



Calibration of a set of surface heat flux analyses

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There exists a foundation for simultaneous assessment of multiple collocated datasets, which leads to a global determination (i.e. for all collocations) of statistical properties characterizing bias (both additive and multiplicative), RMS error, and correlation with an unknown target analysis. This approach, widely referred to as the triple collocation method (Stoffelen 1998, McColl et al. 2014), provides an opportunity, not just to quantify, but also to reduce these errors (in an ordinary least squares sense) and thereby improve the correspondence between the data to be calibrated and an unknown target analysis. This application involves a number of global surface heat flux analyses that have been regridded to a common resolution and are compared to flux estimates from ICOADS. A minor recalibration is suggested for all analyses.