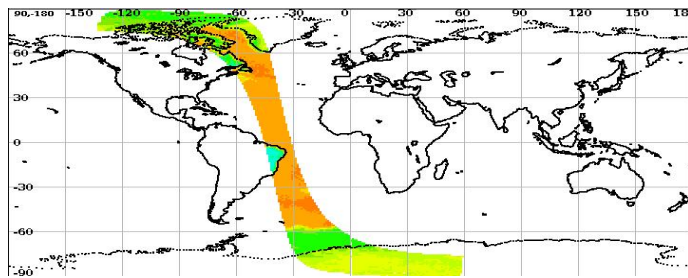


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

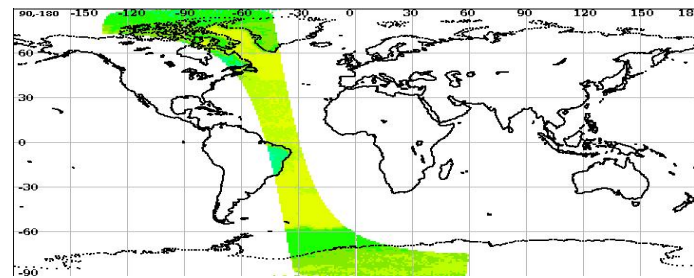
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 15438 | 15439 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 26-08-2019 | 27-08-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

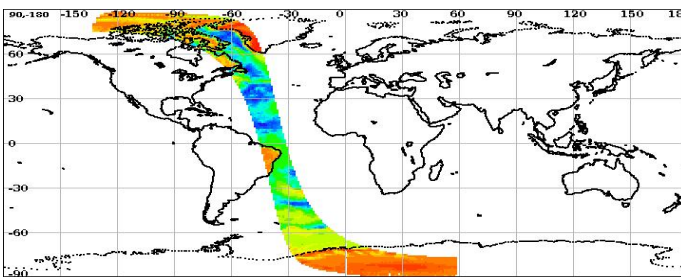


Outer Beam (VV)

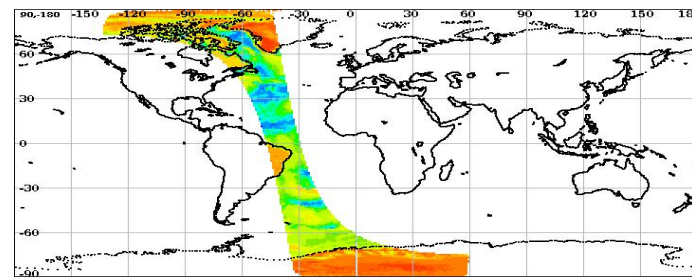


Sigma0(dB)

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 |
|-------------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -14.17 | -8.32 | -10.43 | 0.91 | 198.39 | 255.46 | 222.67 | 12.67 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -12.86 | -8.61 | -10.19 | 0.85 | 197.92 | 264.39 | 223.63 | 14.28 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -11.61 | -8.32 | -9.60 | 0.71 | 189.92 | 249.07 | 221.66 | 11.48 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.79 | -8.04 | -9.44 | 0.83 | 203.12 | 269.40 | 226.37 | 13.50 |

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 | 23.29 | 5.95 | 0.00 | 26.70 | 7.12 | 0.00 | 132.39 | 2.07 | 0.00 | 58.88 | 3.42 |

| 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 | 43.44 | 2.11 | 0.00 | 47.74 | 2.68 | 0.00 | 28.27 | 0.01 | 0.00 | 24.89 | 0.04 |
| | Outer (VV) | 0.00 | 39.02 | 2.20 | 0.00 | 43.82 | 2.86 | 0.00 | 18.56 | 0.00 | 0.00 | 25.77 | 0.03 |
| Sigma0(dB) | Inner (HH) | 0.00 | 43.07 | 2.14 | 0.00 | 47.60 | 2.63 | 0.00 | 27.09 | 0.01 | 0.00 | 22.07 | 0.04 |
| | Outer (VV) | 0.00 | 39.80 | 2.13 | 0.00 | 41.65 | 2.68 | 0.00 | 18.40 | 0.00 | 0.00 | 23.27 | 0.02 |

| 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

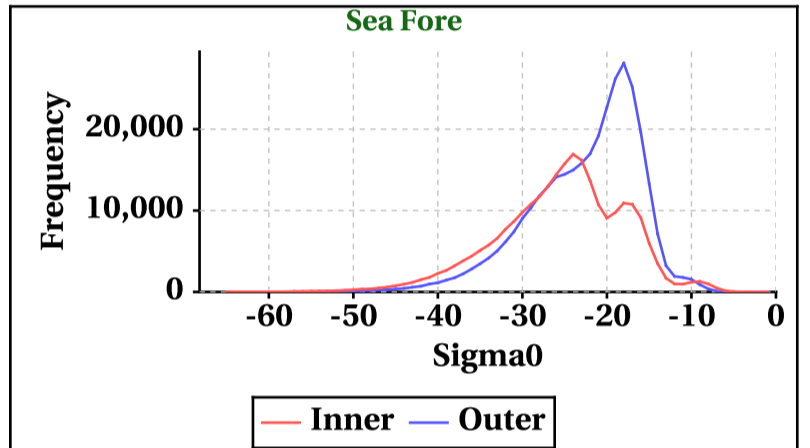
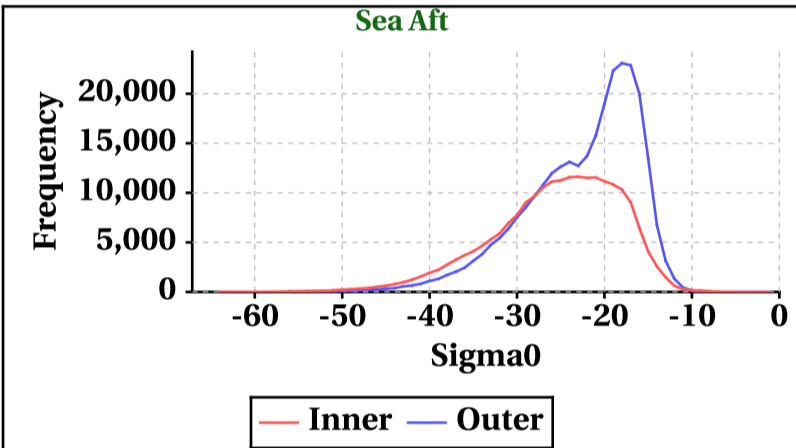
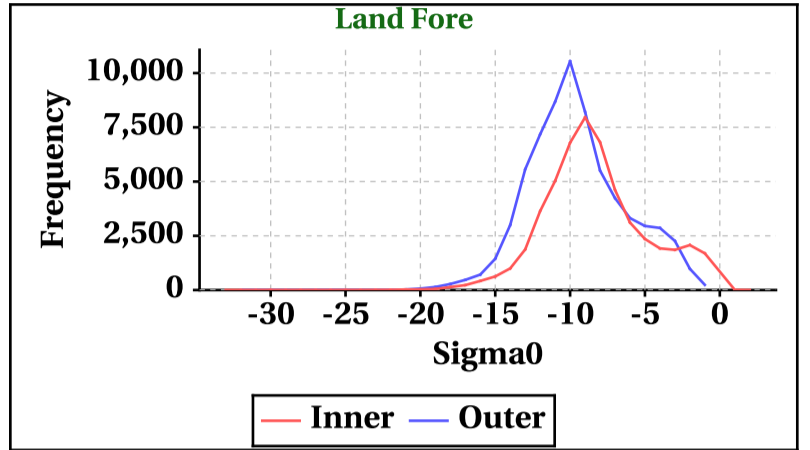
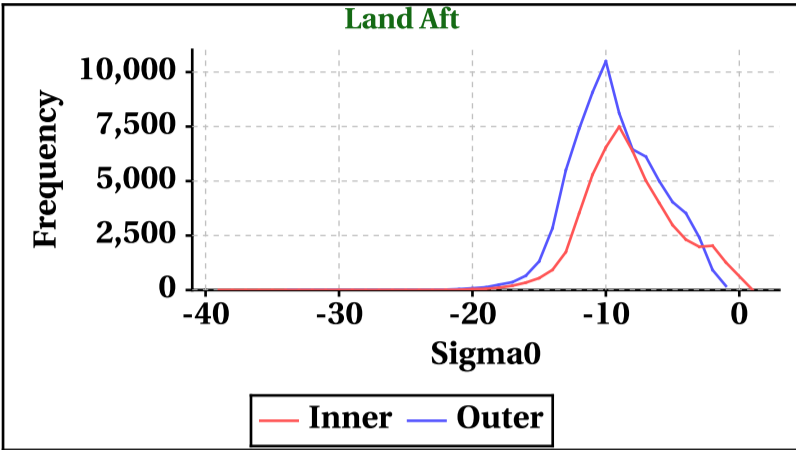
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -39 | -33 | -64 | -65 |
| Max | 1 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -34 | -32 | -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 | 345 | 339 | 299 | 295 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 349 | 329 | 321 | 304 |

