



1
00:00:04,990 --> 00:00:09,079
fried planet presented price science at
nasa

2
00:00:09,079 --> 00:00:14,209
astronomers have just cut a star in the
active devouring one of its planet

3
00:00:14,209 --> 00:00:16,789
be depressed forty-eight seven forty

4
00:00:16,789 --> 00:00:19,869
a red giant day observed using the nine
point two meter

5
00:00:19,869 --> 00:00:24,279
hobby and really telescope at the
mcdonald observatory in texas

6
00:00:24,279 --> 00:00:28,720
appears to have the fumes of escorts to
planet intent atmosphere

7
00:00:28,720 --> 00:00:30,050
this is consistent

8
00:00:30,050 --> 00:00:33,550
for the rocky world recently destroyed

9
00:00:33,550 --> 00:00:35,930
could the same thing happened to parents

10
00:00:35,930 --> 00:00:40,280
yes indeed says alex involves him a
member of the research team from penn

11
00:00:40,280 --> 00:00:41,960
state university

12

00:00:41,960 --> 00:00:45,359

a similar fit me await the inner planets
in our solar system

13

00:00:45,359 --> 00:00:50,320

when the sun becomes a red giant some
five billion years from now

14

00:00:50,320 --> 00:00:54,150

researchers who specialize in stellar
evolution have long known that the

15

00:00:54,150 --> 00:00:56,080

interplanetary in danger

16

00:00:56,080 --> 00:00:59,660

the trouble starts from the distant
future when the sun score runs out of

17

00:00:59,660 --> 00:01:02,320

hydrogen fuel for nuclear fusion

18

00:01:02,320 --> 00:01:03,980

to keep the fires burning

19

00:01:03,980 --> 00:01:07,460

the sun will begin to fuse hydrogen
outside the core

20

00:01:07,460 --> 00:01:10,710

in a layer closer to the stellar surface

21

00:01:10,710 --> 00:01:13,140

this will turn the sun into a red giant

22

00:01:13,140 --> 00:01:17,020

at least two hundred times wider than it
is today

23

00:01:17,020 --> 00:01:19,330

Mercury Venus

24

00:01:19,330 --> 00:01:22,540

and possibly even mars could be engulfed

25

00:01:22,540 --> 00:01:25,500

the fate of earth is not a certainty

however

26

00:01:25,500 --> 00:01:29,229

some researchers believe that births or
that night spiral outward

27

00:01:29,229 --> 00:01:33,260

keeping the kind of had a safe distance
from the approaching inferno

28

00:01:33,260 --> 00:01:37,730

this could happen if solar winds carry
away a significant fraction of the sun's

29

00:01:37,730 --> 00:01:41,780

mass in the years leading up to the red
giant pays

30

00:01:41,780 --> 00:01:43,130

on the other hand

31

00:01:43,130 --> 00:01:48,560

the sunlight expands so quickly at our
planet has no chance to escape

32

00:01:48,560 --> 00:01:52,370

earth would get caught in the sun is
rapidly advancing atmosphere

33

00:01:52,370 --> 00:01:56,150

and spiral inward to oblivion

34

00:01:56,150 --> 00:02:00,070

observations of red giant be depressed
forty eight seven forty

35

00:02:00,070 --> 00:02:03,320

lend credence to the second possibility

36

00:02:03,320 --> 00:02:08,119

are detailed spectroscopic analysis and
be depressed forty eight seven forty

37

00:02:08,119 --> 00:02:12,689

reveals that the red giant contained an
abnormally high amount of the p m

38

00:02:12,689 --> 00:02:17,339

says monica item off who led the study
and nicolas cooker nicotine adversity

39

00:02:17,339 --> 00:02:19,249

and taryn poland

40

00:02:19,249 --> 00:02:22,989

because we live here is the easily
destroyed and stars finding lots of it

41

00:02:22,989 --> 00:02:25,769

in an all dread giant is unexpected

42

00:02:25,769 --> 00:02:28,389

the most likely source is a planet

43

00:02:28,389 --> 00:02:30,179

both sent explains

44

00:02:30,179 --> 00:02:33,889

it is probable that the lithium
production in be depressed forty eight

45

00:02:33,889 --> 00:02:35,099

seven forty

46

00:02:35,099 --> 00:02:37,749

was triggered by a mask the size of the planet

47

00:02:37,749 --> 00:02:42,719

that spiraled into the star and heated up while the star was digesting it

48

00:02:42,719 --> 00:02:45,379

the team found another piece of evidence to

49

00:02:45,379 --> 00:02:47,660

bt close forty eight seven forty

50

00:02:47,660 --> 00:02:49,370

hasn't gastonia planet

51

00:02:49,370 --> 00:02:54,479

one point six times bigger than jupiter which has not yet been devoured

52

00:02:54,479 --> 00:02:57,199

the big planet has a highly elliptical or dead

53

00:02:57,199 --> 00:03:01,879

in fact it is the most elliptical orbit ever found for a planet around an older

54

00:03:07,969 --> 00:03:03,229

star

55

00:03:07,969 --> 00:03:10,309

some catastrophic event

56

00:03:10,309 --> 00:03:14,119

like it starr having inner planet for
lunch

57

00:03:14,119 --> 00:03:18,689

one day he says our own solar system may
end up the same way

58

00:03:18,689 --> 00:03:23,040

and five billion years tough ride planet
could be here