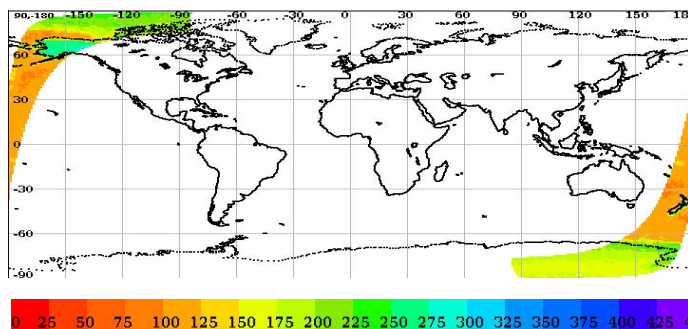


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

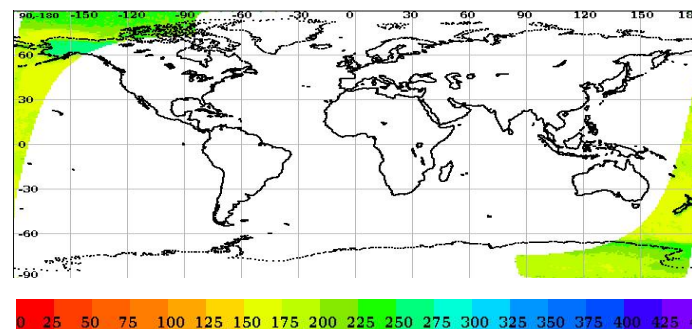
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 15089 | 15090 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 813 | 72 | 02-08-2019 | 03-08-2019 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

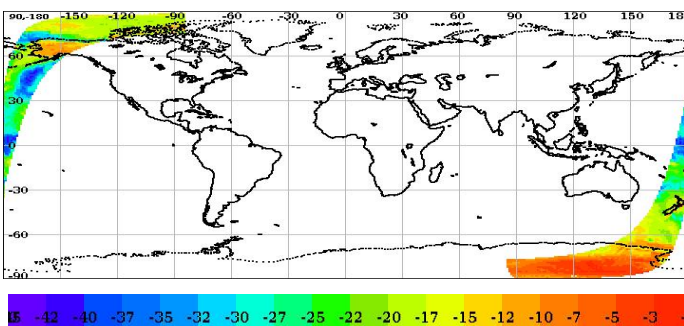


Outer Beam (VV)

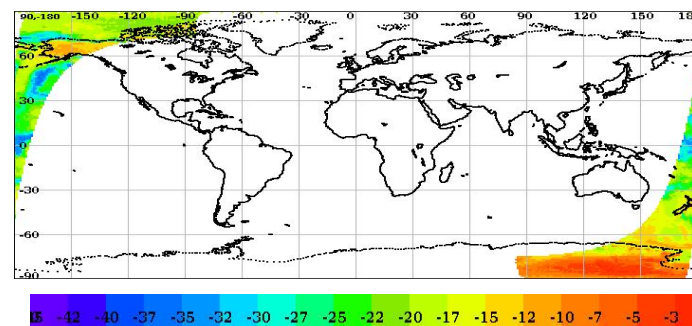


Sigma0(dB)

Inner Beam (HH)



Outer Beam (VV)



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 | DSC | Aft | -10.11 | -5.12 | -6.85 | 1.09 | 163.07 | 209.60 | 178.46 | 14.11 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Aft | -9.30 | -6.07 | -8.01 | 0.81 | 166.61 | 213.54 | 187.47 | 14.88 |
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Fore | -9.77 | -5.10 | -7.07 | 1.15 | 141.92 | 211.11 | 182.06 | 14.23 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Fore | -12.24 | -6.67 | -8.66 | 1.30 | 166.52 | 213.22 | 188.47 | 12.90 |

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. (%) |
| Kpa | 0.00 | 0.07 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.07 | 0.00 |
| Kpb | 0.00 | 0.09 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.09 | 0.00 |
| Kpc | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Inc. Angle(deg) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Delta Azi.Angle(deg) | 0.00 | 24.21 | 6.46 | 0.00 | 24.70 | 7.52 | 0.00 | 301.50 | 3.12 | 0.00 | 74.47 | 3.84 |

| 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. (%) |
| SNR(dB) | Inner (HH) | 0.00 | 40.49 | 1.48 | 0.00 | 45.44 | 2.00 | 0.00 | 20.05 | 0.01 | 0.00 | 35.37 | 0.09 |
| | Outer (VV) | 0.00 | 36.59 | 1.53 | 0.00 | 45.92 | 2.49 | 0.00 | 17.09 | 0.00 | 0.00 | 31.51 | 0.08 |
| Sigma0(dB) | Inner (HH) | 0.00 | 39.48 | 1.46 | 0.00 | 48.83 | 1.88 | 0.00 | 21.44 | 0.01 | 0.00 | 35.46 | 0.09 |
| | Outer (VV) | 0.00 | 36.15 | 1.52 | 0.00 | 45.19 | 2.22 | 0.00 | 16.84 | 0.00 | 0.00 | 31.03 | 0.08 |

| 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

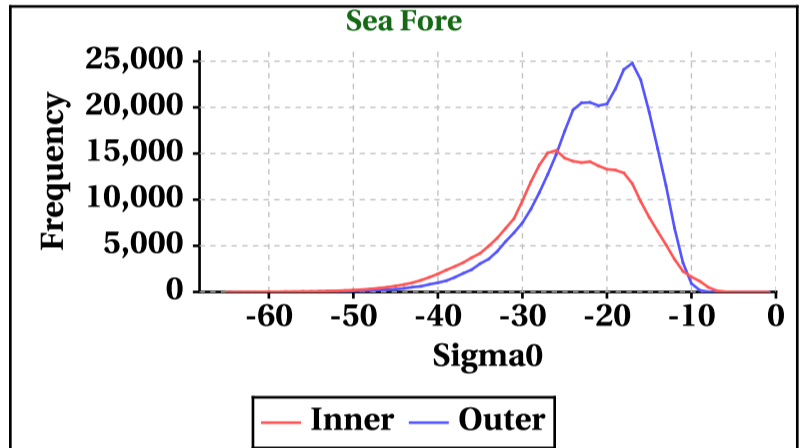
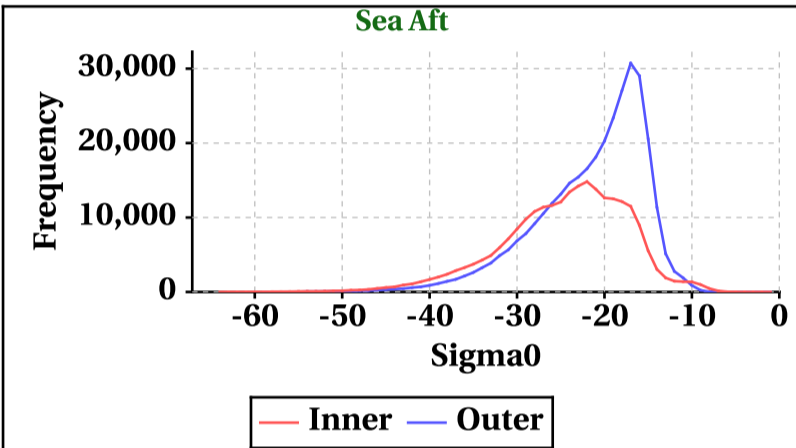
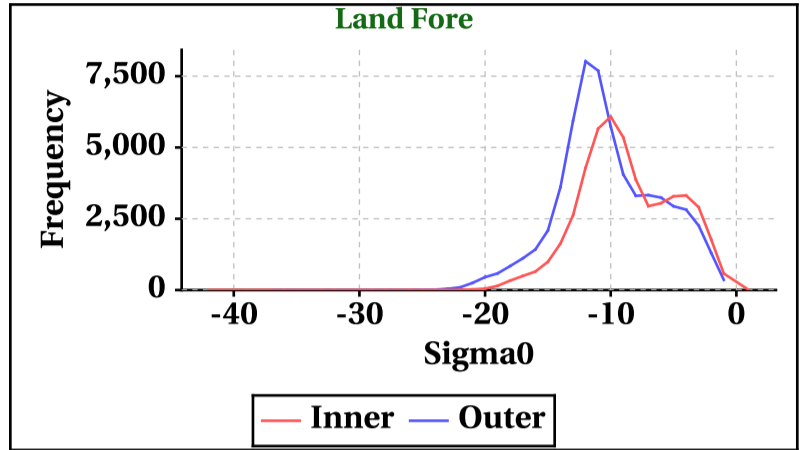
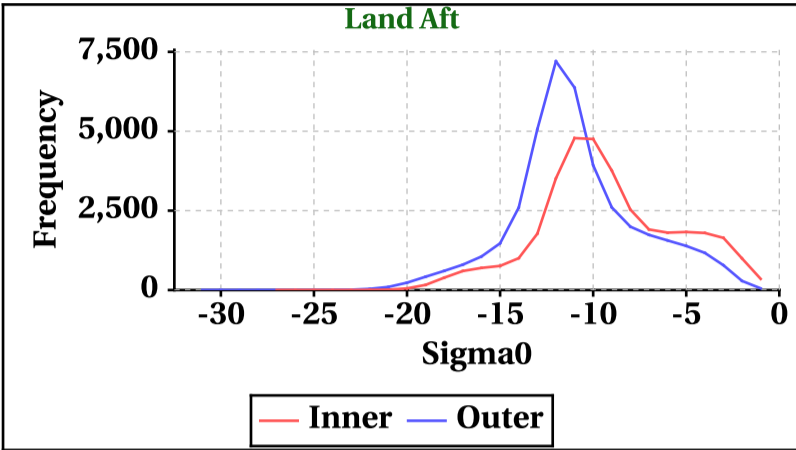
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -27 | -42 | -64 | -65 |
| Max | -1 | 1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -31 | -37 | -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 | 325 | 337 | 285 | 283 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 322 | 322 | 291 | 287 |

