

Aristarchus calculation of the "size" of the sun

Post by "Joshua" of April 21, 2026 at 1:58 PM

I'm more familiar with measurements of the earth from my days in Land Surveying, and the classic experiments that I can recall are these;

- The Eratosthenes experiment; a fairly accurate measurement of the circumference of the earth.
- The Mason-Dixon Survey, which demonstrated that mountains exert gravitational pull
- The Schiehallion survey, which first calculated the mass of the earth
- The Cavendish experiment, which much more accurately measured the mass of the earth
- The Transits of Venus across the sun, which used this earlier knowledge to measure the Astronomical unit.

What you need is an accurate measurement of the planet you're standing on, so that you can observe celestial phenomena from many different known positions on that planet at the same time and collate the data.

I'm at lunch now, I don't have time for a more complete answer.