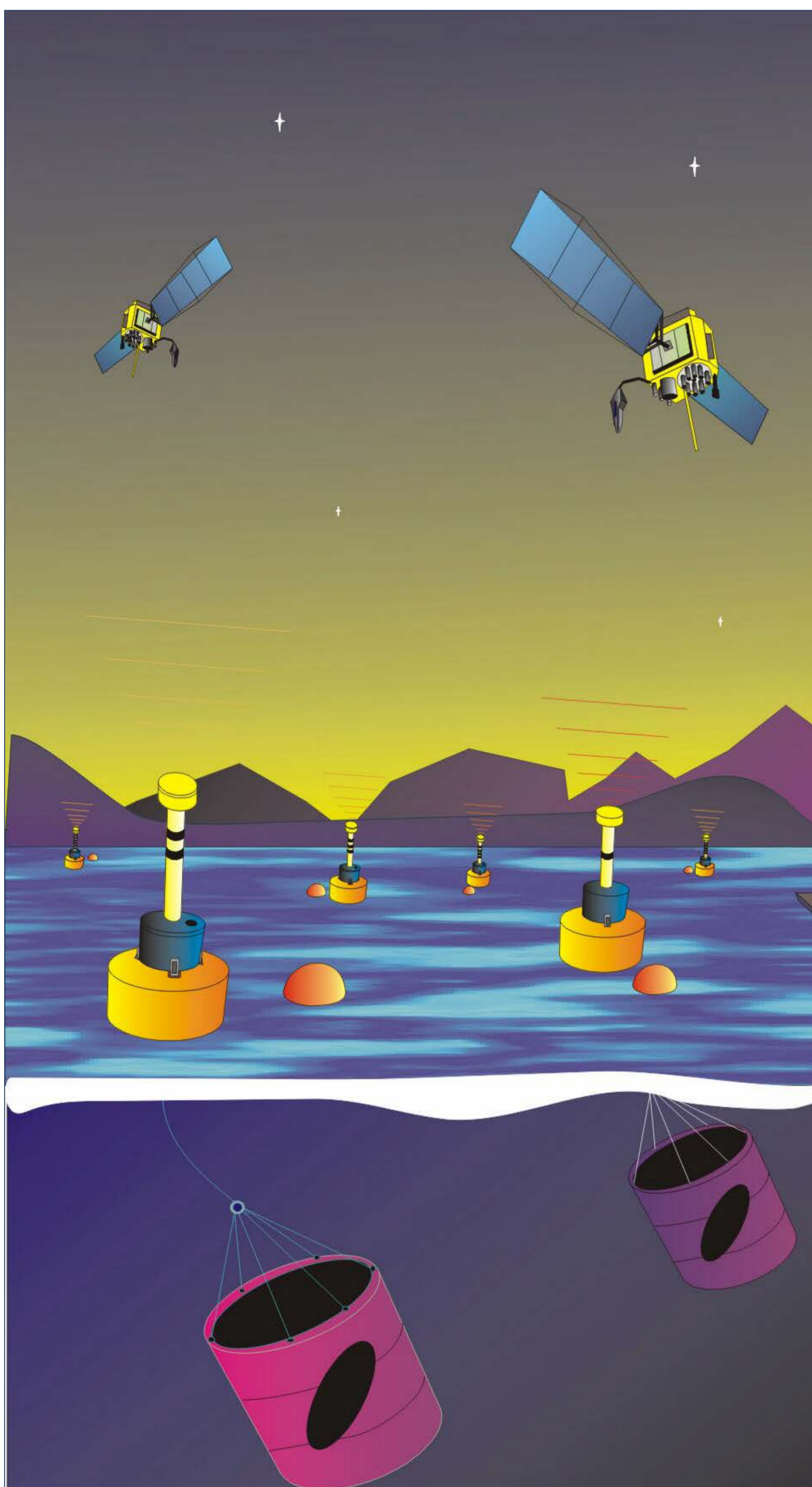


Towards improved drifter SST: a collaboration between the satellite community and the Data Buoy Co-operation Panel

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Satellite estimations of sea surface temperature depend critically on validation from in situ measurements. To date the dataset of choice has been the global fleet of ~ 1500 drifting buoys, despite the fact that these buoys were never intended to generate data of the quality required for satellite validation in terms of resolution, accuracy and traceability. To help address this incongruity, ESA (Craig Donlon) has commissioned a study, within FRM4STS, of the traceability of drifter SST to SI standards, for both the historical and current datasets. A major objective of the study has been to debate and agree a community-wide protocol for the measurement and traceability of drifter SST metadata.

See <http://www.frm4sts.org/drifter-sst-measurements/>

Outputs

Ref	Short name	Deliverable title and description	Date due	Electronic delivery
OP-10	LIB	Web-based library (LIB) of relevant calibration and validation documentation for non-recoverable SST and IST instruments.	KO+21	Web
OP-20	TR-4	Technical Report (TR-4): "Towards SI Traceability for non-recoverable SST and IST FRM Instruments"	KO+21	Web
OP-30	STM	Scientific and Technical Meeting Report: "Towards SI Traceability for non-recoverable SST and IST FRM Instruments"	KO+22	Web

Follow-on work has been initiated by EUMETSAT (Anne O'Carroll) to build and deploy a small fleet (100-150) of high specification drifters that will deploy a high quality HRSST sensor alongside the traditional sensor fit. Additionally, the drifters will carry sensors that will allow the dynamics of the drifter in the water column (and thus within the temperature stratification) to be properly evaluated. A major objective of the study is to demonstrate whether or not it is useful for satellite retrievals to fit future drifters with improved sensors.

