



# **SCS** Scientific Computing System NOAA Office Of Marine and Aviation Operations

## Release Notes for SCS 5.0.40

Release Date: July 30, 2021

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Software Engineering Division  
Marine and Aviation Cyber Center

### Related Documents: SCS User Manual

- HTML - <https://scsshore.noaa.gov/help>
- PDF - <https://scsshore.noaa.gov/Home/Downloads>

Visit <https://SCSShore.noaa.gov> to learn more details about SCS.

# Improvement

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## Overall

- Improved the SignalR engine for a more reliable and stable data connection between server and clients.
- Improved the parser engine to ensure the data quality.

## CFE

- Add validation to prevent base fields with "Other" type being used as inputs to derived calculations.
- Improved the logic to handle the reference orders of physical devices.
- Add a new liner equation, similar to  $y=mx + b$  in the old SCS v.4, to the calculation category.
- Reformat the sensor names, the names are shorter and easier to read.

## Quality Assurance / Quality Control (QA/QC)

- QAQC Monitor - Make the QAQC monitor details template summary grid be a summary of those definitions that reference given message definition or any of its data fields.
- Time Source – Add features to log input from up to 2 NTP servers, Log local system time and indicate drift and alert users of the any issue.

## Events

- Add ability for SCS Events to be downloaded via the REST API feature located at *scsshore* site.

## Raw Data Related

- Make time format in RAW data files more detailed, such as to include decimal seconds: *2021-06-22T14:01:54.9571247Z*.

## Data Visualization Tools - Layouts, Widget Groups and Widgets

- Post-Time Series Plot – The plot now allows user to add up to 4 sensors with manual axis ranges and user defined date/time range.
- Add more colors to Quick View (Charts, Gauges, etc.)

## Custom Message

- *Shiptracker custom messages* have been removed. Now it's called *NPAD messages* and no longer accessible as a template. The NPAD message will be sent through REST actions in the backend every 20 minutes.

# Resolved Issues and Bugs

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## Submit a Ticket

- (Fixed) Unable to submit tickets from SCS system.

## CFE

- (Fixed) Copied an existing physical device and pasted to create a new device did not work.
- (Fixed) ACQ was not notified if only reference orders changed in CFE.
- (Fixed) SAMOS Calculated Items – Changes made to those SAMOS system-generated items caused errors – Now, those items are ready-only.

## Data Visualization Tools - Layouts, Widget Groups and Widgets

- (Fixed) Occasionally, the charts and gauges frozen after a period of time.
- (Fixed) Post Time Series Plot - Failed to plot if bad data received.

## Quality Assurance / Quality Control (QAQC)

- (Fixed) QAQC Monitor - Select Custom for Time Constraint will cut out timestamp display.
- (Fixed) QAQC Monitor Filter – Several issues found with the filtered results

## Events

- (Fixed) Data field selection issue in the Sensor Selector. For example, some derived data fields were disabled.
- (Fixed) The Participants list throw exception when accessing the event page.
- (Fixed) String Meta values ignored and never saved to outputs.
- (Fixed) Formatting options for reference latitude and longitude were disabled.

## Ship to Shore Communication

- (Fixed) Incorrect designators found in the SAMOS Instrument Metadata files
- (Fixed) SAMOS once-per-minute data was missing all the xx : 59.
- (Fixed) Error to get NCEI data submittal status.