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Who controls the long-term NAO variability?

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The regionality of climate response to the homogenious external forcing (i.e. solar variability and enhanced density of greenhouse gases) is one of the chalenging frontiers of climate research. A reference to the existing climatic modes, as factors modifying regionaly climate changes, simply raises a new question – What are the factors determining internal climatic modes? We have conducted a comparative analysis of NAO and lower stratospheric ozone variability, which reveals their covarience during last century (1900-2010). We show that observed coherence is their spatial-temporal evolution is due to the ozone's influence on the surface temperature and pressure, which determine the alternating multidecadal changes of NAO phase. In addition, the factors determining ozone's centenial variability will be also discussed.