Understanding the Dynamics of Future Changes in Extreme Precipitation Intensity

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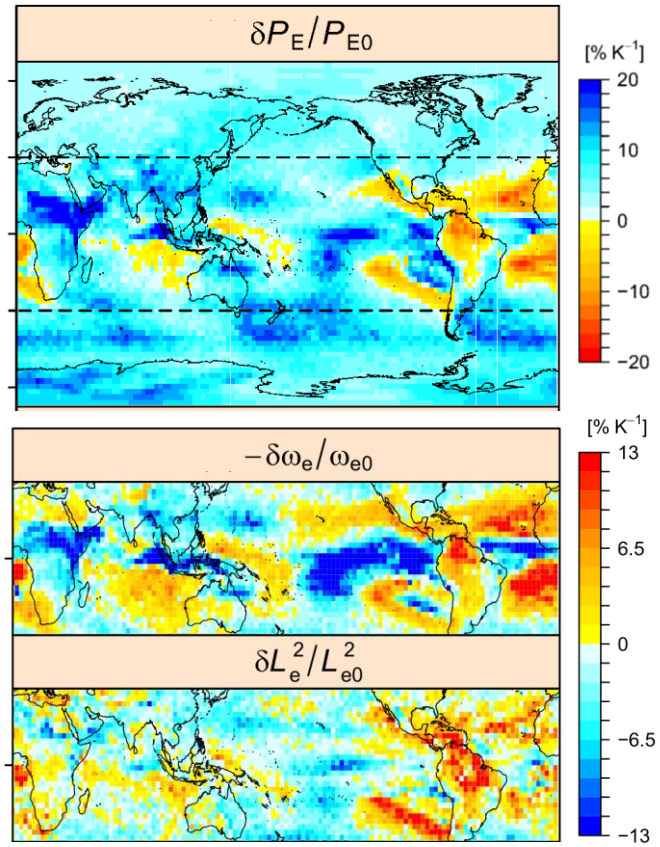
- 50-member ensemble of CanESM2, RCP8.5 scenario.
- Projected change in 10 year maximum of daily precipitation.
- Most of the regional variability is due to changes in large scale dynamics which are poorly understood.
- **Key question:** What drives the dynamical part of extreme precipitation change?
- **Our answer:** Changes in the horizontal scale of ascending anomalies are a key factor, especially in the subtropics.
- We show this using a combination of statistical and theoretical analysis based on quasigeostrophic (QG) theory.



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