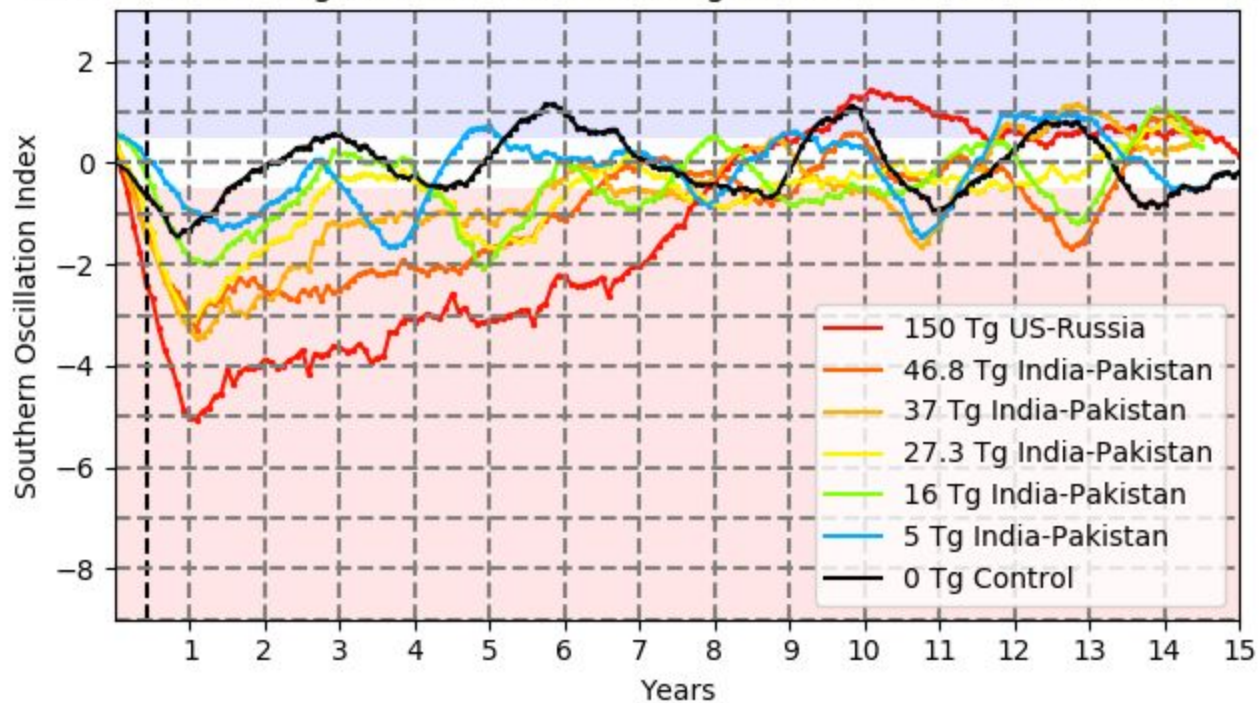
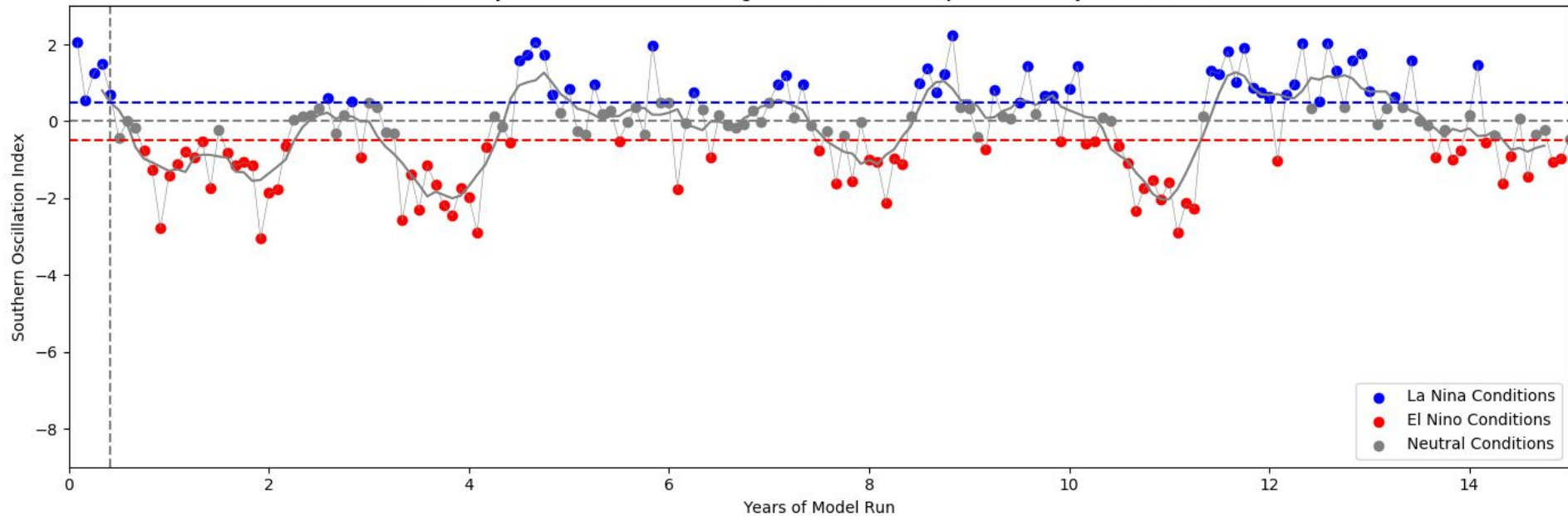


# Nuclear Nino in the 5 Tg Ensembles

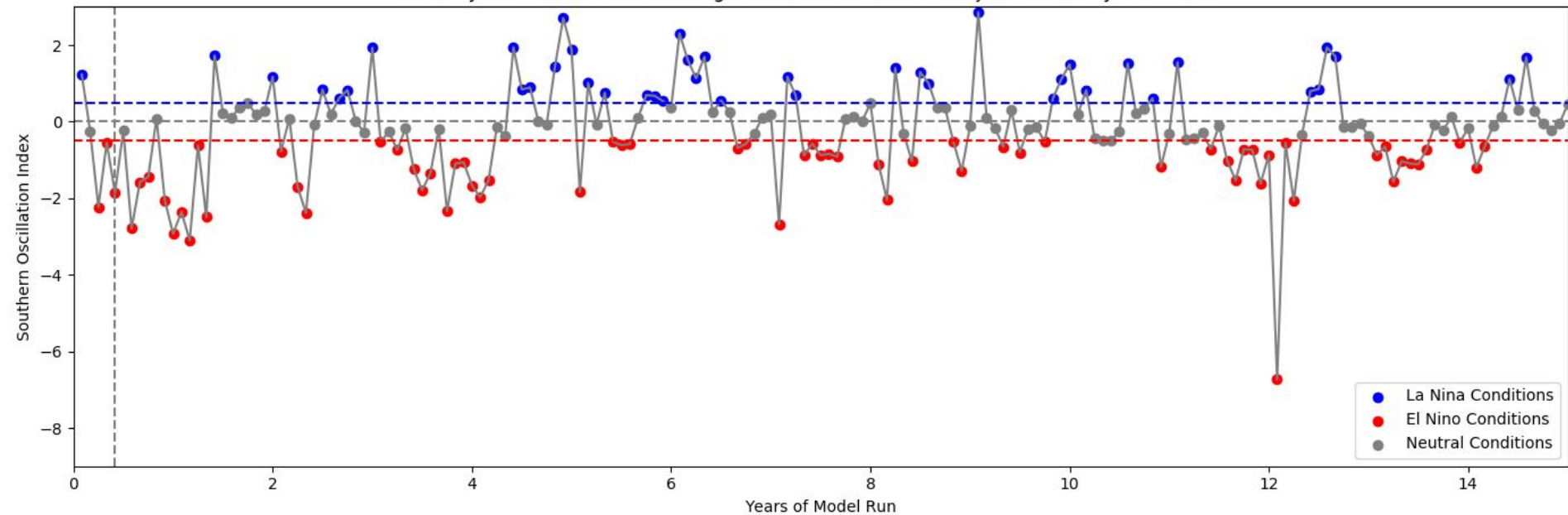
13-Month Running Mean SOI Index During 6 Nuclear War Scenarios in WACCM



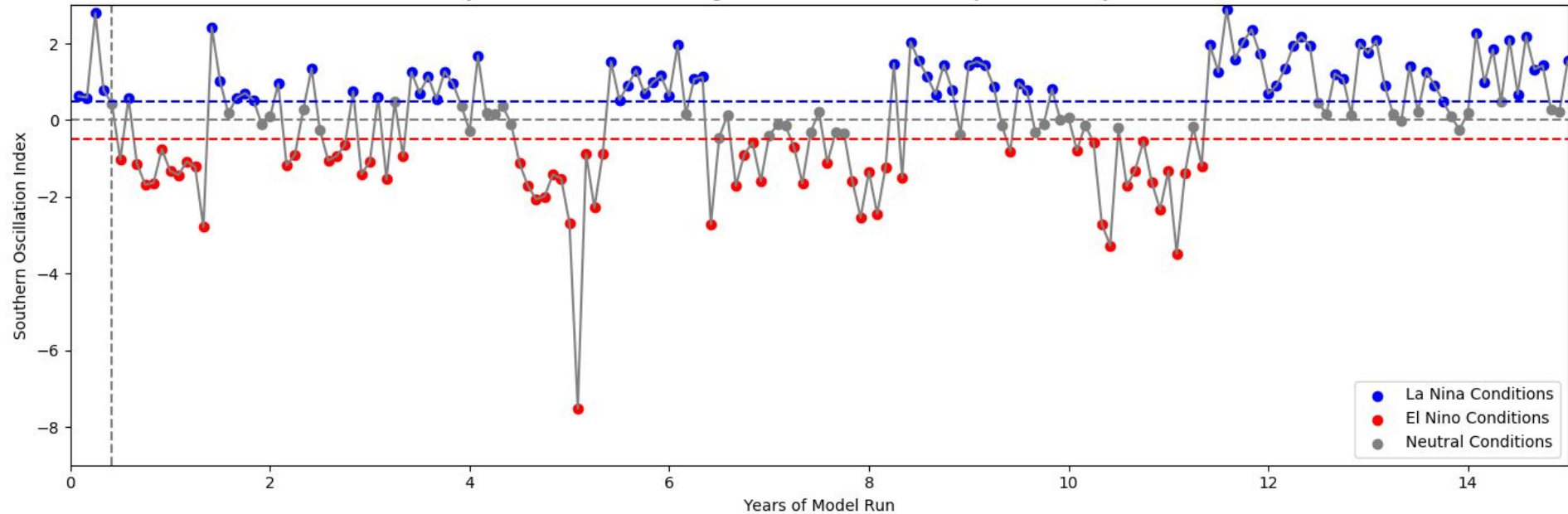
Monthly SOI Timeseries after 5 Tg India-Pakistan BC Injection on May 15th, Year 0



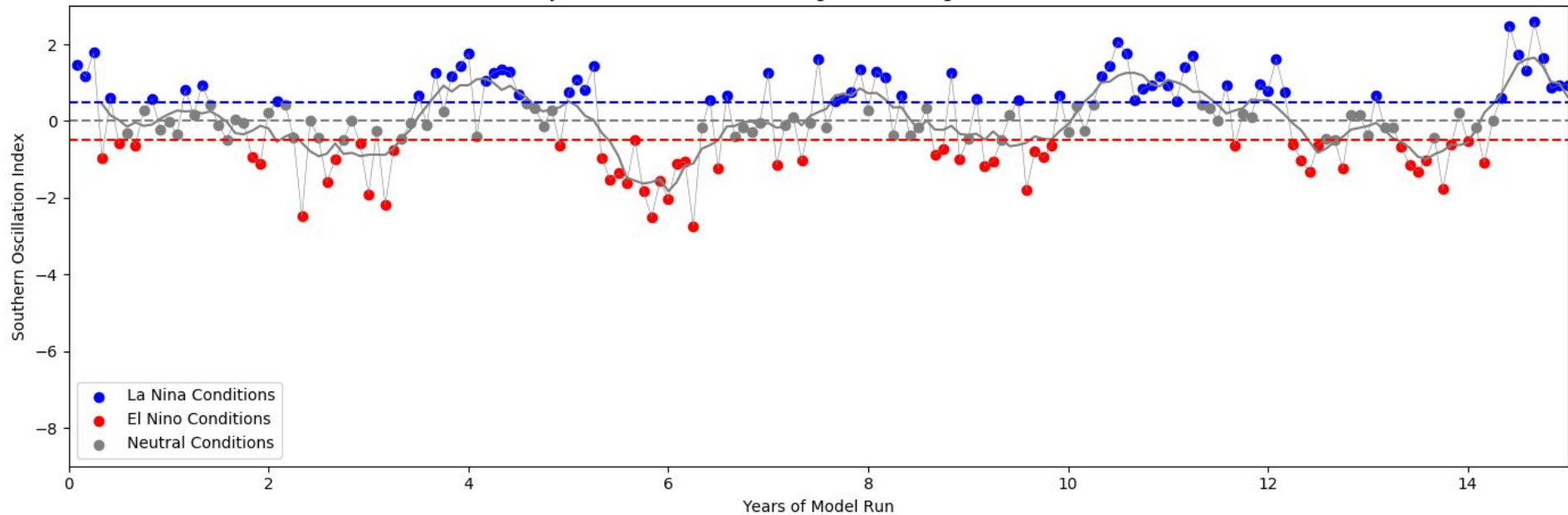
Monthly SOI Timeseries after 5 Tg India-Pakistan Ens 2 BC Injection on May 15th, Year 0



Monthly SOI Timeseries after 5 Tg India-Pakistan Ens 3 BC Injection on May 15th, Year 0



Monthly SOI with 13-month Running Mean During WACCM Control Run



# Why does SOI differ?

- Initial ENSO state likely plays a role
  - What would SOI look like if the beginning of the run was a strong La Nina state (like May, Yr14 of control)
- Based on Khodri 2017, there may be a relationship between continental cooling and westerly wind anomalies.
  - Does different SOI evolution depend more on initial ENSO state or how the continents cool?