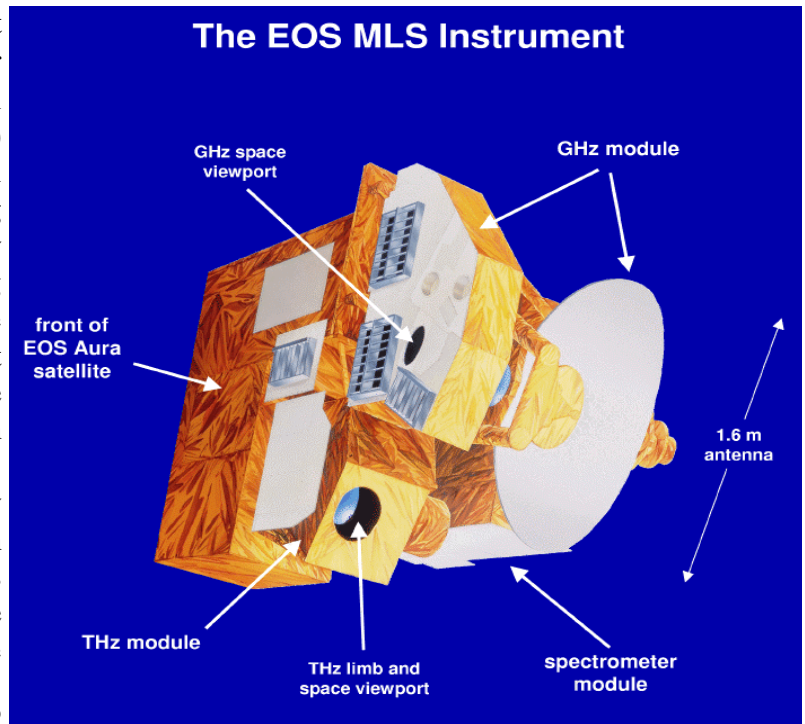


## Microwave Limb Sounder (MLS) on AURA Spacecraft ECCOSORB<sup>®</sup> BSR-1/SS6M (.010" & .020")

Custom fabricated parts cut via waterjet from ECCOSORB<sup>®</sup> BSR-1/SS6M absorber material was used as a key component on the Microwave Limb Sounder (MLS) instrument that will fly on the AURA spacecraft. It is part of the Earth Observing System of NASA that will passively monitor the Earth's naturally occurring microwave thermal emissions from the limb of Earth's atmosphere. The orbit allows the instrument to cover the entire surface of the earth in a few weeks with an operational lifetime of 5 years. The MLS measures the radiation given off by molecular processes that are taking place in the atmosphere. More specifically, it is looking at molecules involved in the ozone creation and depletion cycle- to determine if the stratospheric ozone chemistry is recovering as expected. The ECCOSORB<sup>®</sup> BSR-1/SS6M was used to cover the entire surface of the inside of the quasi-optical bench that holds mirrors, dichroic beam splitters and polarizers that split up the incoming signal to different wavelength receivers. The ECCOSORB<sup>®</sup> BSR-1/SS6M prevents the scattering of the radar beam that would give false readings of wavelength intensity. The AURA spacecraft is scheduled to launch late in 2002.



Visit the following links for further information on this application:

Microwave Limb Sounder Website (MLS)  
<http://mils.jpl.nasa.gov/index.shtml>

The EOS MLS Experiment  
[http://mils.jpl.nasa.gov/joe/eos\\_mls.html](http://mils.jpl.nasa.gov/joe/eos_mls.html)

EOS MLS Summary Presentation Emphasizing Science  
Objectives, Measurements and Data Products  
[http://mils.jpl.nasa.gov/joe/eos\\_mls\\_summary\\_presentation.pdf](http://mils.jpl.nasa.gov/joe/eos_mls_summary_presentation.pdf)

An Overview of the EOS MLS Experiment  
[http://mils.jpl.nasa.gov/joe/mils\\_home\\_page/ATBD-MLS-01.pdf](http://mils.jpl.nasa.gov/joe/mils_home_page/ATBD-MLS-01.pdf)