

**A CONTINUING YEARLY NEUTRON MONITOR LATITUDE SURVEY:
PRELIMINARY RESULTS FROM 1994-2001**

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Each year, beginning in 1994, a Bartol Research Institute / University of Tasmania / Australian Antarctic Division collaboration has conducted a neutron monitor latitude survey aboard a United States Coast Guard icebreaker which travels from the United States to McMurdo, Antarctica and back over a ~6-month period. The 3NM-64 neutron monitor is housed in a standard shipping container on the deck of the icebreaker.

We have performed a preliminary analysis of the survey data and will report on our findings. In particular, we will investigate the sensitivity of the modulated cosmic ray spectrum to the sign of the Sun's magnetic field, since this series of surveys covers the period from the rising period of the present solar activity cycle through the recent solar magnetic polarity change, which occurred in 1999 or 2000.

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