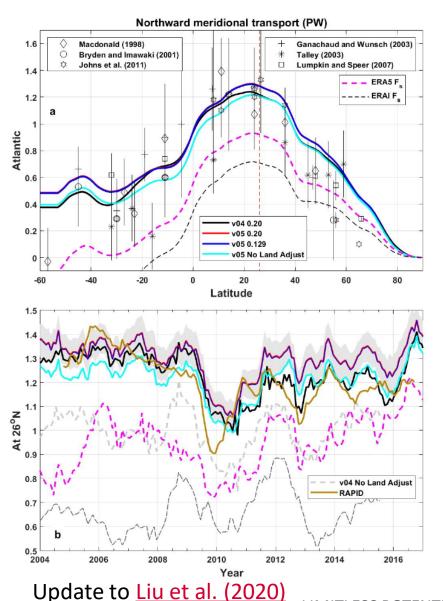
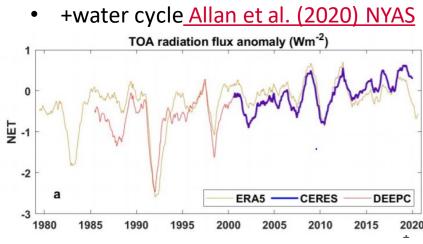
## **UPDATES TO DEEP-C DATASET**



- Update of TOA radiation dataset to 2020, CERES v4.1 (v5 Chunlei Liu)
- Updated surface flux to account for enthalpy using ERA5 (+Univ. Vienna)
- Improved land heat flux
- ← Updated ocean heat transports (left)
- Continued <u>wider use</u> of dataset (Met Office, ETH, Libera science team)
- Tackles major <u>science question</u>: how is energy budget driving/responding to climate change (input to IPCC)



LIMITLESS POTENTIAL | LIMITLESS OPPORTUNITIES | LIMITLESS IMPACT



## **ADDITIONAL WORK & FUTURE PLANS**

- Final version of DEEP-C energy budget product & link with energy budget closure
- Evaluation of precipitation diurnal cycle in CMIP6 simulations (<u>Watters et al. 2021</u>) →
- Updates in global precipitation as part of NERC project Rain from Space (Illingworth)
- Evaluation of water vapour changes in CMIP6 simulations (GCOS, Met Office, EUMETSAT) e.g. can we represent water vapour amplifying climate feedback →

