



1
00:00:00,901 --> 00:00:03,937
Jupiter is the largest and
oldest planet in our solar

2
00:00:03,937 --> 00:00:11,011
system. Its history spans 4.5
billion years. This gas giant is

3
00:00:11,011 --> 00:00:14,014
made of the same elements as a
star, but it did not grow

4
00:00:14,014 --> 00:00:19,019
massive enough to ignite.
Jupiter's appearance is the

5
00:00:19,019 --> 00:00:22,923
result of its swirling interior
of gases and liquids – producing

6
00:00:22,923 --> 00:00:26,927
a tapestry of colorful cloud
bands as well as the iconic

7
00:00:26,927 --> 00:00:32,766
Great Red Spot.

8
00:00:32,766 --> 00:00:38,739
The Great Red Spot is a gigantic
storm. It's an anticyclone,

9
00:00:38,739 --> 00:00:41,508
and with no land mass on the
planet to slow it down,

10
00:00:41,508 --> 00:00:48,081
the Great Red Spot has
raged for over a century.

11

00:00:48,081 --> 00:00:50,751
But scientists studying the spot
have noticed that it has been

12
00:00:50,751 --> 00:00:54,688
changing over time. The color is
deepening, and it's actually

13
00:00:54,688 --> 00:00:59,359
shrinking and getting rounder.
Those studying it expected to

14
00:00:59,359 --> 00:01:02,062
therefore see the wind speeds
inside the Great Red Spot

15
00:01:02,062 --> 00:01:06,233
increasing as the storm shrinks
– like an ice skater who spins

16
00:01:06,233 --> 00:01:13,073
faster as she pulls in her arms.
But this isn't the case.

17
00:01:13,073 --> 00:01:16,209
Data reveals the storm isn't
spinning faster, it's actually

18
00:01:16,209 --> 00:01:20,047
getting taller. You can think of
it like working with pottery.

19
00:01:20,047 --> 00:01:23,483
As the wide lump of clay spins,
forces within are driving it

20
00:01:23,483 --> 00:01:26,553
taller. So from our
perspective, looking down on the

21

00:01:26,553 --> 00:01:30,590

clouds, we see the spot
getting smaller and rounder.

22

00:01:30,590 --> 00:01:33,760

The Great Red Spot used to be
big enough to fit three Earths.

23

00:01:33,760 --> 00:01:37,130

Now, it's just a little over
one.

24

00:01:37,130 --> 00:01:40,434

These discoveries were made by
analyzing data from numerous

25

00:01:40,434 --> 00:01:43,837

NASA missions, including
Voyager, Hubble, and most

26

00:01:43,837 --> 00:01:48,508

recently, Juno.

27

00:01:48,508 --> 00:01:50,777

And through more
investigations, scientists hope