

## **What Will Astro-E2 Do? Script**

### **Clip from *Building the Coolest X-ray Satellite***

Video

ANIMATION OF ASTRO-E2 IN SPACE; TEXT: "WHAT WILL ASTRO-E2 DO?"  
IMAGES OF SUPERNOVA EXPLOSION, BLACK HOLE WITH ACCRETION DISK,  
SUN'S CORONA DURING ECLIPSE, CLUSTER OF GALAXIES

Audio

KIM WEAVER: Astro-E2 is going to be looking at a number of things. It'll be looking at supernova remnants to understand the chemical elements created when a star explodes. It's going to be looking at accretion disks around black holes to study the gravitational effects of a black hole on the accretion disk. It's going to be looking at the corona of stars. Our sun has a really hot corona and it give off x-rays, so we'll be looking at coronae of other stars to see how they behave if they're similar to the sun. And also Astro-E2 will look at clusters -the hot x-ray gas in the center of clusters - to understand the temperature of the cluster, the mass of the cluster and that way you can sort of probe the universe by looking at cluster of galaxies.

Video