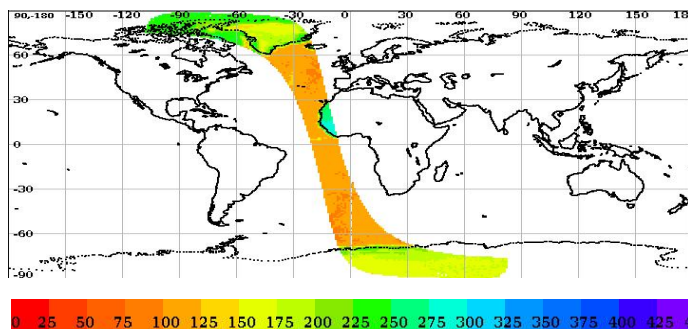


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

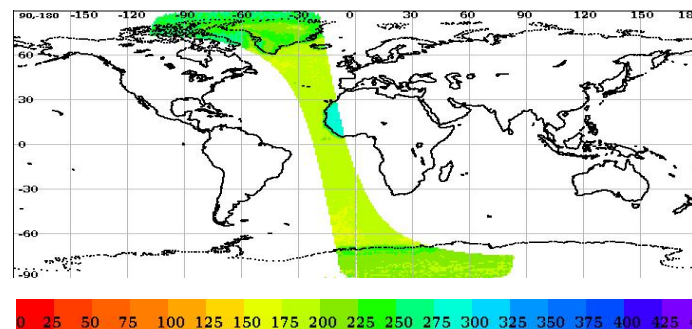
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 13755 | 13756 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 810 | 72 | 02-05-2019 | 02-05-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

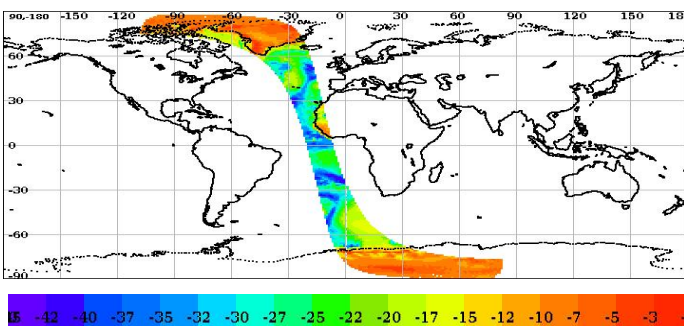


Outer Beam (VV)

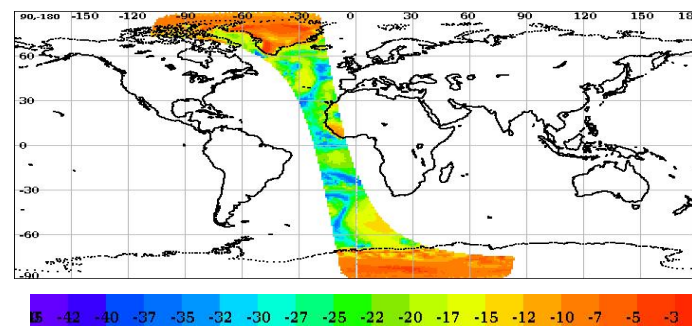


Sigma0(dB)

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 | -7.23 | -4.83 | -6.21 | 0.81 | 130.87 | 177.22 | 157.61 | 14.39 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Aft | -6.59 | -4.24 | -5.20 | 0.73 | 181.33 | 270.12 | 229.82 | 20.83 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -7.56 | -4.63 | -5.99 | 0.80 | 134.11 | 172.53 | 158.35 | 12.25 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -6.14 | -3.32 | -4.83 | 0.75 | 190.30 | 238.37 | 218.05 | 13.93 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -14.11 | -10.38 | -12.23 | 0.95 | 176.95 | 225.29 | 199.82 | 14.90 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -13.93 | -9.94 | -12.48 | 1.04 | 211.51 | 267.11 | 237.53 | 15.36 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -13.87 | -9.73 | -11.72 | 0.97 | 176.22 | 231.96 | 198.07 | 14.16 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -13.93 | -10.40 | -12.12 | 0.92 | 204.00 | 253.73 | 232.24 | 14.11 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -12.14 | -7.22 | -9.85 | 1.16 | 167.71 | 207.96 | 187.02 | 11.89 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -12.16 | -7.81 | -9.85 | 1.08 | 208.23 | 259.86 | 232.94 | 14.60 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -12.05 | -7.25 | -9.81 | 1.24 | 149.78 | 194.27 | 178.41 | 11.04 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.26 | -7.18 | -9.21 | 1.02 | 191.80 | 238.78 | 223.88 | 10.05 |

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 | 23.03 | 4.60 | 0.00 | 21.48 | 6.20 | 0.00 | 44.16 | 0.86 | 0.00 | 37.90 | 1.69 |

| 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 | 39.19 | 1.53 | 0.00 | 38.99 | 2.16 | 0.00 | 28.04 | 0.03 | 0.00 | 36.80 | 0.05 |
| | Outer (VV) | 0.00 | 38.60 | 1.87 | 0.00 | 39.09 | 2.59 | 0.00 | 38.19 | 0.17 | 0.00 | 31.35 | 0.32 |
| Sigma0(dB) | Inner (HH) | 0.00 | 37.99 | 1.54 | 0.00 | 37.83 | 2.00 | 0.00 | 26.44 | 0.03 | 0.00 | 34.05 | 0.04 |
| | Outer (VV) | 0.00 | 36.99 | 1.83 | 0.00 | 36.38 | 2.46 | 0.00 | 36.99 | 0.16 | 0.00 | 31.91 | 0.28 |

| 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

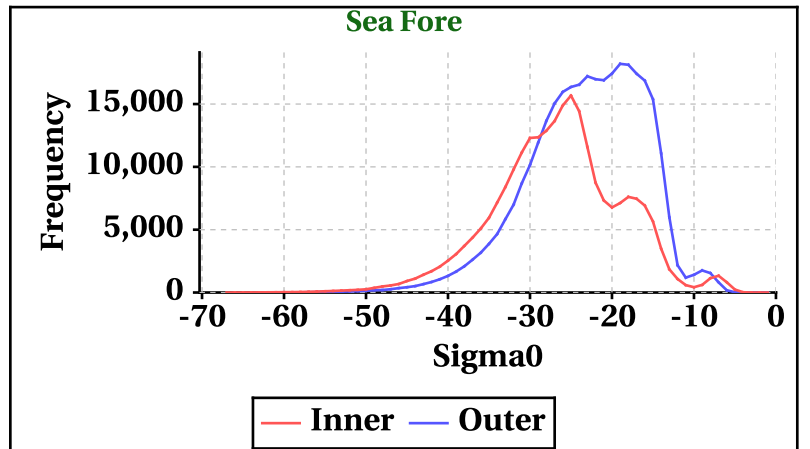
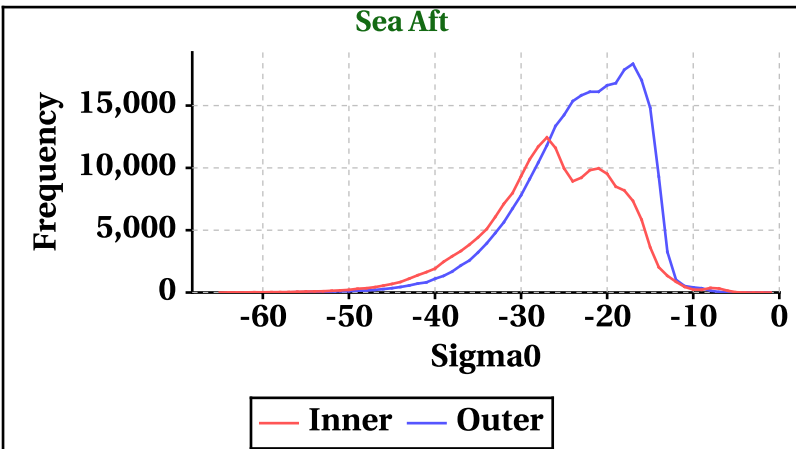
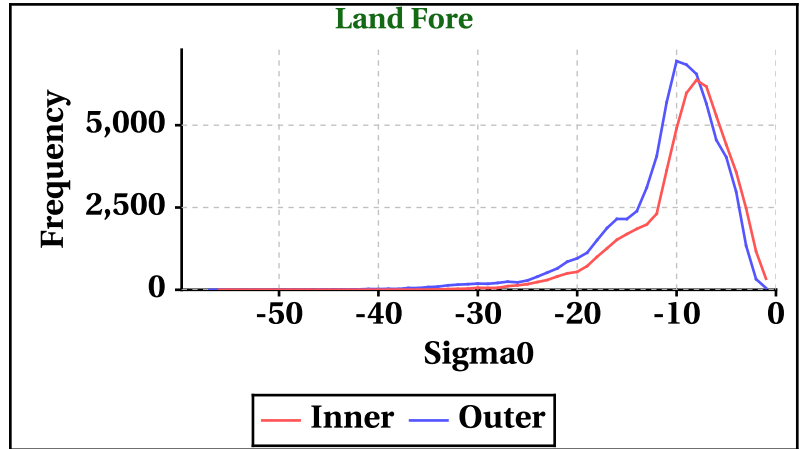
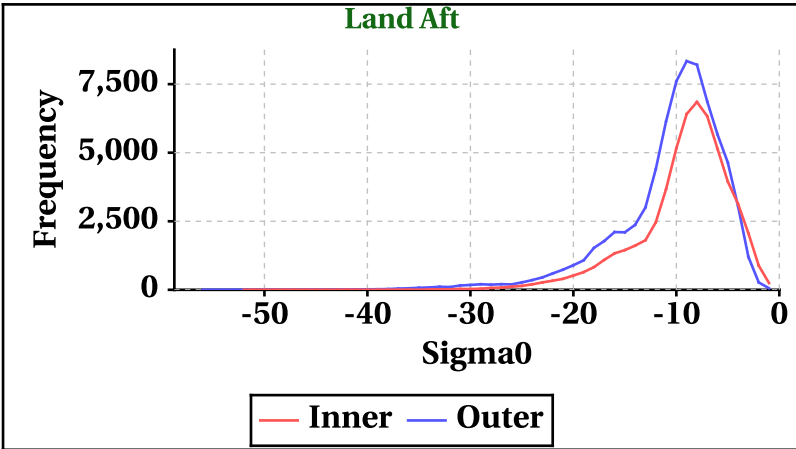
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -52 | -56 | -65 | -67 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -56 | -57 | -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 | 351 | 336 | 301 | 309 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 359 | 352 | 334 | 305 |

