



*Visit the*  
**IONOSPHERE**



The image features a dark blue space background with scattered white stars. At the top left, a satellite with two sets of solar panels is shown. At the top right, a bright yellow crescent moon is visible. The text 'Visit the IONOSPHERE' is centered, with 'Visit the' in a cursive font and 'IONOSPHERE' in large, bold, orange 3D block letters. At the bottom, there is a horizontal band of colorful, out-of-focus bokeh lights in shades of purple, blue, and pink.

1  
00:00:00,000 --> 00:00:04,000  
music throughout

2  
00:00:04,020 --> 00:00:07,840  
Longing for more space, open skies

3  
00:00:07,840 --> 00:00:16,180  
and exotic travel? Then look up! - about 30 to 600 miles straight up- at the ionosphere, Earth's interface to space

4  
00:00:17,780 --> 00:00:21,080  
Nestles far about the clouds, but below outer space, this

5  
00:00:21,200 --> 00:00:24,600  
little understood destination invites you to explore its

6  
00:00:24,640 --> 00:00:26,100  
many features.

7  
00:00:27,620 --> 00:00:32,020  
Experience both the weather from Earth and the weather from space!

8  
00:00:32,160 --> 00:00:37,260  
Marvel at the ballet of radio waves and navigation signals, like GPS,

9  
00:00:37,260 --> 00:00:40,180  
leaping through this particle paradise

10  
00:00:41,640 --> 00:00:44,200  
Sit back, relax, and take in the aurora,

11  
00:00:44,220 --> 00:00:49,100  
some satellites, and the international space station as they sail by!

12  
00:00:49,100 --> 00:00:52,260  
And you'll want your camera handy for

13  
00:00:52,280 --> 00:00:56,440

one of the region's signature features: bright and colorful airglow!

14

00:00:56,440 --> 00:01:00,300

This daily show is made possible by the ionosphere's own swarming charged particles

15

00:01:00,310 --> 00:01:04,310

because that's what the ionosphere is,

16

00:01:04,320 --> 00:01:07,480

it's ALL charged particles!

17

00:01:07,480 --> 00:01:12,340

During the day, enjoy the sea of particles, freshly energized by the sun.

18

00:01:12,360 --> 00:01:16,380

As the sun sets, the particle party relaxes

19

00:01:16,400 --> 00:01:21,700

and the airglow thins. Our quiet nightlife lets you, gaze into clearer skies

20

00:01:21,700 --> 00:01:24,960

The ionosphere is in constant motion,

21

00:01:24,960 --> 00:01:28,220

an amazing effect of space weather.

22

00:01:28,220 --> 00:01:31,860

Don't miss when solar storms rain down. The storm

23

00:01:31,860 --> 00:01:36,460

separates the particles even more, making this colorful region delightfully more dense

24

00:01:36,480 --> 00:01:40,200

some places and stunningly sparse in others.

25

00:01:40,200 --> 00:01:44,480

And don't forget about storms from Earth below! Your weather from back home

26

00:01:44,510 --> 00:01:48,500

also stirs up this one-of-a-kind destination!

27

00:01:48,520 --> 00:01:54,740

Experience the unique beauty of every season, as changes in Earth's atmosphere - daily and annually!

28

00:01:54,740 --> 00:02:00,300

can create pressure waves changing the ionosphere's shape and density.

29

00:02:00,360 --> 00:02:05,240

Venture to the equator, where our particles are packed lush and thick.

30

00:02:05,240 --> 00:02:08,560

Cruise along a magnetic field line and see how the ionosphere's

31

00:02:08,580 --> 00:02:12,570

charged material also interacts with Earth's own magnetic field.

32

00:02:12,590 --> 00:02:16,580

Don't miss the super highway of particles zipping out

33

00:02:16,600 --> 00:02:19,320

to space and back down to the planet.

34

00:02:19,320 --> 00:02:24,600

This unpredictable parade of charged particles can help you unplug and unwind.

35

00:02:24,620 --> 00:02:28,400

This is because the crowd of particles can garble the radio and satellite

36

00:02:28,400 --> 00:02:30,340

communications from home.

37

00:02:30,340 --> 00:02:35,140

The ionosphere welcomes you to discover more about this little-known region.

38

00:02:35,140 --> 00:02:40,660

“After all – once you’ve explored this interface to space who knows how much farther

39

00:02:40,690 --> 00:02:44,680

you’ll be able to go?

40

00:02:44,700 --> 00:02:47,460

music

41

00:02:47,460 --> 00:02:52,700

tone