

Figure 1. Comparison of 5-point running averages of ^{37}Ar production rates with sunspot numbers and solar diameter measurements. Solid points do not include runs associated with solar flares. Open points include flare associated runs.

It is difficult to explain this variation by the usual views on solar structure or conceivable cosmic ray neutrino or muon processes. There are changes in the solar diameter during 1975-1984 that correlate well with sunspot numbers and the ^{37}Ar production rates. As mentioned earlier, Okun et al. ¹²⁾ suggested that the variations in ^{37}Ar production rates could be explained by a neutrino magnetic moment.

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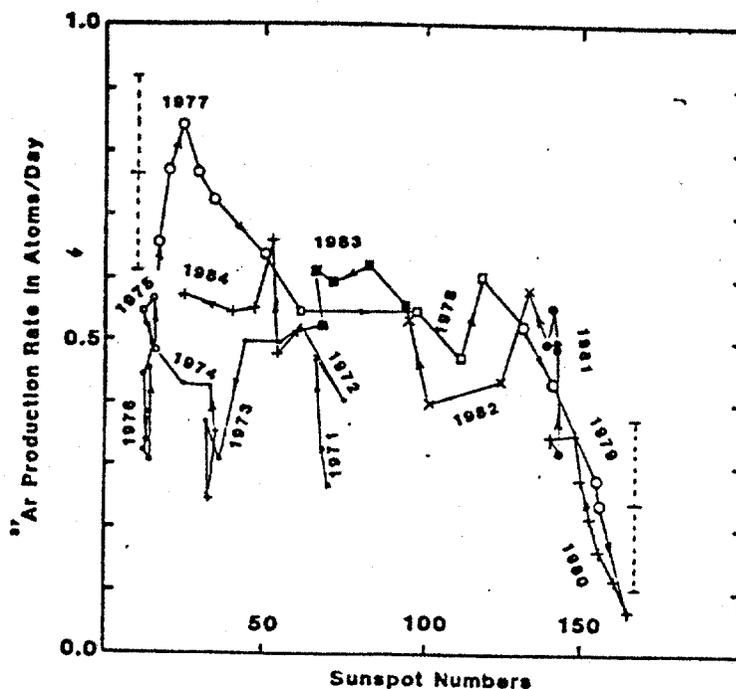


Figure 2. Correlation of ^{37}Ar production rate with sunspot numbers.