



## Isotopic abundance ratios of nitrogen and oxygen in the solar wind

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The Sun is the largest reservoir of matter in the solar system, which formed 4.6 Gy ago from the protosolar nebula. Data from space missions and theoretical models indicate that the solar wind carries a nearly unfractionated sample of heavy isotopes at energies of about 1 keV/amu from the Sun into interplanetary space. In view of results soon to be expected from solar-wind implanted samples of the Genesis mission, we have revisited solar wind isotopic abundance data from sensors on board SOHO, WIND, ACE, and ULYSSES. In particular, we have analyzed the oxygen isotopic ratios  $^{17}\text{O}/^{16}\text{O}$  and  $^{18}\text{O}/^{16}\text{O}$ , and we have re-analyzed the solar wind isotope abundance ratio  $^{15}\text{N}/^{14}\text{N}$  using the high-resolution CELIAS/MTOF spectrometer on board the Solar and Heliospheric Observatory (SOHO). The results are analyzed in the context of measurements in samples of terrestrial planets and models on photo-selfshielding in the protosolar nebula.