



1
00:00:04,150 --> 00:00:02,950
this video clip reveals the links

2
00:00:06,230 --> 00:00:04,160
between sunspots

3
00:00:08,310 --> 00:00:06,240
magnetism and activity in the sun's

4
00:00:09,910 --> 00:00:08,320
million degree outer atmosphere

5
00:00:12,470 --> 00:00:09,920
the images were obtained with the one

6
00:00:14,870 --> 00:00:12,480
megapixel cameras on the esa nasa soho

7
00:00:16,470 --> 00:00:14,880
satellite and the nasa trace satellite

8
00:00:17,990 --> 00:00:16,480
we begin with images of the visible

9
00:00:21,189 --> 00:00:18,000
surface of the sun

10
00:00:22,870 --> 00:00:21,199
these show sunspots as darker patches

11
00:00:24,870 --> 00:00:22,880
a special filter reveals the sun's

12
00:00:26,470 --> 00:00:24,880
magnetism in black and white

13
00:00:27,910 --> 00:00:26,480

the strongest magnetic elements are

14

00:00:29,910 --> 00:00:27,920

found in sunspots

15

00:00:31,750 --> 00:00:29,920

but the entire surface is covered with a

16

00:00:32,790 --> 00:00:31,760

salt and pepper pattern in constant

17

00:00:35,670 --> 00:00:32,800

motion

18

00:00:37,750 --> 00:00:35,680

another filter reveals super hot gas

19

00:00:40,389 --> 00:00:37,760

this gas is trapped in magnetic loops

20

00:00:41,990 --> 00:00:40,399

above the surface of the sun

21

00:00:43,670 --> 00:00:42,000

zooming in on these loops reveals a

22

00:00:45,270 --> 00:00:43,680

continuous flickering

23

00:00:47,190 --> 00:00:45,280

this activity is produced by the