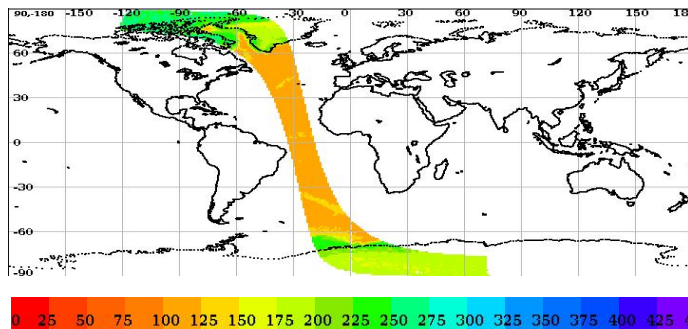


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

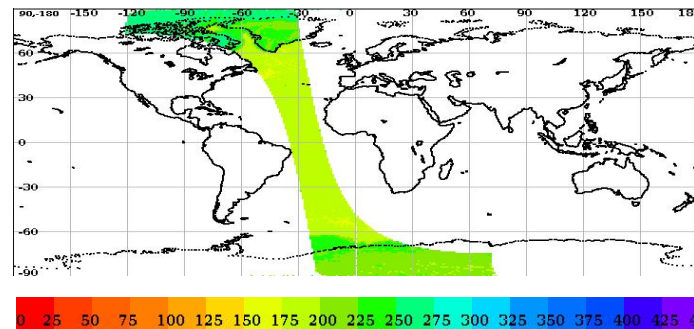
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 19396 | 19397 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 813 | 72 | 25-05-2020 | 26-05-2020 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.4 | |

Brightness Temperature

Inner Beam (HH)

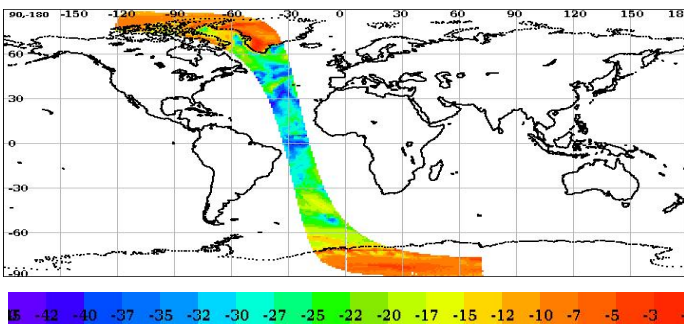


Outer Beam (VV)

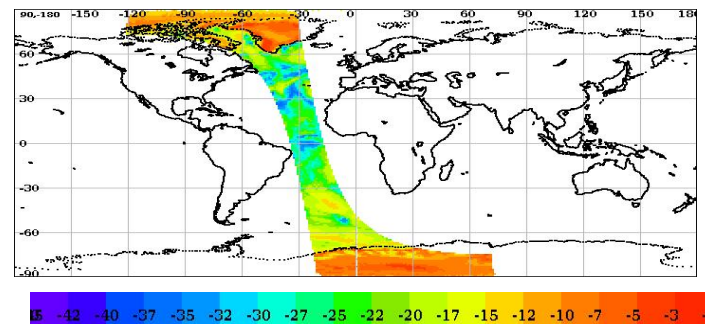


Sigma0(dB)

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 | -7.63 | -3.89 | -5.80 | 0.93 | 138.48 | 206.23 | 170.92 | 17.68 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Aft | -7.02 | -4.15 | -5.33 | 0.73 | 194.35 | 249.40 | 225.35 | 14.83 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -7.47 | -4.26 | -5.86 | 0.97 | 146.92 | 191.96 | 169.24 | 10.40 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -7.48 | -3.66 | -5.36 | 0.86 | 201.87 | 259.03 | 224.01 | 14.05 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Aft | -11.78 | -6.96 | -9.74 | 1.11 | 172.26 | 227.42 | 197.75 | 14.10 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Aft | -13.65 | -9.26 | -11.51 | 0.91 | 193.99 | 269.84 | 234.90 | 18.55 |
| GreenLand_3 | 71.55 | -42.45 | Inner | ASC | Fore | -12.69 | -7.37 | -9.60 | 1.26 | 167.96 | 229.14 | 192.73 | 13.07 |
| GreenLand_3 | 71.55 | -42.45 | Outer | ASC | Fore | -13.80 | -9.22 | -11.60 | 1.04 | 205.70 | 260.53 | 229.22 | 11.66 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Aft | -12.56 | -6.81 | -9.28 | 1.24 | 164.03 | 218.28 | 193.64 | 16.16 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Aft | -12.91 | -7.64 | -9.55 | 0.97 | 192.70 | 258.23 | 232.10 | 14.93 |
| GreenLand_1 | 74.69 | -42.50 | Inner | ASC | Fore | -11.61 | -6.68 | -9.37 | 1.02 | 158.51 | 210.92 | 190.86 | 11.62 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -10.56 | -7.42 | -9.07 | 0.80 | 217.56 | 260.06 | 233.57 | 12.66 |

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 | 22.16 | 6.18 | 0.00 | 187.95 | 7.64 | 0.00 | 182.71 | 3.01 | 0.00 | 75.65 | 4.26 |

| 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 | 42.79 | 1.38 | 0.00 | 46.89 | 1.80 | 0.00 | 16.55 | 0.00 | 0.00 | 19.40 | 0.00 |
| | Outer (VV) | 0.00 | 38.58 | 1.62 | 0.00 | 39.11 | 2.43 | 0.00 | 18.14 | 0.00 | 0.00 | 18.39 | 0.00 |
| Sigma0(dB) | Inner (HH) | 0.00 | 43.00 | 1.37 | 0.00 | 43.94 | 1.60 | 0.00 | 16.34 | 0.00 | 0.00 | 15.90 | 0.00 |
| | Outer (VV) | 0.00 | 38.88 | 1.54 | 0.00 | 39.86 | 2.12 | 0.00 | 16.15 | 0.00 | 0.00 | 15.67 | 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

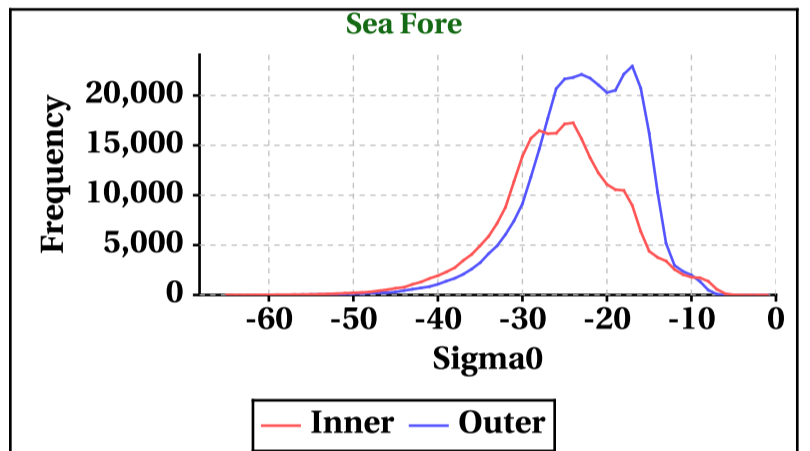
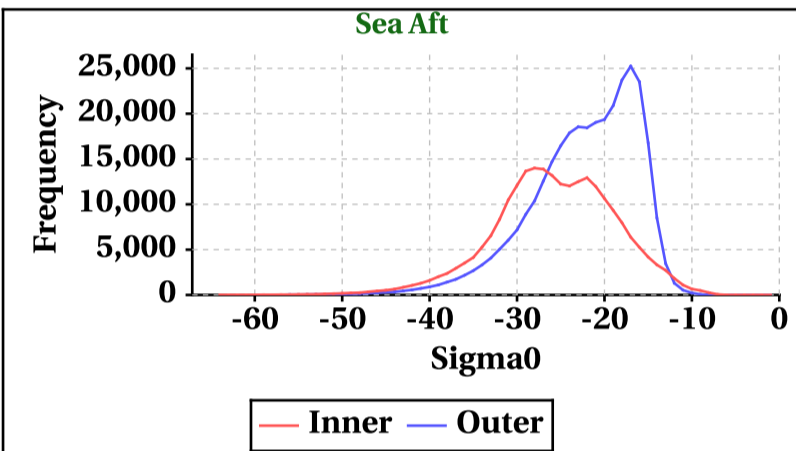
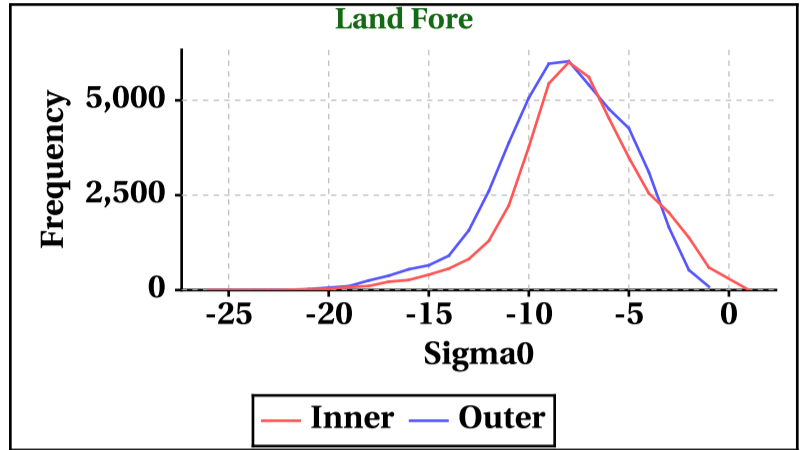
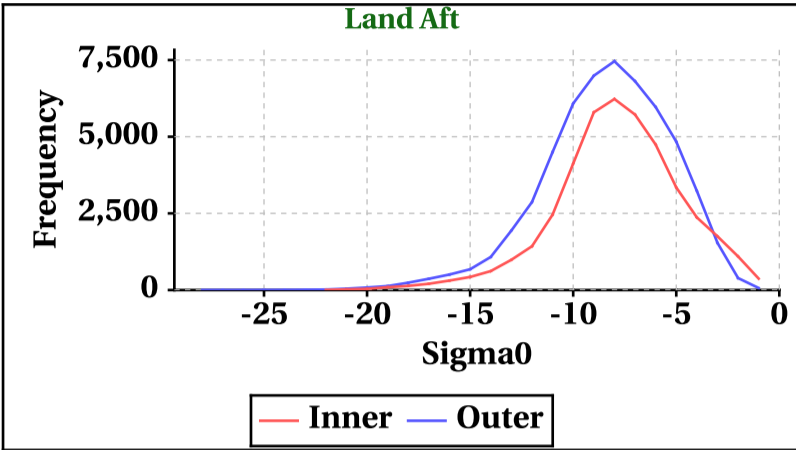
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

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 | -28 | -26 | -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 | 305 | 308 | 299 | 318 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 315 | 313 | 304 | 316 |

