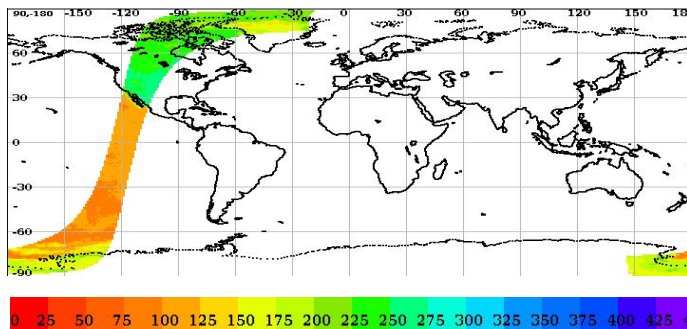


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

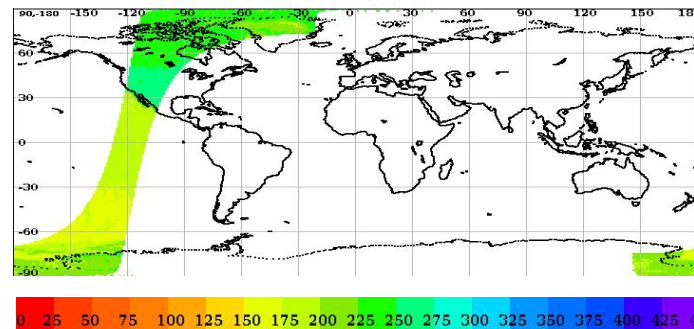
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 6836 | 6837 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 814 | 72 | 10-01-2018 | 10-01-2018 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

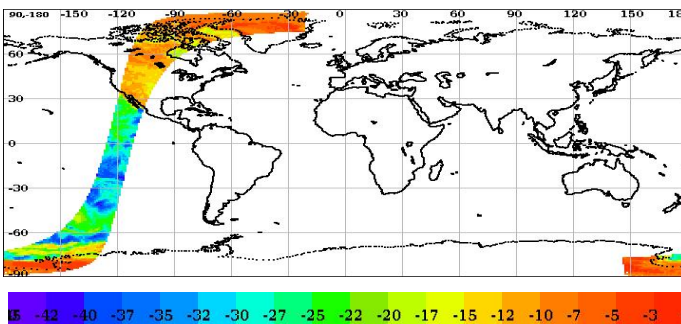


Outer Beam (VV)

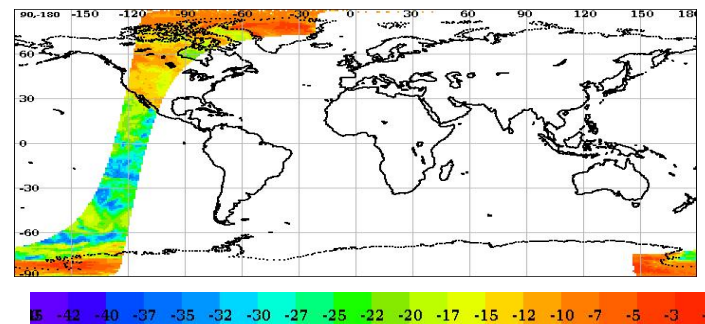


Sigma0(dB)

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 | DSC | Aft | -6.49 | -3.37 | -4.74 | 0.96 | 154.24 | 172.55 | 161.91 | 5.30 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Aft | -5.40 | -3.63 | -4.73 | 0.56 | 200.39 | 242.89 | 217.23 | 15.40 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Aft | -12.52 | -5.24 | -8.23 | 1.56 | 146.21 | 208.29 | 176.96 | 13.13 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Aft | -11.01 | -6.48 | -8.51 | 1.07 | 182.87 | 258.10 | 227.51 | 17.47 |
| GreenLand_1 | 74.69 | -42.50 | Inner | DSC | Fore | -11.19 | -5.77 | -7.89 | 1.34 | 153.93 | 202.26 | 178.81 | 12.49 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -10.27 | -7.70 | -9.01 | 1.04 | 210.13 | 217.69 | 215.80 | 3.27 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Fore | -8.82 | -7.89 | -8.28 | 0.34 | 230.27 | 246.33 | 238.30 | 8.03 |

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 | 26.99 | 10.77 | 0.00 | 26.98 | 10.29 | 0.00 | 143.64 | 5.49 | 0.00 | 144.66 | 5.01 |

| 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 | 43.67 | 3.89 | 0.00 | 42.92 | 3.68 | 0.00 | 29.46 | 0.04 | 0.00 | 29.97 | 0.05 |
| | Outer (VV) | 0.00 | 37.44 | 2.90 | 0.00 | 42.59 | 3.23 | 0.00 | 24.20 | 0.03 | 0.00 | 20.70 | 0.02 |
| Sigma0(dB) | Inner (HH) | 0.00 | 43.48 | 3.62 | 0.00 | 40.86 | 3.44 | 0.00 | 25.12 | 0.02 | 0.00 | 30.19 | 0.03 |
| | Outer (VV) | 0.00 | 37.16 | 2.71 | 0.00 | 39.71 | 2.91 | 0.00 | 21.93 | 0.01 | 0.00 | 20.77 | 0.01 |

| 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

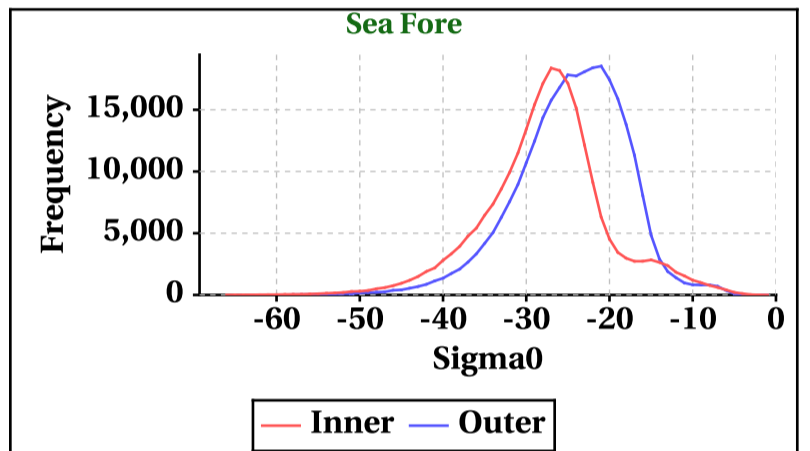
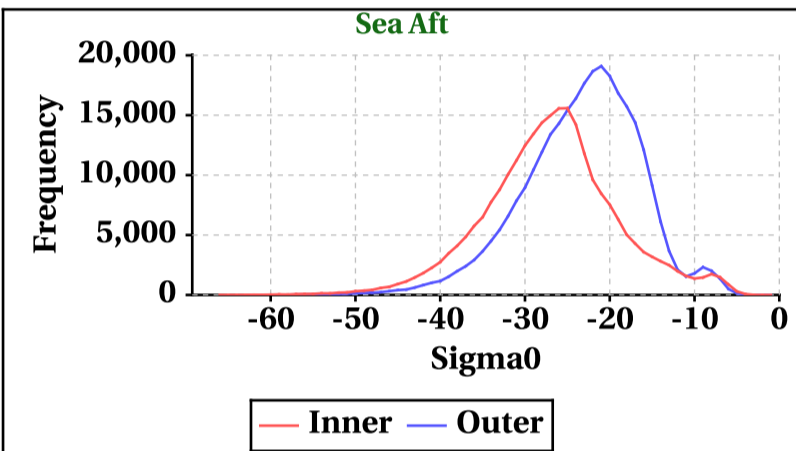
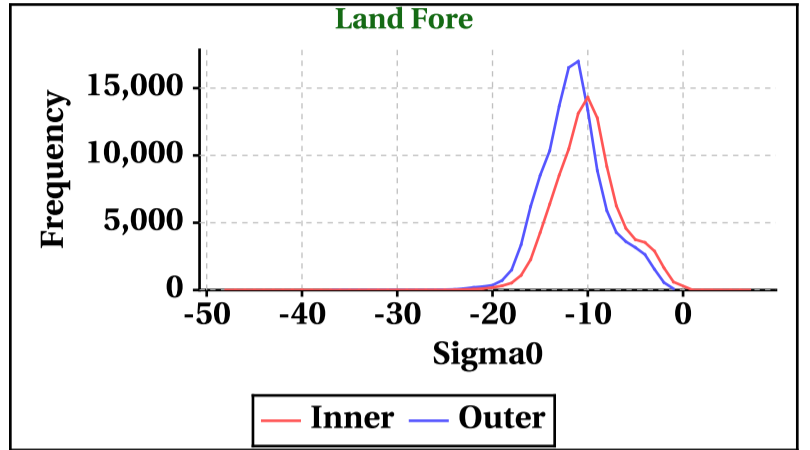
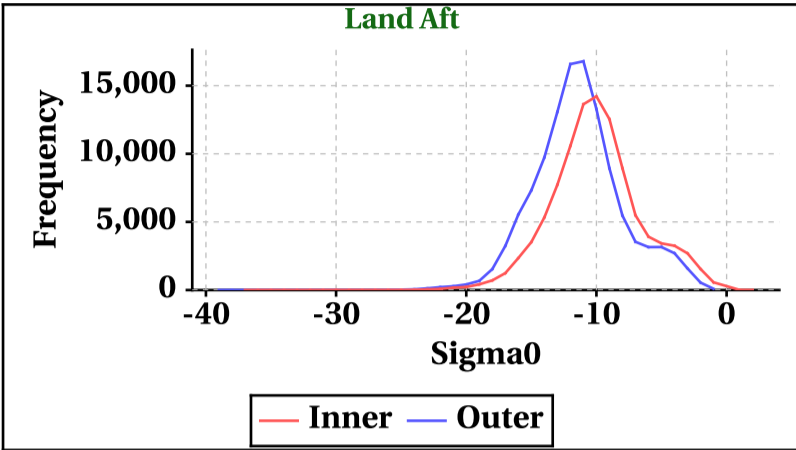
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -37 | -48 | -66 | -66 |
| Max | 2 | 7 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -39 | -37 | -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 | 336 | 335 | 292 | 294 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 328 | 328 | 311 | 314 |

