



1  
00:00:21,950 --> 00:00:19,820  
it's hard to imagine weather being more

2  
00:00:25,040 --> 00:00:21,960  
than rain on our weekend or ice on our

3  
00:00:27,050 --> 00:00:25,050  
roads but space weather can affect the

4  
00:00:30,080 --> 00:00:27,060  
globe especially in the way we

5  
00:00:32,089 --> 00:00:30,090  
communicate and power our world space

6  
00:00:34,610 --> 00:00:32,099  
weather is the environmental conditions

7  
00:00:36,590 --> 00:00:34,620  
outside of our planet originating from

8  
00:00:38,990 --> 00:00:36,600  
the massively energetic output of the

9  
00:00:40,910 --> 00:00:39,000  
Sun the solar wind is primarily

10  
00:00:43,069 --> 00:00:40,920  
comprised of protons and electrons

11  
00:00:45,350 --> 00:00:43,079  
they're streaming outward from the Sun

12  
00:00:47,959 --> 00:00:45,360  
it speeds of up to a million miles an

13  
00:00:51,560 --> 00:00:47,969

hour and they are constantly bombarding

14

00:00:53,270 --> 00:00:51,570

the Earth's magnetic field satellites

15

00:00:55,970 --> 00:00:53,280

have been launched to study solar wind

16

00:01:01,010 --> 00:00:55,980

solar flares coronal mass ejections and

17

00:01:08,010 --> 00:01:04,020

these phenomena impact our atmosphere

18

00:01:10,500 --> 00:01:08,020

sometimes with devastating force so

19

00:01:13,170 --> 00:01:10,510

space weather includes power outages in

20

00:01:15,690 --> 00:01:13,180

high latitude power grids includes a

21

00:01:17,880 --> 00:01:15,700

disruption of spacecraft includes

22

00:01:20,850 --> 00:01:17,890

radiation that can harm astronauts in

23

00:01:24,270 --> 00:01:20,860

space with any weather prediction is the

24

00:01:26,010 --> 00:01:24,280

goal these missions will all add to the