

## Trend of SST anomalies and Solar Activity

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The tendency of anomalies of SST during the fluctuation of Sunspot numbers are studied using composite SST and fluctuation of SSN.

In general, El Nino tendency is observed during Sunspot numbers (SSN) minimum, while La Nina tendency is observed in SSN maximum. It is generally accepted that the frequency of Solar Activity varies in 11 years, during those years there are SSN maximum and minimum. On the other hand, SST anomalies do not correspond well to the frequency of the solar activity. In addition, the thermal structure of sea surface temperature (SST) varies during El Nino and La Nina. Moreover, the impact of large-scale solar flare on the SST has not been clearly evident for the 4 days backward and forward comparison for the flare event on 2 April 2001 and 28 October 2003 on SST, wind velocity and OLR. Since the ocean has higher heat capacity, this might prevent the appearance of immediate SSN effect through the surge of any frequency in any band of electromagnetic waves from the SUN. The subtle impact might be confirmed either through cloud or wind. The long-term impact should also be considered by precise integration of the total energy on each wavelength. Numerical simulation is also expected to validate this issue.

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