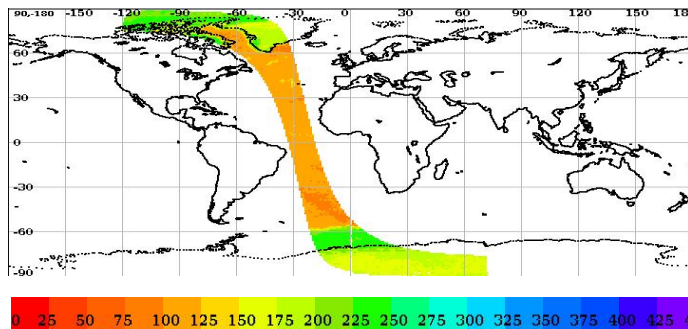


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

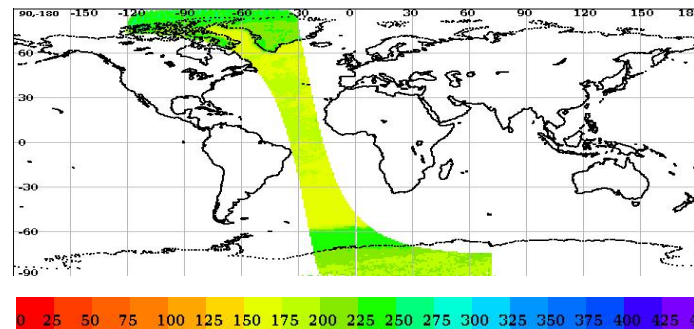
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 15742 | 15743 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 16-09-2019 | 16-09-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

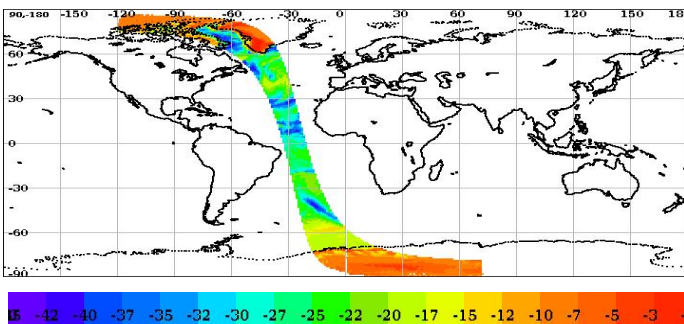


Outer Beam (VV)

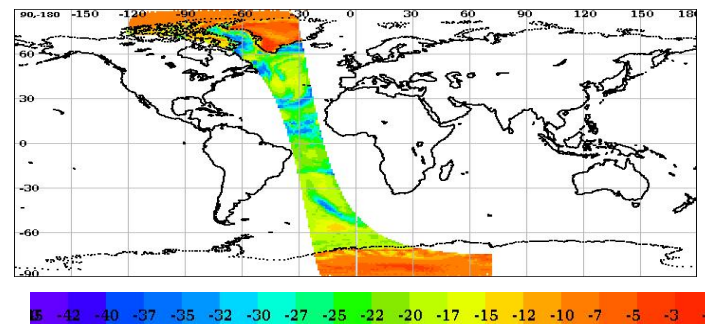


Sigma0(dB)

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 | Outer | ASC | Aft | -6.64 | -4.97 | -5.56 | 0.46 | 193.52 | 237.67 | 210.39 | 15.89 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -7.91 | -2.86 | -5.23 | 1.42 | 206.18 | 249.20 | 232.79 | 12.67 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -10.14 | -5.74 | -8.12 | 1.03 | 165.00 | 213.13 | 189.18 | 9.00 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -12.32 | -7.68 | -10.50 | 0.87 | 191.15 | 246.97 | 215.77 | 17.66 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -10.90 | -5.55 | -8.32 | 1.12 | 162.04 | 227.90 | 187.97 | 18.14 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -12.88 | -8.92 | -10.71 | 0.84 | 211.57 | 245.98 | 227.96 | 8.62 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -11.19 | -6.82 | -9.01 | 0.86 | 189.22 | 260.82 | 227.77 | 15.31 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -10.50 | -7.02 | -8.92 | 0.86 | 195.94 | 253.21 | 225.04 | 16.14 |

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 | 29.36 | 13.13 | 0.00 | 27.27 | 13.09 | 0.00 | 138.69 | 10.61 | 0.00 | 72.59 | 13.37 |

| 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 | 45.06 | 5.74 | 0.00 | 48.40 | 6.53 | 0.00 | 19.41 | 0.00 | 0.00 | 25.19 | 0.12 |
| | Outer (VV) | 0.00 | 42.25 | 5.70 | 0.00 | 40.41 | 6.96 | 0.00 | 19.37 | 0.00 | 0.00 | 21.14 | 0.18 |
| Sigma0(dB) | Inner (HH) | 0.00 | 45.65 | 5.91 | 0.00 | 48.22 | 6.19 | 0.00 | 18.33 | 0.00 | 0.00 | 23.35 | 0.12 |
| | Outer (VV) | 0.00 | 42.59 | 5.65 | 0.00 | 39.69 | 6.62 | 0.00 | 16.96 | 0.00 | 0.00 | 19.41 | 0.00 |

| 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

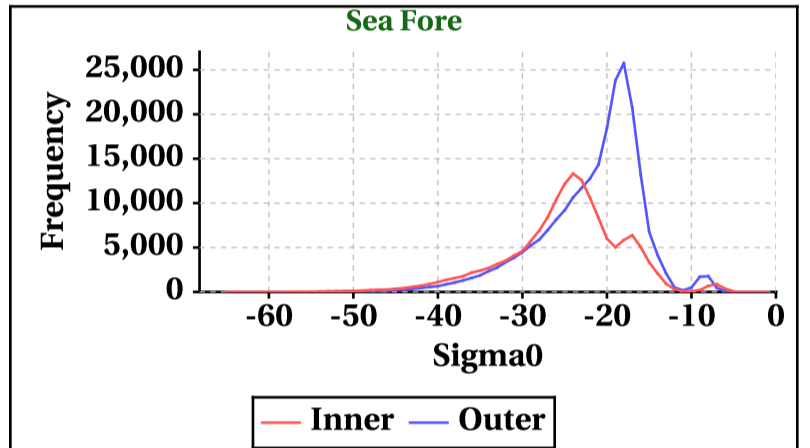
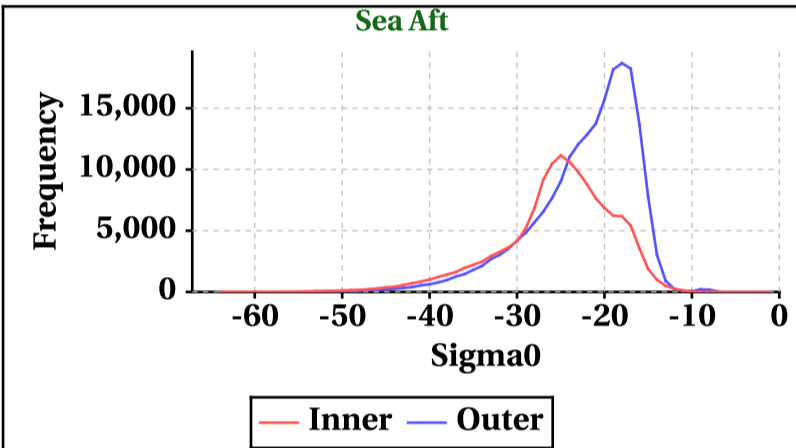
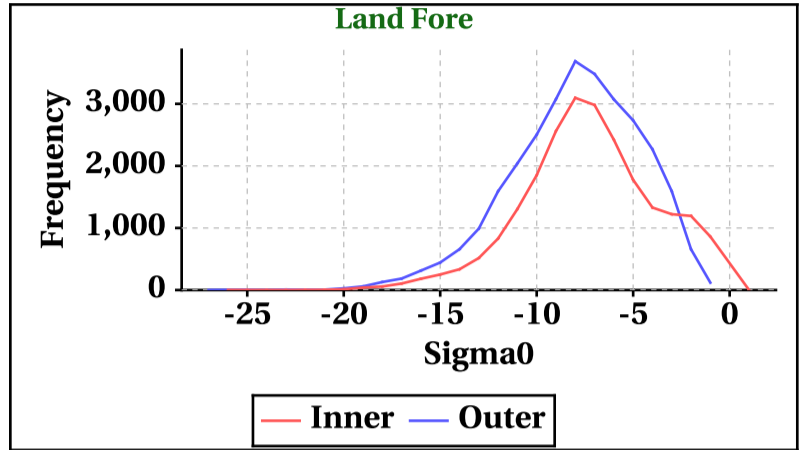
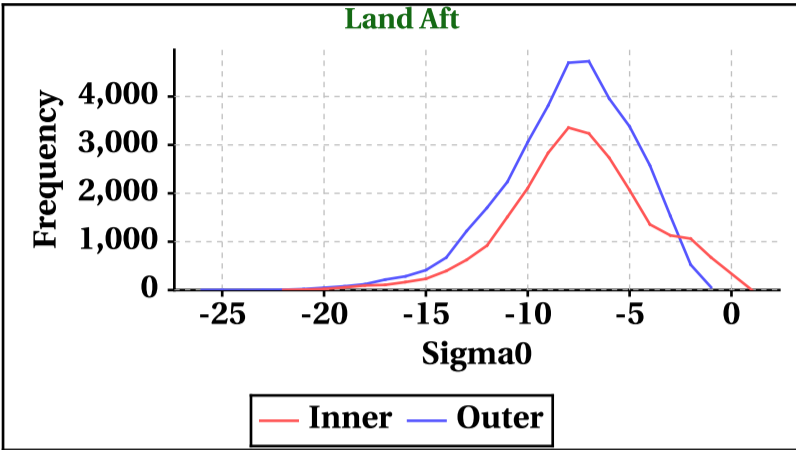
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -22 | -26 | -64 | -65 |
| Max | 1 | 1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -26 | -27 | -59 | -59 |
| 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 | 294 | 298 | 298 | 294 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 319 | 301 | 298 | 313 |

