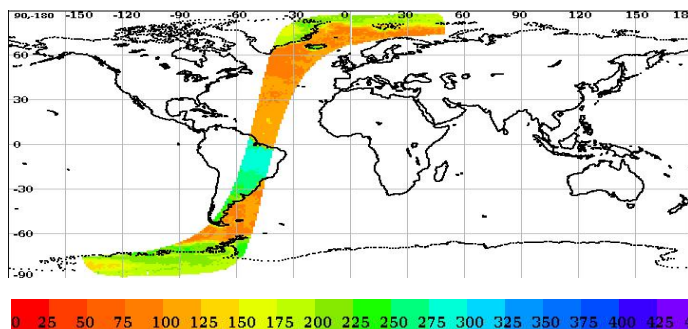


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

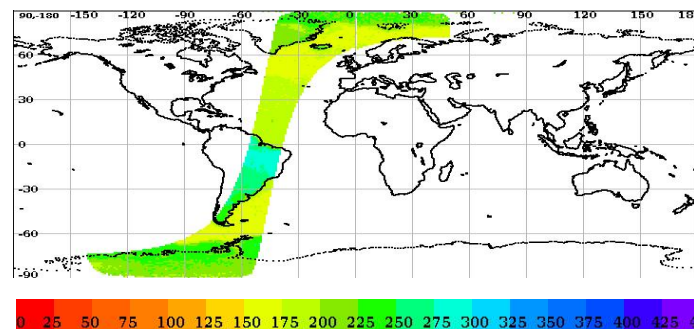
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 4716 | 4717 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 404 | 36 | 17-08-2017 | 17-08-2017 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 50 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

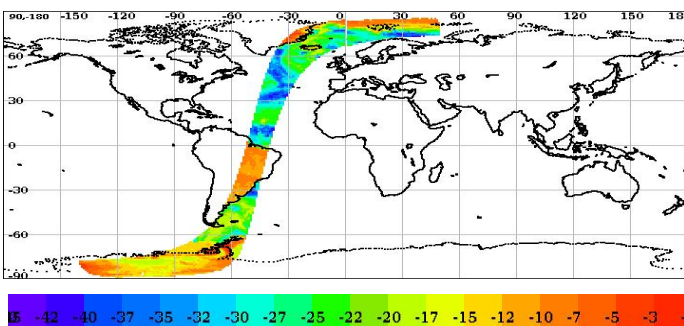


Outer Beam (VV)

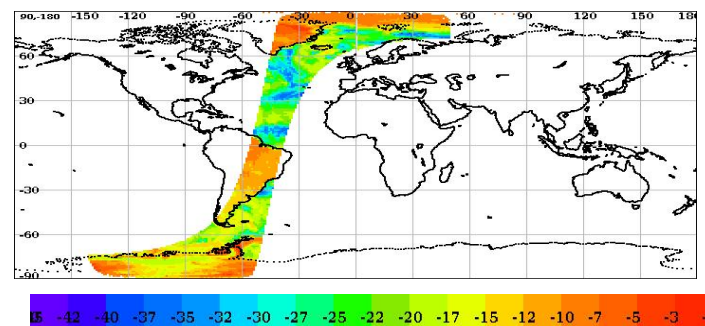


Sigma0(dB)

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 | Outer | DSC | Aft | -5.95 | -5.00 | -5.51 | 0.37 | 175.05 | 226.81 | 202.68 | 15.49 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Fore | -5.50 | -4.34 | -4.92 | 0.38 | 203.12 | 235.35 | 218.21 | 12.10 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Aft | -12.55 | -9.73 | -11.37 | 0.77 | 197.38 | 250.19 | 219.97 | 12.82 |
| GreenLand_3 | 71.55 | -42.45 | Outer | DSC | Fore | -12.28 | -9.94 | -11.36 | 0.67 | 174.28 | 246.67 | 216.84 | 16.95 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Aft | -8.76 | -8.70 | -8.73 | 0.03 | 208.37 | 232.76 | 220.57 | 12.19 |
| GreenLand_1 | 74.69 | -42.50 | Outer | DSC | Fore | -9.10 | -7.54 | -8.41 | 0.48 | 203.00 | 242.69 | 219.45 | 11.51 |

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 | 27.09 | 15.35 | 0.00 | 33.17 | 15.51 | 0.00 | 355.26 | 12.05 | 0.00 | 38.24 | 12.67 |

| 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 | 45.86 | 10.37 | 0.00 | 43.98 | 8.90 | 0.00 | 19.58 | 0.00 | 0.00 | 28.95 | 0.03 |
| | Outer (VV) | 0.00 | 42.41 | 6.92 | 0.00 | 41.53 | 6.90 | 0.00 | 35.21 | 0.07 | 0.00 | 21.01 | 0.06 |
| Sigma0(dB) | Inner (HH) | 0.00 | 48.20 | 9.99 | 0.00 | 42.60 | 8.63 | 0.00 | 16.74 | 0.00 | 0.00 | 27.42 | 0.03 |
| | Outer (VV) | 0.00 | 39.29 | 6.71 | 0.00 | 38.29 | 6.74 | 0.00 | 30.52 | 0.05 | 0.00 | 18.60 | 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

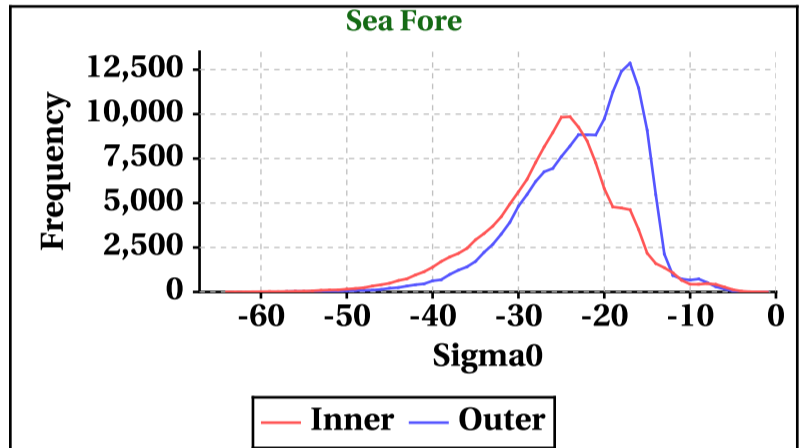
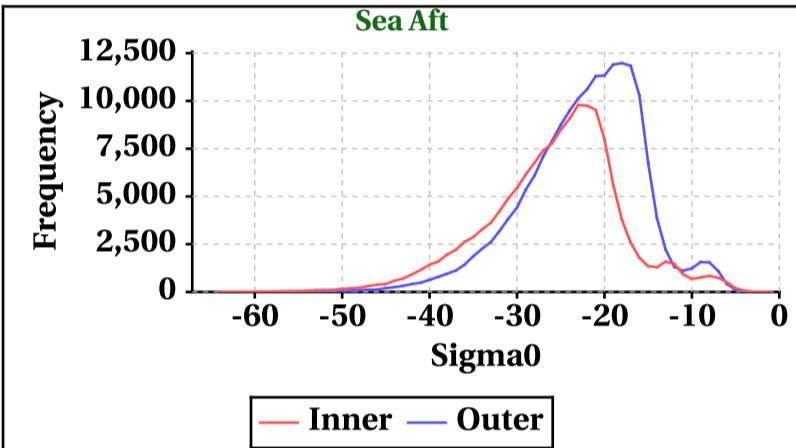
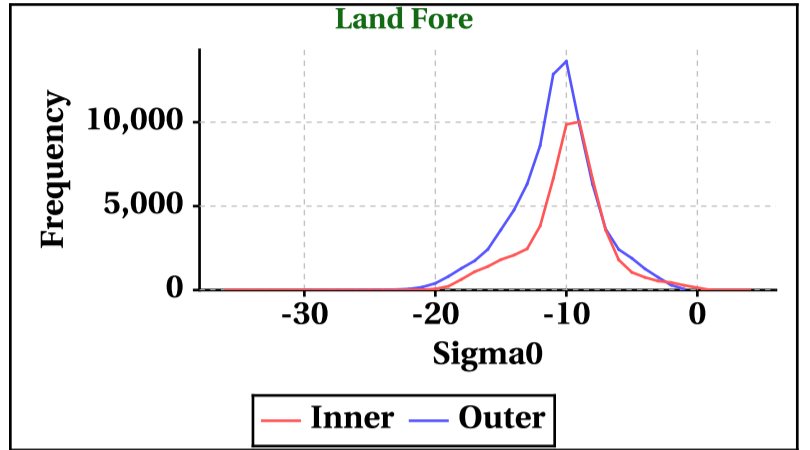
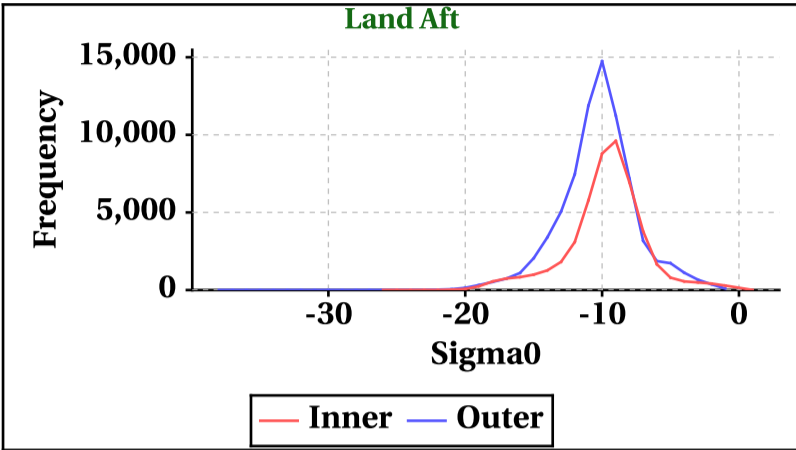
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -26 | -36 | -64 | -64 |
| Max | 1 | 4 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -38 | -30 | -60 | -60 |
| 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 | 355 | 347 | 291 | 289 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 352 | 338 | 310 | 299 |

