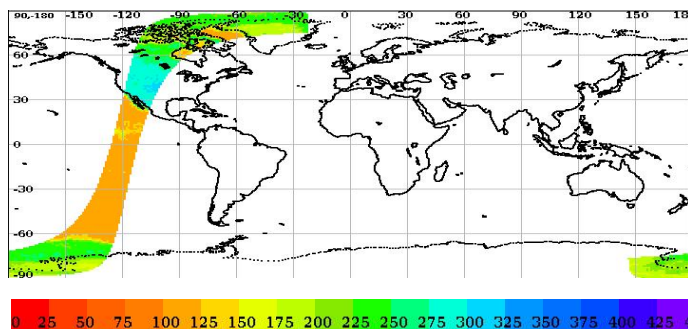


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

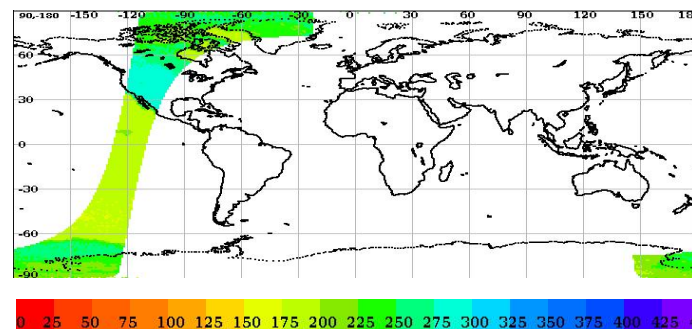
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 15478 | 15479 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 813 | 72 | 29-08-2019 | 29-08-2019 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

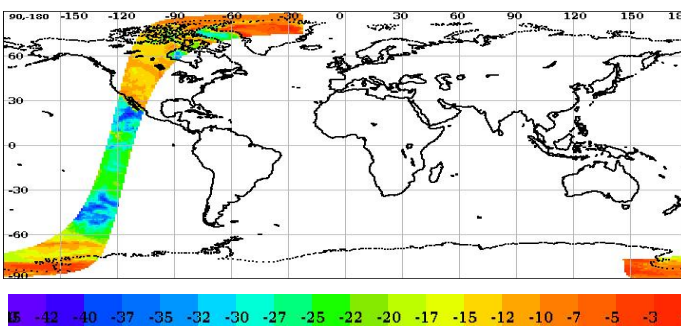


Outer Beam (VV)

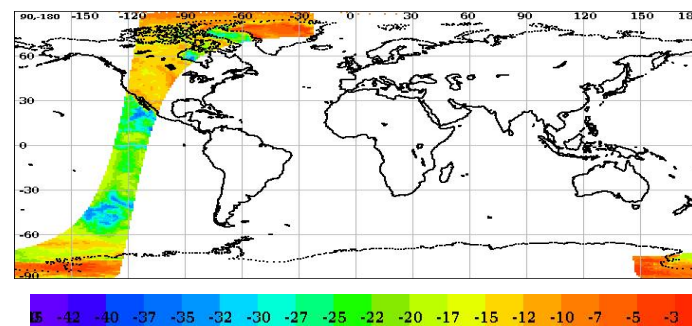


Sigma0(dB)

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 |
|-------------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| GreenLand_2 | 77.50 | -41.50 | Inner | DSC | Aft | -6.20 | -4.09 | -4.93 | 0.54 | 164.83 | 210.51 | 181.82 | 13.31 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Aft | -9.22 | -3.83 | -5.39 | 1.35 | 204.83 | 269.95 | 229.11 | 14.34 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Aft | -11.74 | -6.39 | -8.68 | 1.04 | 169.86 | 221.73 | 196.16 | 12.22 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Aft | -11.42 | -6.99 | -9.51 | 0.99 | 214.40 | 253.46 | 234.67 | 10.61 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Fore | -10.43 | -6.12 | -8.64 | 0.96 | 153.68 | 219.80 | 190.35 | 15.29 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Fore | -12.51 | -8.89 | -10.26 | 0.99 | 228.73 | 243.96 | 234.41 | 5.37 |

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 | 27.58 | 5.98 | 0.00 | 24.61 | 7.16 | 0.00 | 350.81 | 2.66 | 0.00 | 125.98 | 3.39 |

| 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 | 43.86 | 1.34 | 0.00 | 47.16 | 2.00 | 0.00 | 36.69 | 0.06 | 0.00 | 41.48 | 0.28 |
| | Outer (VV) | 0.00 | 39.98 | 1.57 | 0.00 | 39.06 | 2.18 | 0.00 | 21.70 | 0.02 | 0.00 | 29.34 | 0.04 |
| Sigma0(dB) | Inner (HH) | 0.00 | 43.94 | 1.30 | 0.00 | 45.41 | 1.86 | 0.00 | 35.08 | 0.06 | 0.00 | 39.58 | 0.24 |
| | Outer (VV) | 0.00 | 37.81 | 1.48 | 0.00 | 38.03 | 1.90 | 0.00 | 22.83 | 0.01 | 0.00 | 24.46 | 0.01 |

| 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

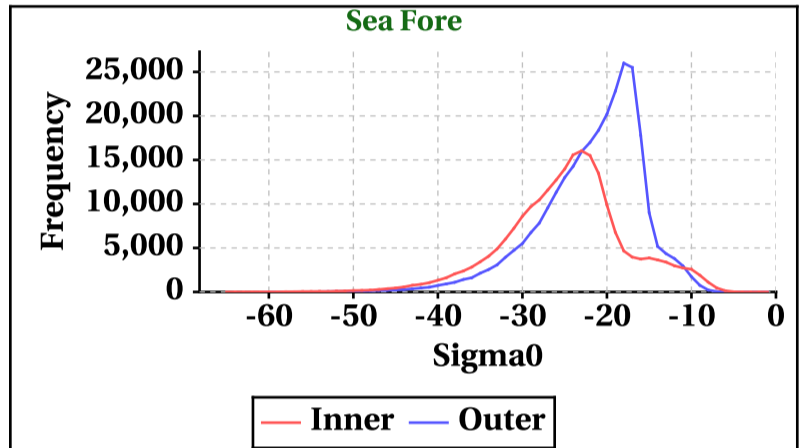
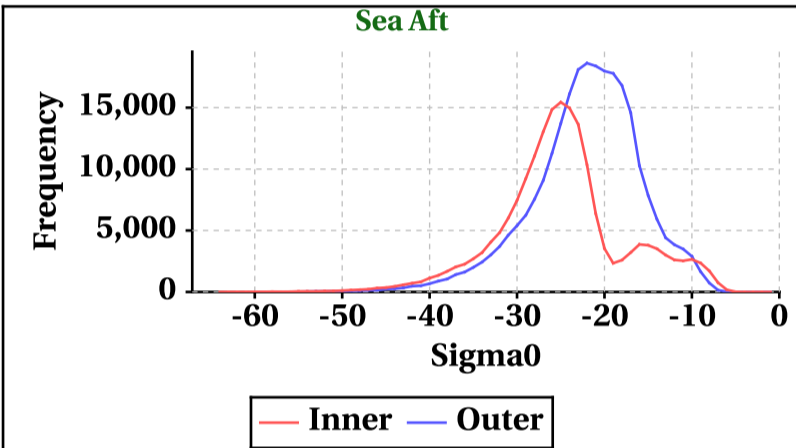
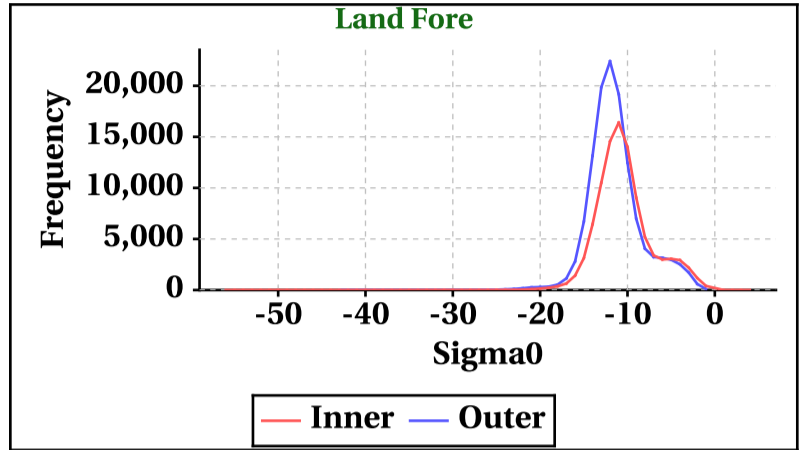
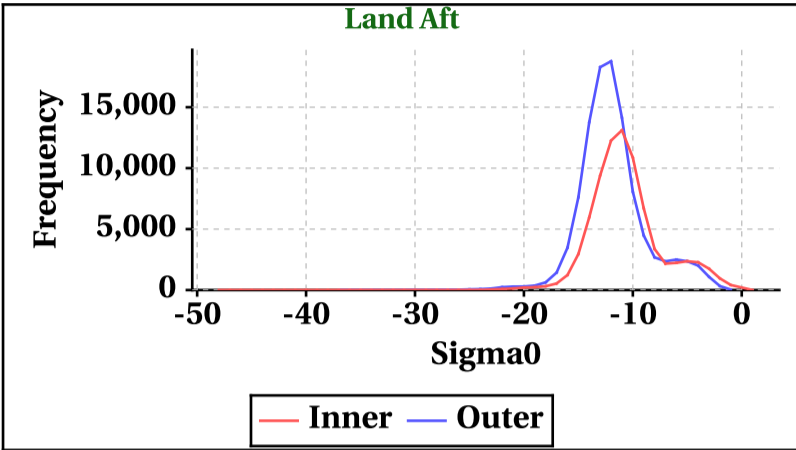
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -48 | -56 | -64 | -65 |
| Max | 1 | 4 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -37 | -43 | -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 | 367 | 363 | 306 | 310 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 350 | 360 | 321 | 322 |

