



1
00:00:00,020 --> 00:00:10,190
Sometimes the ozone

2
00:00:10,210 --> 00:00:20,210
that causes this (cough) comes from way up here. Yes there, the stratosphere, where jet liners fly around

3
00:00:20,230 --> 00:00:30,220
Ozone in the stratosphere typically stays up there and protects us from UV rays.

4
00:00:30,240 --> 00:00:40,250
But sometimes the gas travels into the lower part of earth's atmosphere. watch the way ozone behaved here. A

5
00:00:40,270 --> 00:00:50,270
descended downward. Winds took a hold of it, stretching it in different directions and bringing it all the way to th

6
00:00:50,290 --> 00:01:00,300
This is called a stratospheric intrusion. The EPA says an acceptable amount of ground level ozone is 75 parts

7
00:01:00,320 --> 00:01:10,310
that number went beyond healthy levels.

8
00:01:10,330 --> 00:01:20,340
When stratospheric intrusions happens you can go into exceedance of these limitations. Going beyond 75 part

9
00:01:20,360 --> 00:01:30,360
paying a fine. So, in order to qualify for exemptions the states need to be able to prove that the high ozone leve

10
00:01:30,380 --> 00:01:40,380
emissions in that state. The GEOS 5's ability to represent the stratospheric intrusions and show how ozone is t

11
00:01:40,400 --> 00:01:50,410
will give them a very quantitative way of being able to do that. GEOS 5 is a high resolution computer model. it c

12
00:01:50,430 --> 00:02:00,430
and chemical make-up of our atmosphere. We'll be able to use GEOS 5 to estimate how frequently we expect