

Special Issue on Large-Scale Dynamics, Anomalous Flows, and Teleconnections 2018

CALL FOR PAPERS

While the dynamics of large-scale meteorology have been largely described, there are two outstanding issues today that are being explored: anticipating a change in the hemispheric flow regime and making subseasonal forecasts at the three-to-four-week time-scale.

A greater understanding of the dynamic behaviour of teleconnective regimes, including their interactions with tropical weather, would enhance the capability of making long-range forecasts at the subseasonal level as described above. Making such forecasts involves a mix of statistic, dynamic, and modelling techniques. Currently, teleconnections are identified through the use of empirically derived indices; however, their dynamics are not well understood.

Additionally, anomalous flows and teleconnections can be responsible for the occurrence of extreme weather in the mid-latitudes where many people live. Finally, an understanding of the dynamics and behaviour of large-scale flows more thoroughly will be important for anticipating the impact of climate change.

We are particularly interested in manuscripts that examine the dynamics and predictability of anomalous flows and atmospheric teleconnections, from both a short-range and long-range perspective. The interactions of tropical convection, tropical cyclones (e.g., Typhoon Nuri, 2014), or the Madden Julian Oscillation are particularly welcome. Also, the examination of stratosphere-troposphere coupling would be a topic of interest. Papers that analyze the causes and the impacts of large-scale events that have led to periods of destructive weather, regardless of season, are welcome. Climatological studies that use models to project general circulation features, their future distribution, and their societal impacts would also be of interest to the community.

Potential topics include but are not limited to the following:

- ▶ Dynamics of teleconnections or blocking and predictability
- ▶ Large-scale predictability on the seasonal scale
- ▶ Tropical–mid-latitude interactions
- ▶ Climatological studies
- ▶ Modelling techniques in subseasonal forecasting
- ▶ Interannual and interdecadal variability in teleconnections and blocking
- ▶ Blocking and climate change
- ▶ Stratosphere-troposphere coupling (e.g., sudden stratospheric warming) during blocking

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/amete/ldat18/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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