

**What advantage does  
the Hubble Space Telescope  
have over ground-based telescopes?**



1  
00:00:13,749 --> 00:00:12,470  
no matter how big your telescope is on

2  
00:00:15,990 --> 00:00:13,759  
the ground you just can't see through

3  
00:00:17,750 --> 00:00:16,000  
the air very well because the atmosphere

4  
00:00:19,429 --> 00:00:17,760  
is turbulent

5  
00:00:21,429 --> 00:00:19,439  
so even though you can see the stars

6  
00:00:23,109 --> 00:00:21,439  
with your eyes they're blurry they're

7  
00:00:24,790 --> 00:00:23,119  
twinkling they're doing things that you

8  
00:00:26,870 --> 00:00:24,800  
can't really compensate for yet from the

9  
00:00:28,790 --> 00:00:26,880  
ground so space telescope gives you a

10  
00:00:31,670 --> 00:00:28,800  
sharp image that you can't get from the

11  
00:00:34,069 --> 00:00:31,680  
ground

12  
00:00:35,830 --> 00:00:34,079  
[Music]

13  
00:00:37,350 --> 00:00:35,840

in astronomy there's what we knew before

14

00:00:40,150 --> 00:00:37,360

hubble and now there's what we know

15

00:00:41,910 --> 00:00:40,160

after hubble they're so different

16

00:00:43,990 --> 00:00:41,920

of course hubble has now had a life of

17

00:00:46,069 --> 00:00:44,000

30 years so this had a long time to make

18

00:00:48,389 --> 00:00:46,079

this revolution happen so it's not all

19

00:00:50,370 --> 00:00:48,399

at once it's a gradual revolution but

20

00:01:01,029 --> 00:00:50,380

it's still a huge revolution

21

00:01:02,470 --> 00:01:01,039

[Music]

22

00:01:04,070 --> 00:01:02,480

i think the hubble telescope has been

23

00:01:05,990 --> 00:01:04,080

the most productive science instrument

24

00:01:08,149 --> 00:01:06,000

ever built

25

00:01:09,290 --> 00:01:08,159

so it is indeed the most astonishing

