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**Mars:** The fourth planet from the Sun.

**Credits:** NASA/CXC/MPE/K.Dennerl et al.

Chandra's image of Mars gave scientists their first look at X-rays from the red planet. In its sparse upper atmosphere, about 120 (75 miles) kilometers above the surface, X-rays are produced by fluorescent radiation from oxygen atoms excited by X-radiation from the Sun. The X-ray power detected from the Martian atmosphere is very small, amounting to only 4 megawatts, comparable to the X-ray power of about ten thousand medical X-ray machines.

**Scale:** Mars disk is 20.3 arcsec in diameter.

*Chandra X-ray Observatory ACIS Image*

*CXC operated for NASA by the Smithsonian Astrophysical Observatory*