



## **Can ENSO affect Tibetan Plateau thermal effect from winter through summer?**

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Following the approaches of a previous study, this paper reexamined if the ENSO condition can induce a delayed impact on Tibetan Plateau (TP) snowpack from winter to summer. Using longer record of the snow water equivalent (SWE) data, we found that there was significantly positive correlation between the sea surface temperature in central and eastern tropical Pacific in winter and the TP SWE in spring but not in summer. There was significant lag autocorrelations of the TP SWE between winter and spring but not between winter and summer. The SWE itself could significantly be correlated in the limitation of successive 5 months. These correlations confirm that the ENSO condition may result in an increasing snowpack in winter and spring but not in summer. On the other hand, the TP surface air temperature was less negatively correlated with the TP SWE. This implies that the TP snowpack may not act as a reduction of the TP thermal effect on air in spring and summer as the previous study suggested. Further analysis indicated that preceding ENSO condition tends to be associated with an increase of TP surface air temperature after May. This also suggested an impact of ENSO on the TP thermal effect but in a way opposite to that in the previous study. We proposed a newly possible teleconnection mechanism regarding ENSO effect on Asian monsoon.