**INTERCONTINENTAL CLIMATE INTERACTIONS**

It should come as no surprise that climate-related events in one country or region on a given continent could not only impact neighboring countries or regions on the same continent but also on weather patterns, and ecosystems on other distant continents. These occurrences, where a climate event on one continent effect another continent are Intercontinental climate interactions. Rising temperatures, melting ice caps and even changes in ocean circulation can have impacts on the weather, sea-level rise, and the ecosystems on all the continents including Antarctica which has been excluded from this analysis.

We identified seven intercontinental climate interactions, they are:

1. Between North America and Europe there is the North Atlantic Oscillation (NAO). The NAO is characterized by changes in atmospheric pressure over the North Atlantic Ocean. A positive NAO is associated with milder winters in Europe with colder and stormier weather in Eastern North America.
2. Between North America and Asia is the Pacific Decadal Oscillation (PDO). The PDO can cause instances of droughts, wildfires and heavy rainfall between the North Pacific Ocean and Asia.
3. For North America and Oceania there’s El Nino and La Nina. These ocean atmospheric phenomena impact weather patters all around the globe. El Nino causes wetter conditions for North America. La Nina conversely causes drier and warmer weather in Oceania.
4. Between Europe and Asia are the Siberian Highs. The Siberian Highs can create severely cold climate in Europe and influence the timing and intensity of monsoon season in Asia.
5. Africa dust and South America rainforest. Dust storms in Northern Africa transport dust particles across the Atlantic Ocean to the Amazonian rainforest in South America. The dust contains essential minerals for the soil in the rainforest which contributes to the health and growth of the Amazon.
6. African and Indian Monsoons. The monsoons in Africa and Asia are connected and are greatly impacted by each other. If the rain patterns of the African monsoons vary, those of Asia especially in India are affected.
7. The Southern Oscillation. When combined with El Nino and La Nina, the southern oscillation can affect the weather patterns in Oceania and South America. When the wet seasons caused by El Nino occurs in South America, drier weather occurs in Oceania.