 00:04:23,280
trapezium

54
00:04:45,110 --> 00:04:27,040
a group of hot young stars so brilliant

55
00:04:50,390 --> 00:04:48,150
canis major the great dog is the

56
00:04:55,110 --> 00:04:50,400
faithful companion who follows in

57
00:05:00,469 --> 00:04:57,749
canis major is dominated by the most

58
00:05:01,990 --> 00:05:00,479
brilliant star in the night sky

59
00:05:08,390 --> 00:05:02,000
sirius

60
00:05:11,110 --> 00:05:08,400
containing a bright star and a much

61
00:05:15,270 --> 00:05:11,120
smaller and fainter companion

62
00:05:17,670 --> 00:05:15,280
it is a mere 8.6 light years away

63
00:05:20,550 --> 00:05:17,680

scanning with binoculars just below

64

00:05:23,350 --> 00:05:20,560

sirius will reveal a lovely cluster of

65

00:05:27,110 --> 00:05:23,360

stars called m41

66

00:05:29,350 --> 00:05:27,120

it contains about 100 stars including

67

00:05:32,790 --> 00:05:29,360

several red giants

68

00:05:52,790 --> 00:05:32,800

stars in clusters like m41 were born

69

00:05:58,070 --> 00:05:55,749

saturn rises in the east around midnight

70

00:06:06,950 --> 00:05:58,080

and climbs higher throughout the morning

71

00:06:16,390 --> 00:06:09,990

use a telescope to spy its marvelous

72

00:06:21,270 --> 00:06:19,990

the night sky is always a celestial

73

00:06:23,830 --> 00:06:21,280

showcase