



X-RAY

1  
00:00:08,470 --> 00:00:06,150  
in florence italy in the year 1609

2  
00:00:11,270 --> 00:00:08,480  
the world changed

3  
00:00:13,350 --> 00:00:11,280  
using a small telescope galileo proved

4  
00:00:15,829 --> 00:00:13,360  
that the earth is not distinct from the

5  
00:00:17,990 --> 00:00:15,839  
universe but part of it

6  
00:00:20,470 --> 00:00:18,000  
and he showed that there is much more to

7  
00:00:33,510 --> 00:00:20,480  
the universe than we see with the naked

8  
00:00:39,190 --> 00:00:36,389  
in the 20th century astronomers made

9  
00:00:42,310 --> 00:00:39,200  
another revolutionary discovery that

10  
00:00:50,709 --> 00:00:42,320  
optical telescopes reveal only a portion

11  
00:00:54,790 --> 00:00:52,869  
telescopes sensitive to invisible

12  
00:00:58,790 --> 00:00:54,800  
wavelengths of light have detected

13  
00:01:01,270 --> 00:00:58,800

microwave radiation from the big bang

14

00:01:03,189 --> 00:01:01,280

infrared radiation from protoplanetary

15

00:01:05,750 --> 00:01:03,199

disks around stars

16

00:01:07,429 --> 00:01:05,760

and x-rays from explosions produced by

17

00:01:09,990 --> 00:01:07,439

black holes

18

00:01:12,469 --> 00:01:10,000

we have booster ignition and liftoff of

19

00:01:14,630 --> 00:01:12,479

columbia reaching new heights for women

20

00:01:19,190 --> 00:01:14,640

and x-ray astronomy

21

00:01:25,590 --> 00:01:22,149

the most powerful x-ray telescope ever

22

00:01:31,590 --> 00:01:27,910

began its exploration of the hot