

## **Using metadata to understand VOS meteorological data**

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Meteorological reports from Voluntary Observing Ships (VOS), such as those collated in the International - Comprehensive Ocean Atmosphere Dataset (I-COADS), form an important part of the climate record. However these data contain biases and random errors which depend on how the measurement was taken, the type and exposure of the instruments used, the size of the ship, and environmental conditions, amongst other factors. Information is available about some of these important predictors of data quality both from within I-COADS and from external sources, for example the World Meteorological Organisation List of Selected, Supplementary and Auxiliary Ships (Publication 47) or Lloyds Register of Shipping. Examples of how this metadata can provide important information on data biases and random uncertainty will be presented.