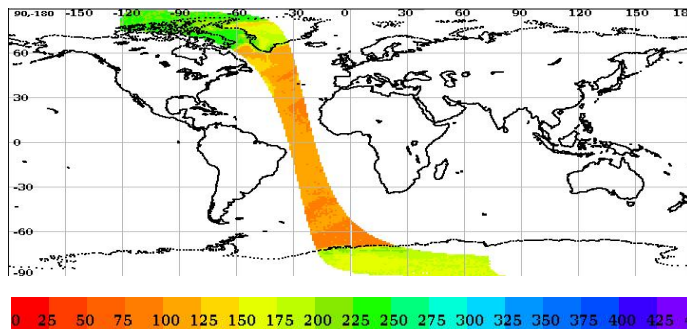


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

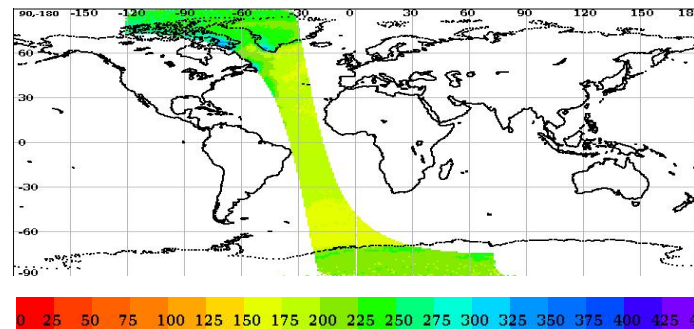
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 12784 | 12785 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 406 | 36 | 24-02-2019 | 25-02-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

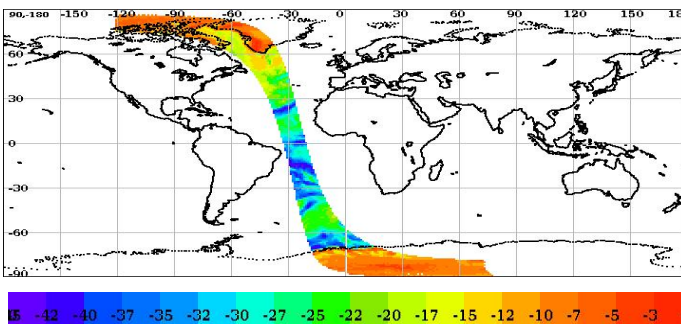


Outer Beam (VV)

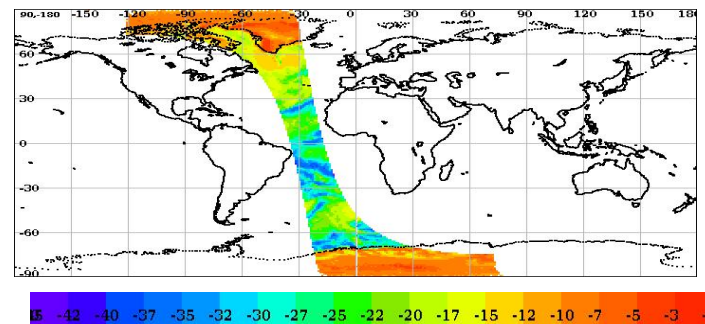


Sigma0(dB)

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 | -5.96 | -3.36 | -5.01 | 0.72 | 211.61 | 251.73 | 228.12 | 10.77 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -5.90 | -4.00 | -4.88 | 0.54 | 199.80 | 237.28 | 222.21 | 11.99 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -14.04 | -10.87 | -12.32 | 0.81 | 156.01 | 227.13 | 191.24 | 17.52 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -13.77 | -10.63 | -12.50 | 0.74 | 209.95 | 262.93 | 233.07 | 12.59 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -13.12 | -10.06 | -11.43 | 0.80 | 173.76 | 217.02 | 192.35 | 12.97 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -13.20 | -11.12 | -11.91 | 0.62 | 209.08 | 260.96 | 230.62 | 17.45 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -13.65 | -8.14 | -9.92 | 1.07 | 191.51 | 263.63 | 233.61 | 17.20 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -11.00 | -7.57 | -8.91 | 0.93 | 193.79 | 270.78 | 230.46 | 15.66 |

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 | 30.96 | 12.49 | 0.00 | 181.10 | 12.79 | 0.00 | 169.12 | 11.86 | 0.00 | 180.65 | 13.95 |

| 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 | 54.52 | 6.85 | 0.00 | 47.29 | 8.20 | 0.00 | 18.98 | 0.00 | 0.00 | 24.00 | 0.23 |
| | Outer (VV) | 0.00 | 43.68 | 6.52 | 0.00 | 47.67 | 8.56 | 0.00 | 18.58 | 0.00 | 0.00 | 19.50 | 0.00 |
| Sigma0(dB) | Inner (HH) | 0.00 | 56.17 | 7.02 | 0.00 | 50.72 | 7.98 | 0.00 | 18.91 | 0.00 | 0.00 | 21.41 | 0.12 |
| | Outer (VV) | 0.00 | 45.05 | 6.91 | 0.00 | 46.06 | 8.61 | 0.00 | 16.73 | 0.00 | 0.00 | 18.95 | 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

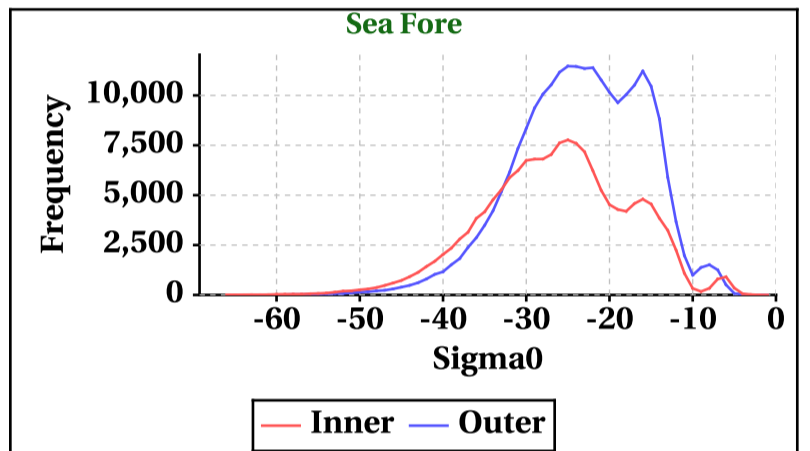
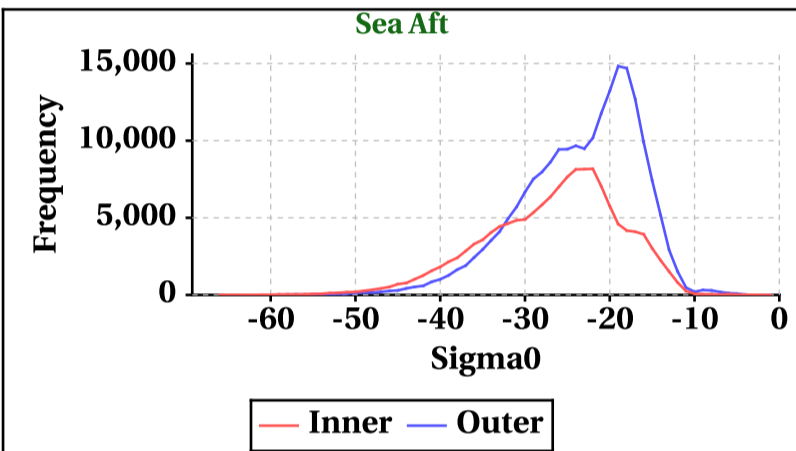
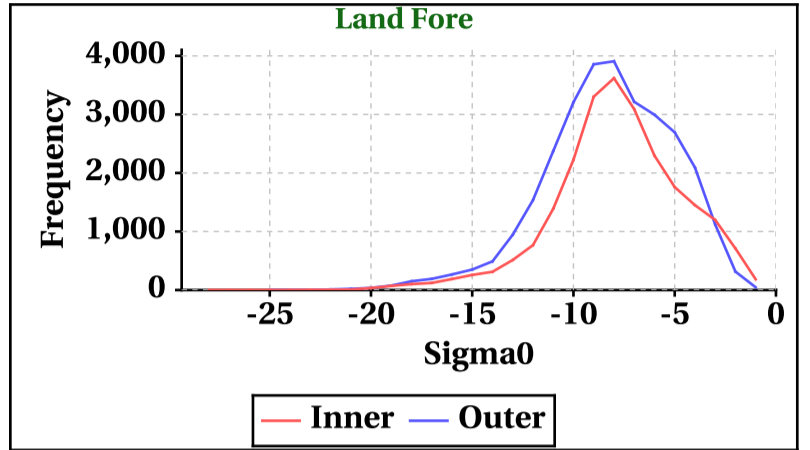
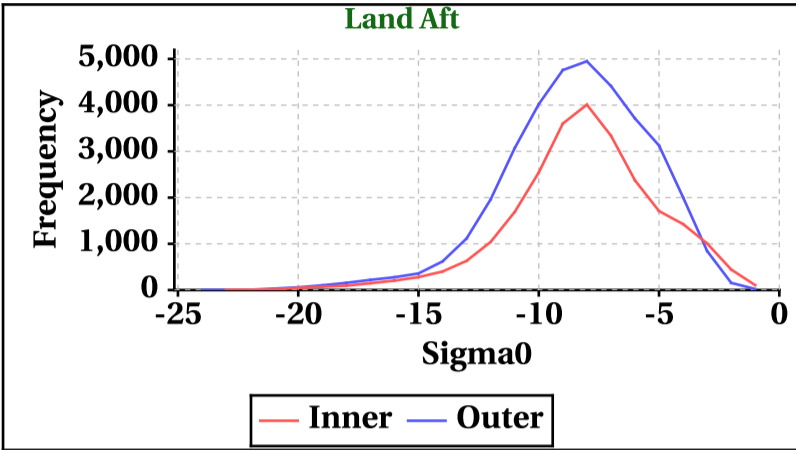
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -23 | -28 | -66 | -66 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -24 | -25 | -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 | 294 | 309 | 300 | 286 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 500 | 391 | 393 |

