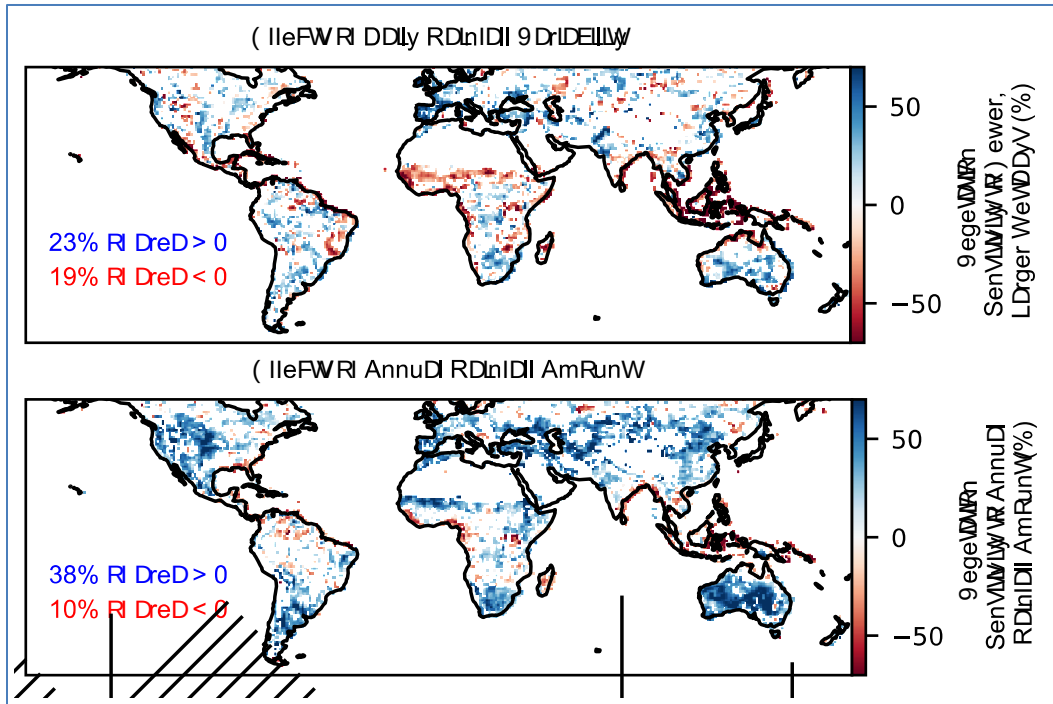


Large Global Scale Vegetation Sensitivity to Daily Rainfall Variability



Problem: Rainfall event intensity and frequency are shifting, with uncertain impacts on vegetation, including the global carbon cycle and crop yields



Finding:

- Satellite-based vegetation indices are sensitive to daily rainfall variability across 42% of the vegetated land surfaces
- The sensitivity of vegetation to daily rainfall variability is almost as large (95 per cent) as the sensitivity of vegetation to annual rainfall totals
- Used vegetation indices (OCO-2, MODIS) and rainfall and soil moisture metrics (GPM, SMAP)

Impact: Global vegetation carbon uptake and crop yields are sensitive to daily rainfall variability and not just the total amount of rainfall