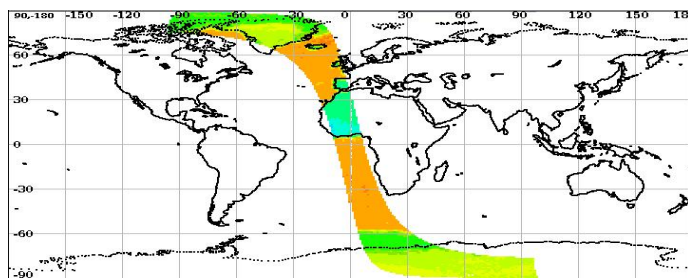


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

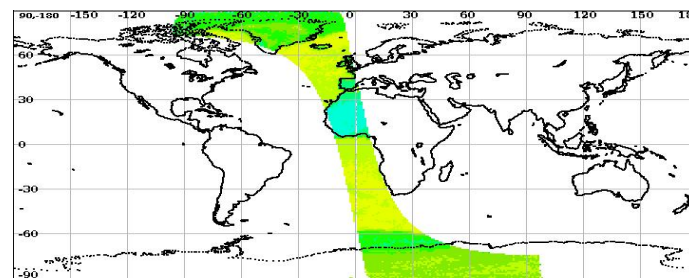
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 16205 | 16206 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 813 | 72 | 18-10-2019 | 19-10-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

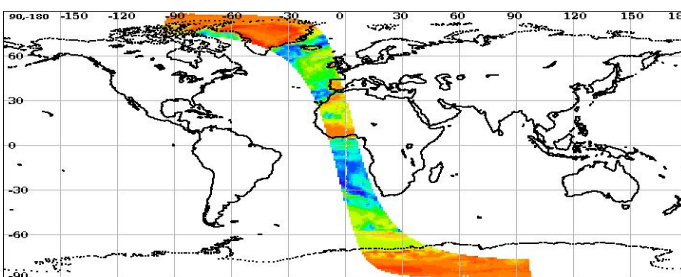


Outer Beam (VV)

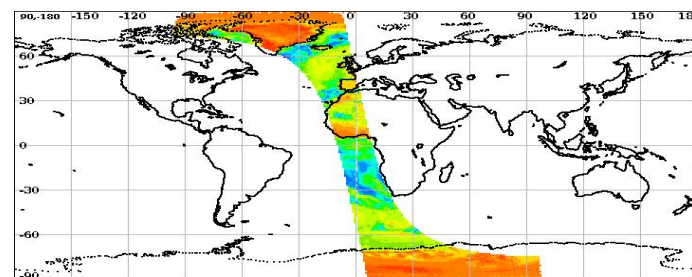


Sigma0(dB)

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_2 | 77.50 | -41.50 | Inner | ASC | Aft | -6.25 | -4.08 | -5.25 | 0.75 | 153.84 | 194.24 | 167.37 | 12.96 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Aft | -6.27 | -4.78 | -5.57 | 0.48 | 207.63 | 252.53 | 226.34 | 14.30 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -7.82 | -3.21 | -5.03 | 1.26 | 141.92 | 195.43 | 170.80 | 13.43 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -6.64 | -3.92 | -4.96 | 0.79 | 200.49 | 263.64 | 221.79 | 17.49 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -12.73 | -5.32 | -8.22 | 1.25 | 174.98 | 211.88 | 190.01 | 11.84 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -12.02 | -8.91 | -10.40 | 0.85 | 211.73 | 258.41 | 230.38 | 13.97 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -12.58 | -6.35 | -8.52 | 1.34 | 169.57 | 231.55 | 197.11 | 14.79 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -13.73 | -8.77 | -10.72 | 0.93 | 187.02 | 267.67 | 230.18 | 21.19 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -11.38 | -7.31 | -8.86 | 0.95 | 158.96 | 229.25 | 193.67 | 18.86 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -12.62 | -7.92 | -9.25 | 0.94 | 210.28 | 256.82 | 230.30 | 12.82 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -10.50 | -6.65 | -8.60 | 1.02 | 153.18 | 207.01 | 180.51 | 11.89 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -10.11 | -6.61 | -8.39 | 0.85 | 177.72 | 256.15 | 226.97 | 17.33 |

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 | 22.12 | 6.02 | 0.00 | 128.81 | 7.65 | 0.00 | 131.59 | 2.39 | 0.00 | 77.55 | 3.58 |

| 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 | 40.12 | 1.95 | 0.00 | 42.66 | 2.54 | 0.00 | 32.15 | 0.06 | 0.00 | 39.68 | 0.13 |
| | Outer (VV) | 0.00 | 36.31 | 2.23 | 0.00 | 39.76 | 2.87 | 0.00 | 28.58 | 0.18 | 0.00 | 31.24 | 0.27 |
| Sigma0(dB) | Inner (HH) | 0.00 | 41.80 | 1.98 | 0.00 | 42.58 | 2.37 | 0.00 | 31.47 | 0.05 | 0.00 | 37.28 | 0.09 |
| | Outer (VV) | 0.00 | 35.49 | 2.27 | 0.00 | 42.68 | 2.63 | 0.00 | 28.70 | 0.15 | 0.00 | 28.80 | 0.21 |

| 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

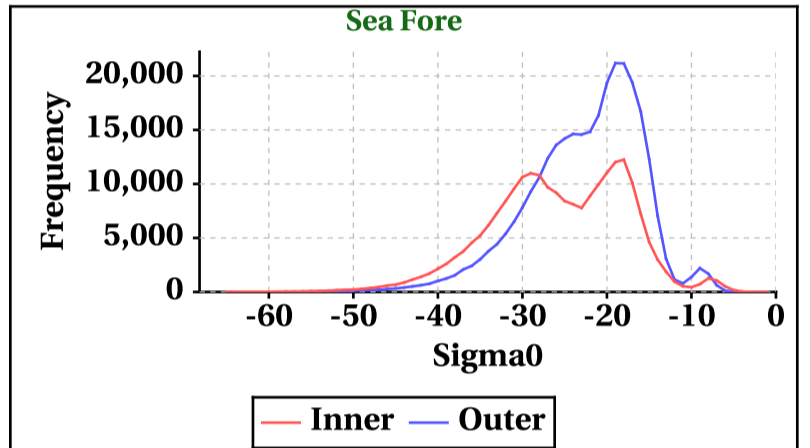
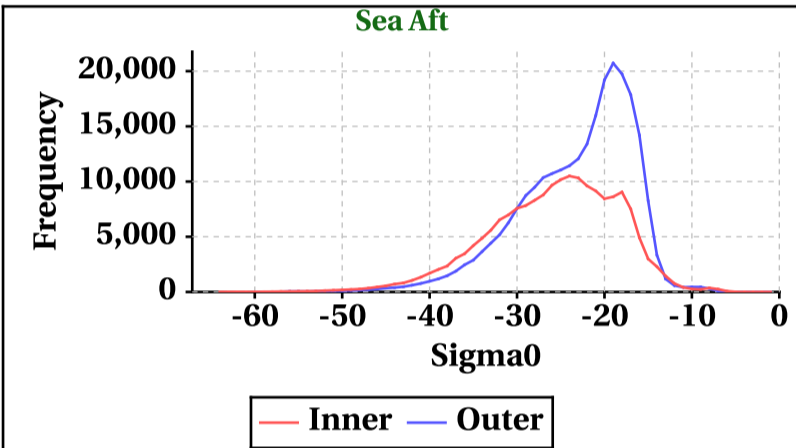
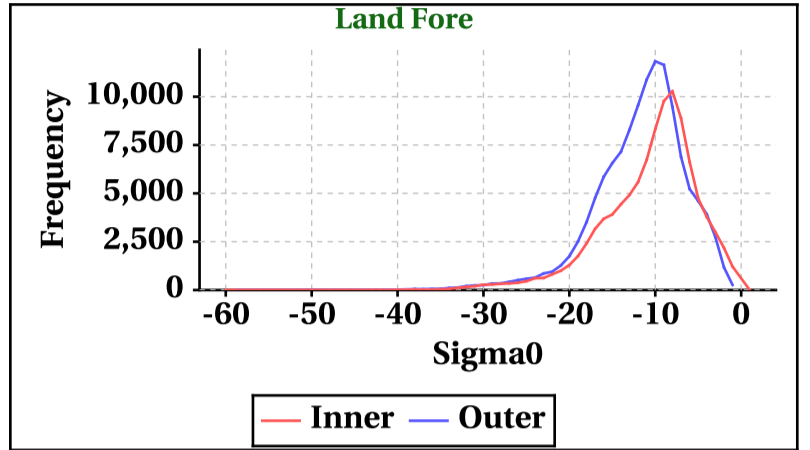
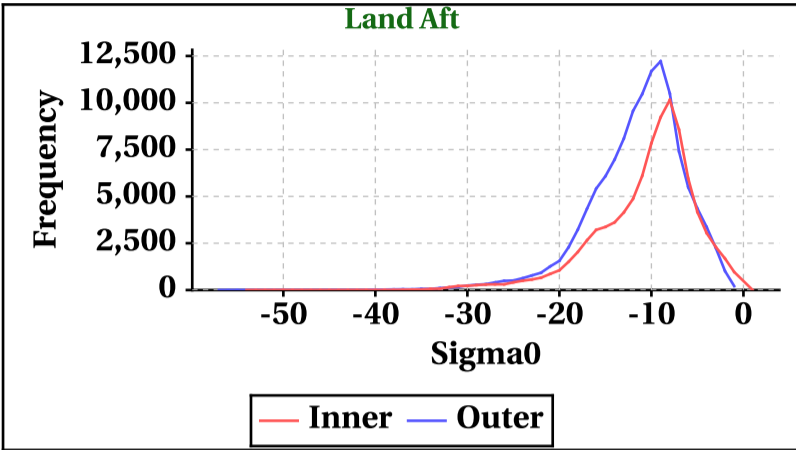
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -54 | -60 | -64 | -65 |
| Max | 1 | 1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -57 | -59 | -60 | -60 |
| 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 | 355 | 362 | 303 | 314 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 353 | 360 | 304 | 316 |

