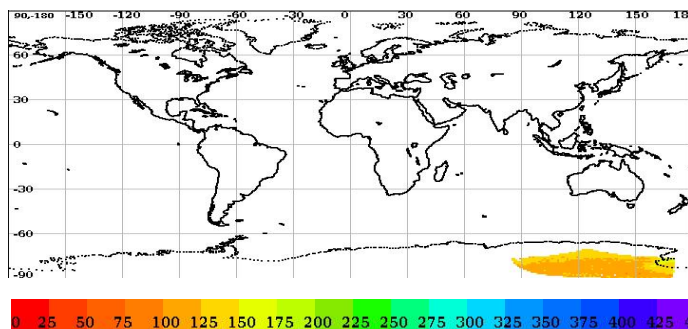


# Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

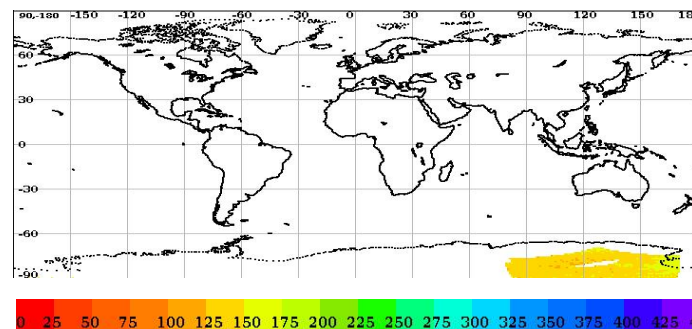
| Satellite      | Sensor          | Start Orbit       | End Orbit       |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1      | Scatterometer   | 14984             | 14985           |
| WV Cells Along | WV Cells Across | EquatorCrossDate  | Production Date |
| 66             | 72              | 01-01-1970        | 26-07-2019      |
| Direction      | WVC Size(km)    | Processor Version |                 |
| SN             | 25              | v1.1.3            |                 |

## Brightness Temperature

Inner Beam (HH)

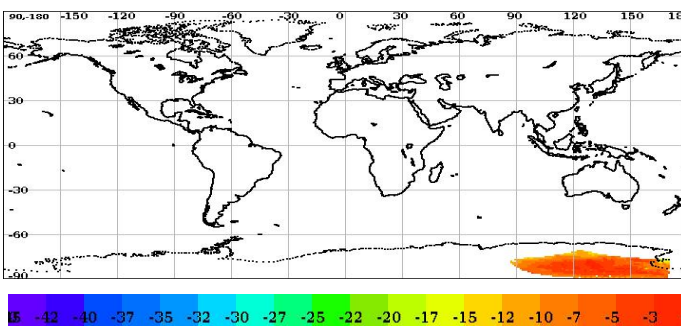


Outer Beam (VV)

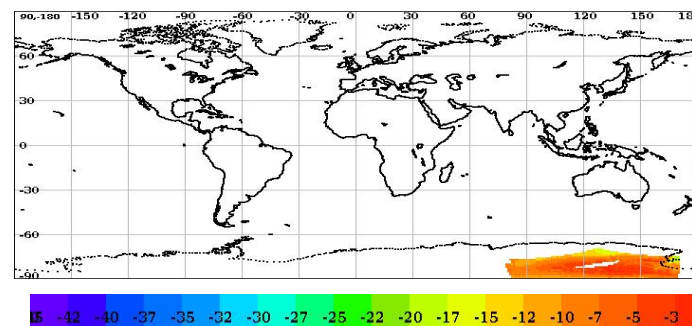


## Sigma0(dB)

Inner Beam (HH)



Outer Beam (VV)



## Invariant Site Sigma-0 Statistics for Ascending/Descending, Fore/Aft in HH/VV beams

| Site Name | Center Lat | Center Lon | Beam  | Node | ScanDir | Sigma0 Min | Sigma0 Max | Sigma0 Mean | Sigma0 Std | BT Min | BT Max | BT Mean | BT Std |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ANT_1     | -75.00     | 121.00     | Inner | ASC  | Fore    | -10.71     | -3.95      | -6.71       | 1.40       | 110.63 | 150.26 | 131.37  | 13.76  |
| ANT_1     | -75.00     | 121.00     | Outer | ASC  | Fore    | -10.45     | -5.40      | -7.93       | 1.36       | 109.24 | 149.05 | 128.16  | 11.10  |

## Level-2A Cell-wise Deviations\*

| Static Parameter Statistics (variations over the cell grid) for the Inner and Outer Beam |                 |         |              |         |         |              |                 |         |              |         |         |              |
|--|-----------------|---------|--------------|---------|---------|--------------|-----------------|---------|--------------|---------|---------|--------------|
| Parameter  | Inner Beam (HH) |         |              |         |         |              | Outer Beam (VV) |         |              |         |         |              |
|  | Aft             |         |              | Fore    |         |              | Aft             |         |              | Fore    |         |              |
|  | Min Rng         | Max Rng | Bad Occ. (%) | Min Rng | Max Rng | Bad Occ. (%) | Min Rng         | Max Rng | Bad Occ. (%) | Min Rng | Max Rng | Bad Occ. (%) |
| <b>Kpa</b>   | 0.00            | 0.07    | 0.00         | 0.00    | 0.07    | 0.00         | 0.00            | 0.07    | 0.00         | 0.00    | 0.07    | 0.00         |
| <b>Kpb</b>   | 0.00            | 0.09    | 0.00         | 0.00    | 0.09    | 0.00         | 0.00            | 0.09    | 0.00         | 0.00    | 0.09    | 0.00         |
| <b>Kpc</b>   | 0.00            | 0.00    | 0.00         | 0.00    | 0.00    | 0.00         | 0.00            | 0.00    | 0.00         | 0.00    | 0.00    | 0.00         |
| <b>Inc. Angle(deg)</b>   | 0.00            | 0.00    | 0.00         | 0.00    | 0.00    | 0.00         | 0.00            | 0.00    | 0.00         | 0.00    | 0.00    | 0.00         |
| <b>Delta Azi.Angle(deg)</b>  | 0.00            | 15.91   | 7.04         | 0.00    | 120.67  | 2.57         | 0.00            | 135.00  | 4.16         | 0.00    | 9.34    | 0.00         |

| Category wise Dynamic Parameter Statistics (Variations over the Cell grid) |                   |         |         |              |           |           |              |          |         |              |           |         |              |
|--|-------------------|---------|---------|--------------|-----------|-----------|--------------|----------|---------|--------------|-----------|---------|--------------|
| Parameter  | Beam              | Sea Aft |         |              | Sea Fore  |           |              | Land Aft |         |              | Land Fore |         |              |
|  |                   | Min Rng | Max Rng | Bad Occ. (%) | Min Rng   | Max Rng   | Bad Occ. (%) | Min Rng  | Max Rng | Bad Occ. (%) | Min Rng   | Max Rng | Bad Occ. (%) |
| <b>SNR(dB)</b>   | <b>Inner (HH)</b> | 0.00    | 18.79   | 0.00         | 0.00      | 0.00      | 0.00         | 0.00     | 12.28   | 0.00         | 0.00      | 12.15   | 0.00         |
|  | <b>Outer (VV)</b> | 0.00    | 16.35   | 0.00         | 100000.00 | -10000.00 | 0.00         | 0.00     | 12.64   | 0.00         | 0.00      | 16.40   | 0.00         |
| <b>Sigma0(dB)</b>  | <b>Inner (HH)</b> | 0.00    | 20.81   | 1.25         | 0.00      | 0.00      | 0.00         | 0.00     | 11.01   | 0.00         | 0.00      | 10.14   | 0.00         |
|  | <b>Outer (VV)</b> | 0.00    | 16.16   | 0.00         | 100000.00 | -10000.00 | 0.00         | 0.00     | 11.16   | 0.00         | 0.00      | 12.28   | 0.00         |

| Parameter Specifications with in a cell |     |     |     |            |          |                  |             |
|---|-----|-----|-----|------------|----------|------------------|-------------|
| Parameter                               | Kpa | Kpb | Kpc | Inci (deg) | SNR (dB) | Delta Azi. (deg) | Sigma0 (dB) |
| Range                                   | 1.0 | 1.0 | 1.0 | 3.0        | 20.0     | 10.0             | 20.0        |

■ Normal    
 ■ Deviation    
 ■ Alarming    
 ■ High

\* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

