

CEOS SST-VC: Summary of cal/val requirements

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<http://www.ghrsst.org>



SST-VC cal/val activities

- Clear separation of calibration and validation activities
 - Each one clearly defined by the WGCV
- For calibration
 - Coordinated through WGCV IVOS and reported to SST-VC/GHRSSST
 - Interaction with instrument teams
- For validation
 - Coordinated through GHRSSST and reported to SST-VC/WGCV IVOS
 - Established links to JCOMM DBCP and SOT, Argo, ship radiometers and other reference data sources

Calibration requirements

- Provision of calibrated geolocated radiances is the responsibility of the instrument provider (to Level 1b)
- Require standard set of instrument parameters
 - E.g. Spectral profiles (relative spectral response functions); instrument T; instrument stability; detector non-linearity; etc.
 - Information ideally provided through web portal
 - For all sensors - future, current & past
- Communication methods
 - Two way feedback is essential e.g. via WGCV IVOS

Validation requirements

- Validation of geophysical parameters should also involve other groups such as GHRSSST
 - May be same entity as responsible for calibration
 - **Independence** of reference data, methods and personnel is preferable
- Require **long-term SI-traceable reference measurements**
 - Ideally global in coverage, reporting every minute, to minimise uncertainties
 - Of course this is not practical so in reality we use what is available
 - But it is important to maintain key data at a minimum level (see next slide)
 - Need to maintain strong two-way dialogue with reference data providers
 - To understand existing data and seek cost-effective upgrades that benefit an integrated measurement system for SST

But...

- **The current financial situation is affecting available reference data**
 - Interruptions to critical data streams, e.g. ICOADS
 - Recent reduction in GTMBA data flow
 - Fewer drifters being deployed
 - Proposed project to improve quality/usefulness of future drifters is essential
 - Piecemeal, insecure funding for SI-traceable radiometric measurements
 - Need to establish radiometry network c.f. DBCP, Argo etc.
 - Key link to LST and IST (we are moving to ST!)