

## **Grazing Incidence Script**

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

Video

ANIMATION OF ASTRO-E2 IN SPACE

Audio

NARRATIVE: The X-rays that Astro-E2 will observe get absorbed in many materials including glass and ordinary mirrors. So Astro-E2 and other x-ray telescopes require a unique strategy to focus x-rays on to a detector.

Video

CURTIS OC

ANIMATION SHOWING THE PATH OF LIGHT THROUGH A GRAZING INCIDENCE TELESCOPE

ANIMATION SHOWING THE PATH OF LIGHT THROUGH THE XRT TO THE XRS IN RELATION TO THE SPACECRAFT

Audio

CURTIS: We use an x-ray telescope, which depends on a grazing incidence reflection, in which the reflectors are nearly edge on to the X-ray source. The x-ray beam hits the primary reflector, then hits the secondary reflector and then moves on to the detector about 4 and a half meters away. We add a pre-collimator, before the primary reflection, to block off axis x-rays.