

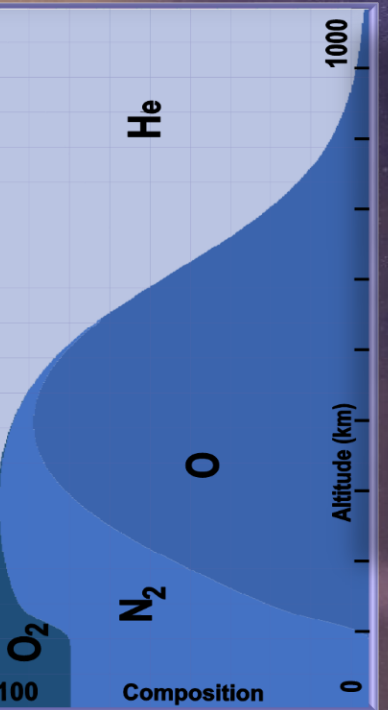
# A Review of Space-Based Atomic Oxygen Sensing Methods

The purpose of this review is to create a condensed understanding of the current atomic oxygen measurement market. A simplified decision-making tool for early instrument design.

The review directly compares all modern satellite-based AO measurement methods and makes recommendations on their most appropriate application



- Mass Spectrometry – Heavy science missions
- QCM – Versatile nanosatellites
- Witness Samples – Long-term materials testing
- Chemiluminescence – Robust reentry observations
- Actinometry – Low power, medium lifetime missions
- Optical Degradation – Versatile science missions



Building upon a similar review from 2001, we compare sensor mass against power

We also compare sensor mass against resolution

Together, these graphs show the pros and cons of each method

