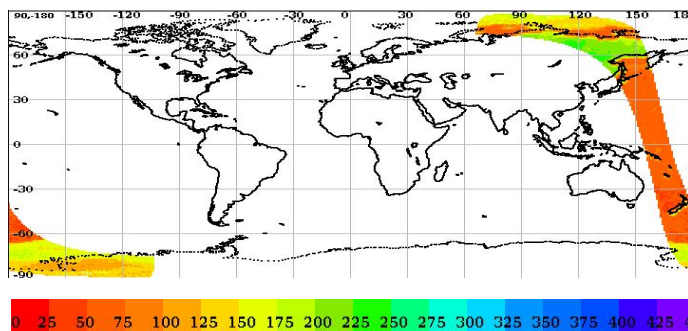


# Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

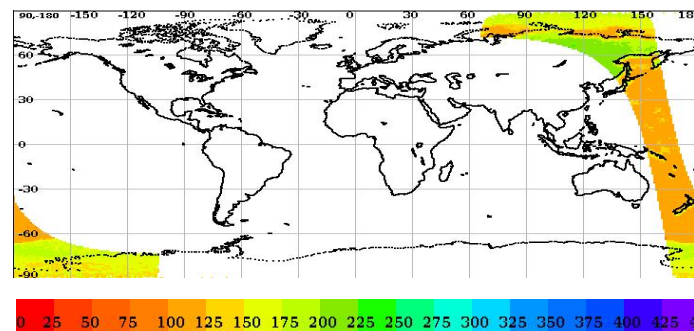
| Satellite      | Sensor          | Start Orbit       | End Orbit       |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1      | Scatterometer   | 14937             | 14938           |
| WV Cells Along | WV Cells Across | EquatorCrossDate  | Production Date |
| 405            | 36              | 23-07-2019        | 23-07-2019      |
| Direction      | WVC Size(km)    | Processor Version |                 |
| SN             | 50              | v1.1.3            |                 |

## Brightness Temperature

Inner Beam (HH)

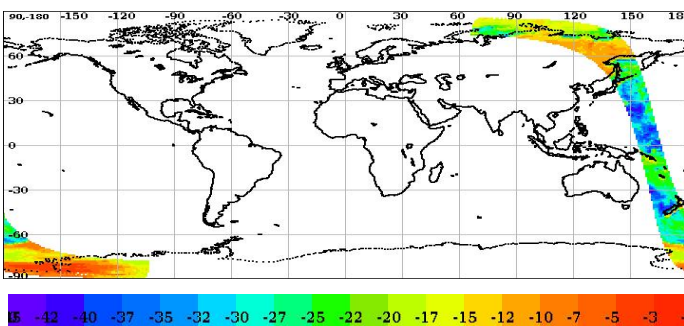


Outer Beam (VV)

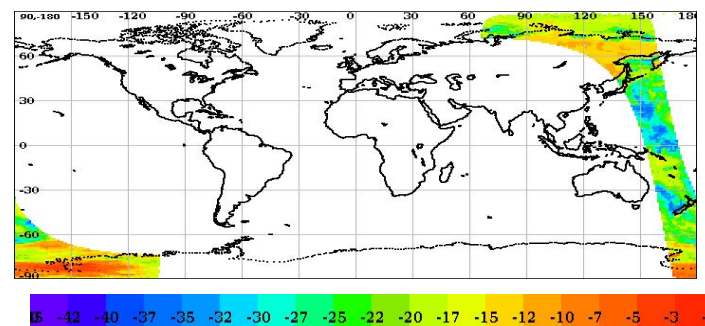


## Sigma0(dB)

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            | 28.98   | 12.92        | 0.00    | 84.46   | 13.85        | 0.00            | 136.16  | 9.62         | 0.00    | 185.05  | 12.28        |

| 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    | 46.82   | 11.22        | 0.00     | 48.88   | 13.04        | 0.00     | 16.76   | 0.00         | 0.00      | 20.45   | 0.05         |
|                                                                            | <b>Outer (VV)</b> | 0.00    | 42.04   | 7.44         | 0.00     | 38.26   | 9.57         | 0.00     | 22.73   | 0.07         | 0.00      | 21.57   | 0.08         |
| <b>Sigma0(dB)</b>                                                          | <b>Inner (HH)</b> | 0.00    | 46.69   | 11.23        | 0.00     | 50.49   | 12.96        | 0.00     | 16.45   | 0.00         | 0.00      | 19.51   | 0.00         |
|                                                                            | <b>Outer (VV)</b> | 0.00    | 42.84   | 7.62         | 0.00     | 38.79   | 9.44         | 0.00     | 20.39   | 0.07         | 0.00      | 22.05   | 0.04         |

| 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

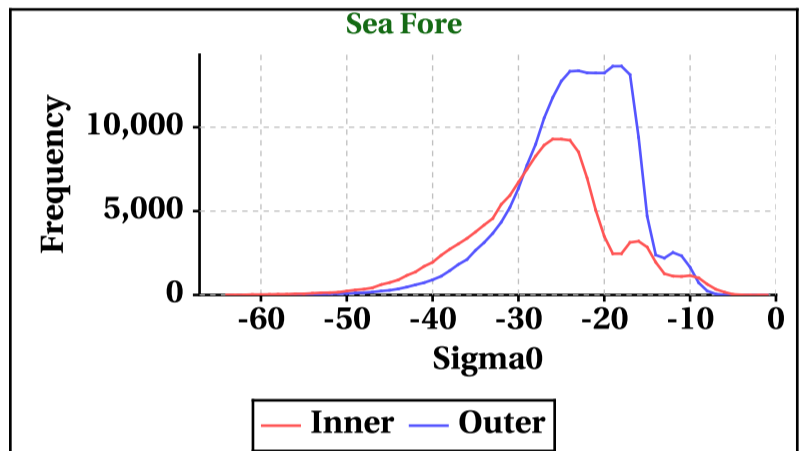
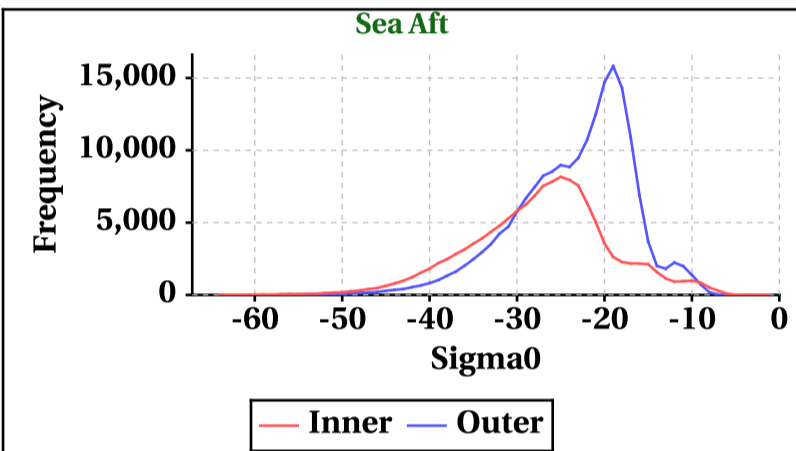
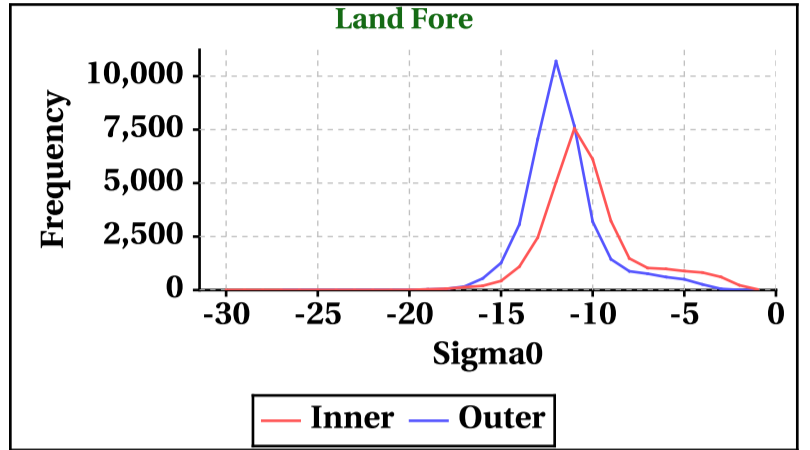
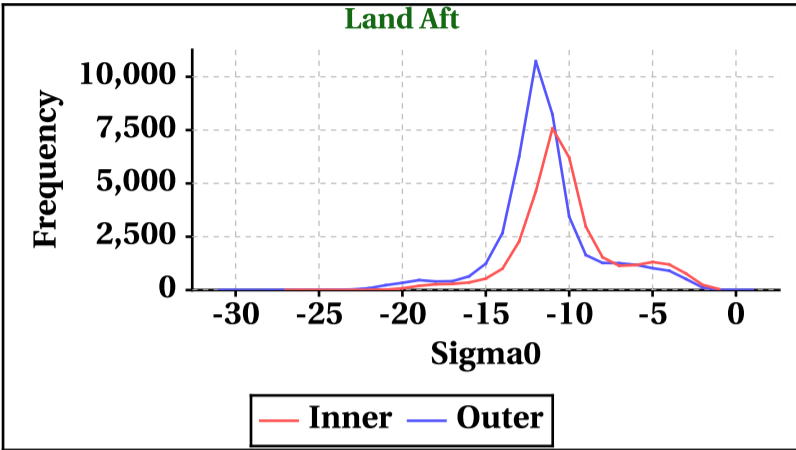
\* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

# Dynamic Range (Data Histograms)

## Sigma0(db)

| Inner Beam (HH) |          |           |         |          |
|-----------------|----------|-----------|---------|----------|
|                 | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min             | -27      | -30       | -64     | -64      |
| Max             | -1       | -1        | -1      | -1       |

| Outer Beam (VV) |          |           |         |          |
|-----------------|----------|-----------|---------|----------|
|                 | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min             | -31      | -27       | -59     | -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            | 284      | 287       | 227     | 232      |

| Outer Beam(VV) |          |           |         |          |
|----------------|----------|-----------|---------|----------|
|                | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min            | 1        | 1         | 1       | 1        |
| Max            | 270      | 280       | 233     | 243      |

