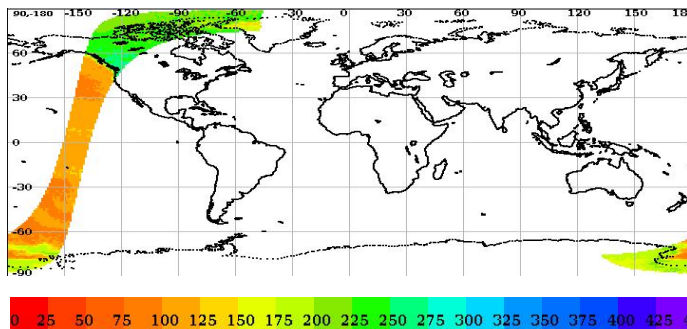


# Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

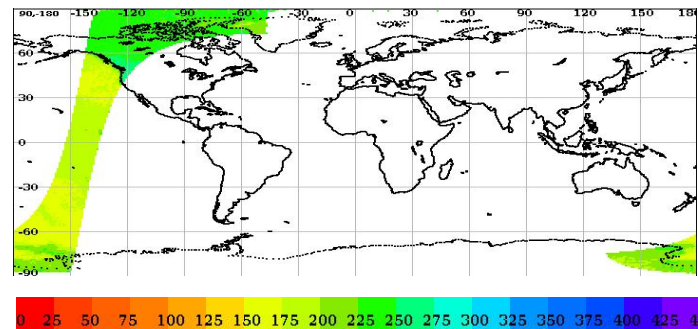
| Satellite      | Sensor          | Start Orbit       | End Orbit       |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1      | Scatterometer   | 11912             | 11913           |
| WV Cells Along | WV Cells Across | EquatorCrossDate  | Production Date |
| 800            | 72              | 26-12-2018        | 26-12-2018      |
| Direction      | WVC Size(km)    | Processor Version |                 |
| NS             | 25              | v1.1.3            |                 |

## Brightness Temperature

Inner Beam (HH)

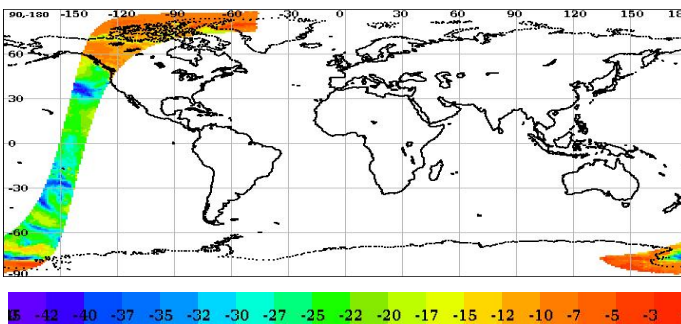


Outer Beam (VV)

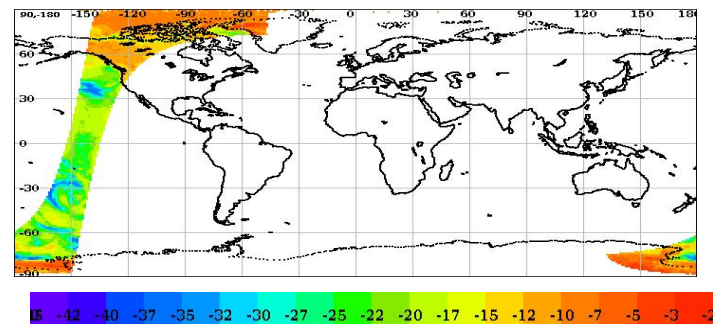


## Sigma0(dB)

Inner Beam (HH)



Outer Beam (VV)



## 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            | 23.54   | 7.01         | 0.00    | 23.68   | 8.61         | 0.00            | 355.24  | 3.91         | 0.00    | 14.33   | 4.82         |

| 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    | 36.97   | 0.74         | 0.00     | 41.56   | 1.20         | 0.00     | 14.99   | 0.00         | 0.00      | 20.03   | 0.01         |
|  | <b>Outer (VV)</b> | 0.00    | 34.35   | 0.92         | 0.00     | 43.01   | 1.68         | 0.00     | 13.26   | 0.00         | 0.00      | 22.42   | 0.02         |
| <b>Sigma0(dB)</b>  | <b>Inner (HH)</b> | 0.00    | 37.01   | 0.71         | 0.00     | 40.73   | 1.03         | 0.00     | 13.64   | 0.00         | 0.00      | 19.13   | 0.00         |
|  | <b>Outer (VV)</b> | 0.00    | 32.63   | 0.87         | 0.00     | 40.11   | 1.37         | 0.00     | 10.54   | 0.00         | 0.00      | 17.67   | 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

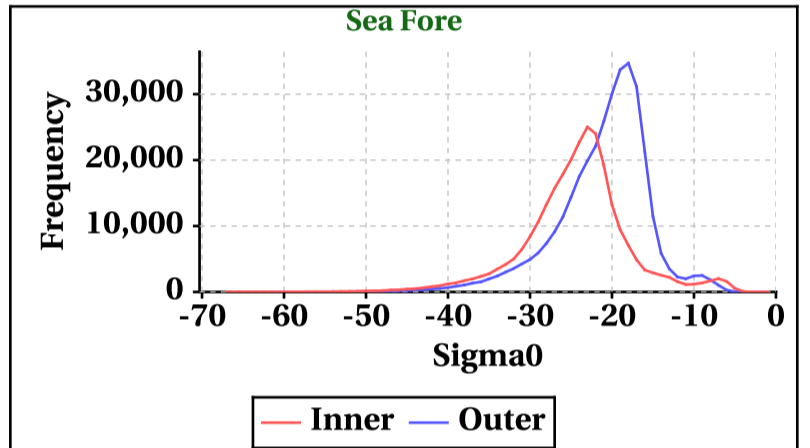
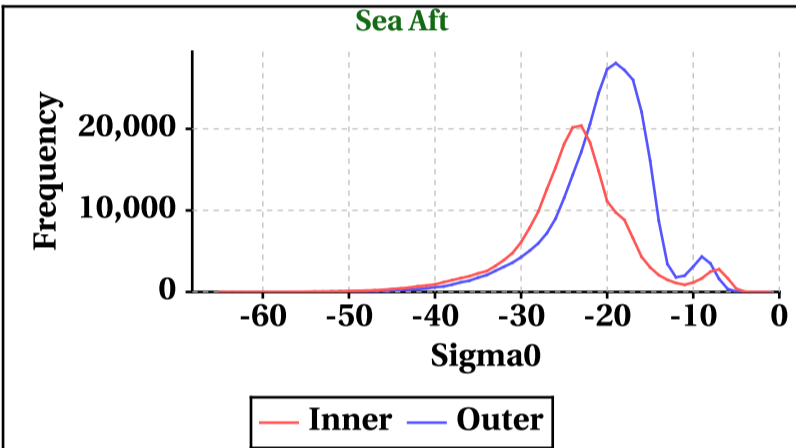
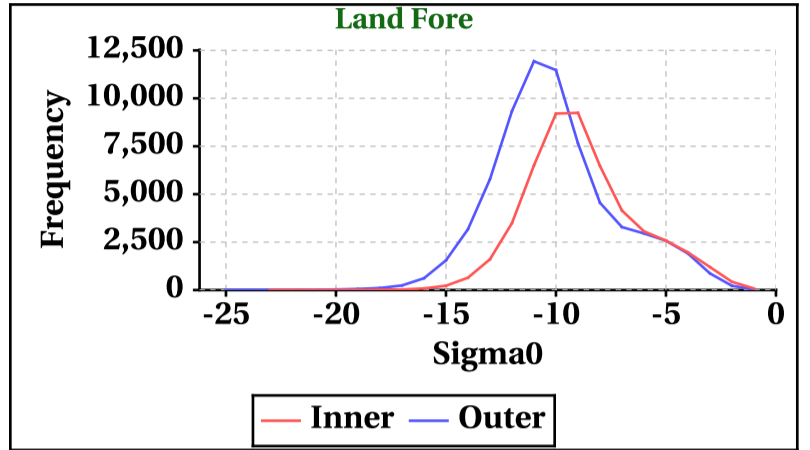
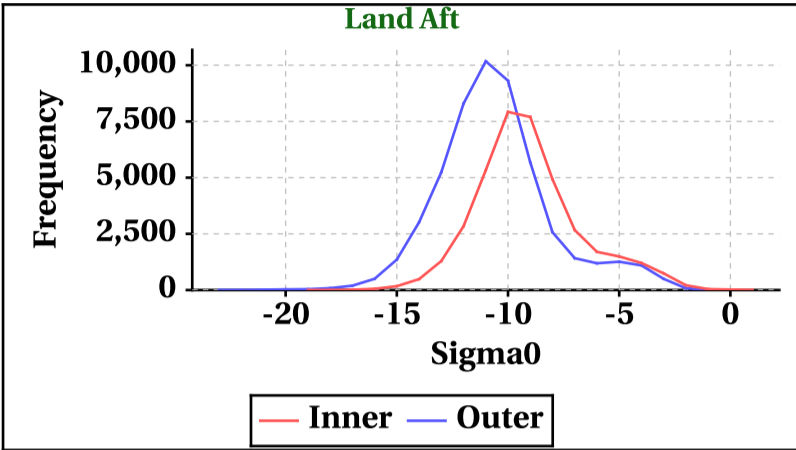
\* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

# Dynamic Range (Data Histograms)

## Sigma0(db)

| Inner Beam (HH) |          |           |         |          |
|-----------------|----------|-----------|---------|----------|
|                 | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min             | -19      | -23       | -65     | -67      |
| Max             | 1        | -1        | -1      | -1       |

| Outer Beam (VV) |          |           |         |          |
|-----------------|----------|-----------|---------|----------|
|                 | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min             | -23      | -25       | -60     | -61      |
| Max             | -1       | -1        | -1      | -1       |



## Brightness Temperature(K)

| Inner Beam(HH) |          |           |         |          |
|----------------|----------|-----------|---------|----------|
|                | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min            | 1        | 1         | 1       | 1        |
| Max            | 324      | 317       | 295     | 283      |

| Outer Beam(VV) |          |           |         |          |
|----------------|----------|-----------|---------|----------|
|                | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min            | 1        | 1         | 1       | 1        |
| Max            | 309      | 310       | 312     | 291      |

