

Multi-dataset synergy: convective and cloud processes as a function of convective intensity, aggregation and life cycle (work in progress)

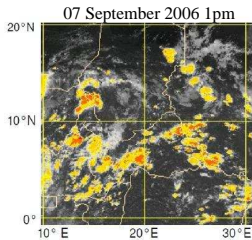
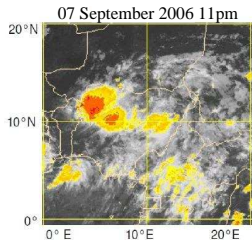
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Convective intensity, aggregation, life cycle

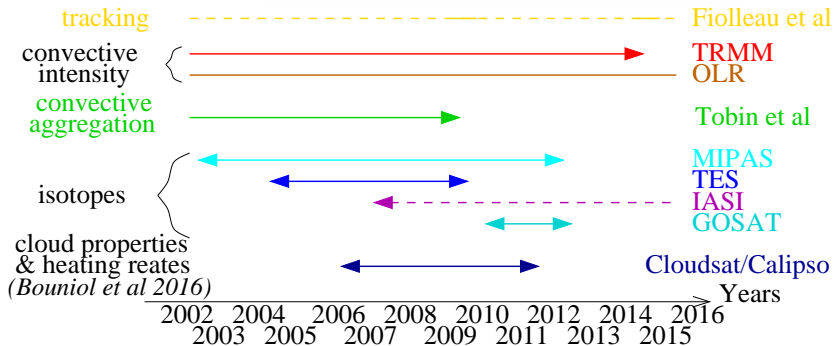
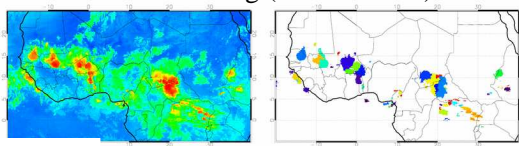


- ▶ aggregation: ex: *Tobin et al 2012, 2013*
- ▶ life cycle: ex: *Sherwood and Wahrlich 1999, Bouniol et al 2016*

- ▶ How do convective and cloud processes vary with these conditions?
- ▶ How do GCMs simulate these processes?
- ▶ Missing processes? Different probability of occurrence of life phases? Ignoring aggregation?
What consequences on the simulated water vapor budget?

Collocating multiple datasets

MCS tracking (Fioleau et al):



Added value of water isotopes

