



Abstract Details

[AOGS 1st Annual Meeting](#) > [Non-linear Geophysics](#) > **Multi-scale response of climate to the solar activity** >

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Title: Multi-scale response of climate to the 11-yr solar activity
Abstract:

Whether climate is influenced by the solar activity has been a debated issue, partly due to small or inconsistent correlations between the solar and climate time series. Subharmonic response of a simple nonlinear system to multi-scale forcing helps us to understand the complicated yet detectable nonstationary solar footprints in climate, which may result in insignificant solar-climate correlation. Solar-modulated seasonal forcing is responsible for most decadal-centennial variability and some interannual variability in climate (e.g., SST). Different regional climate responses to the same solar activity depend on the magnitude of the annual forcing and internal dynamics that is season-dependent.

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