

Influence of the magnetic cycle on solar oscillation modes properties

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The Sun's convective envelope generates, by dynamo effect, a surface magnetic field whose strength evolves on an 11-year cycle, with a change in polarity at the end of each cycle. Similar activity cycles exist in other solar-type stars, influencing the star's physics, including the properties of solar oscillations, which are excited by convection. Thus, the frequency, amplitude, excitation and damping of the modes vary with the cycle over time. In this work, we will revisit the variation of these properties during Cycles 23, 24 and the beginning of Cycle 25. To do so, we analyse data obtained since 1996 by two instruments on the SoHO satellite: the GOLF spectrometer and the VIRGO/SPM photometer.