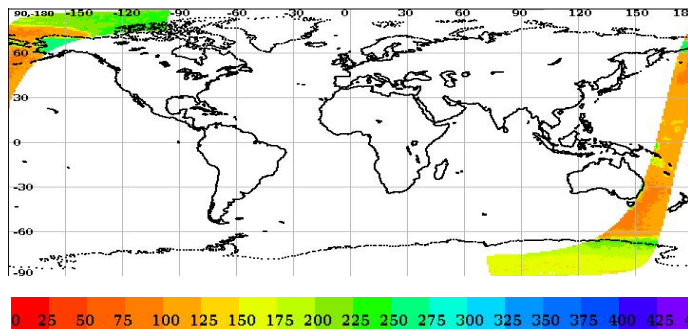


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

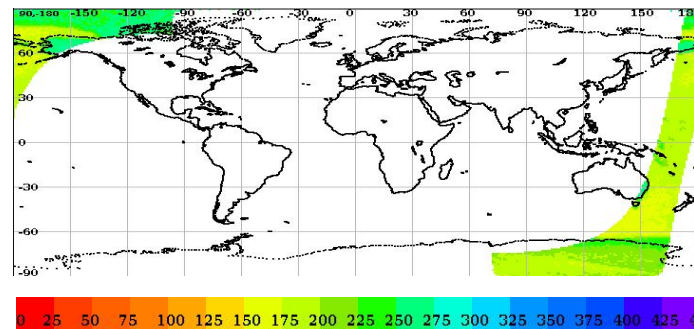
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 10580 | 10581 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 814 | 72 | 25-09-2018 | 25-09-2018 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

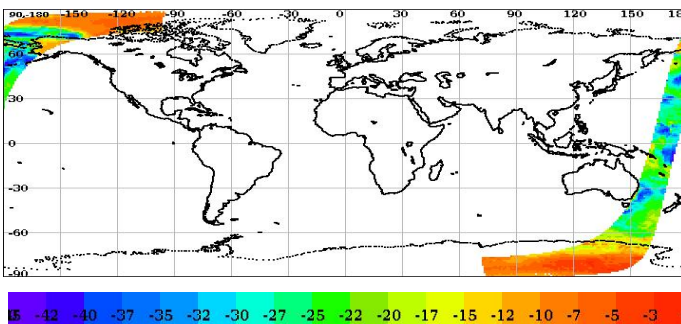


Outer Beam (VV)

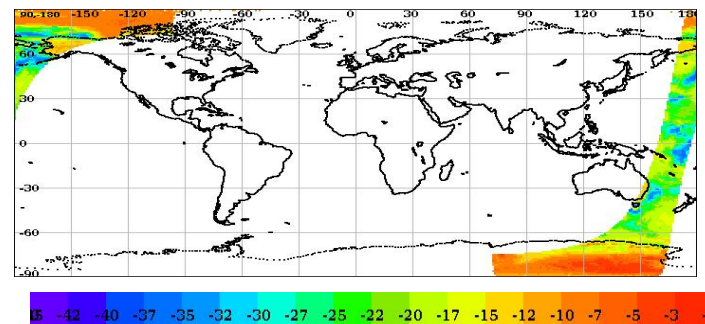


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Aft | -9.37 | -4.73 | -7.22 | 1.35 | 147.33 | 192.45 | 171.48 | 11.51 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Aft | -9.96 | -6.36 | -8.02 | 1.03 | 178.47 | 238.37 | 210.44 | 17.17 |
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Fore | -12.17 | -4.99 | -7.90 | 1.58 | 131.41 | 198.68 | 164.89 | 15.60 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Fore | -10.29 | -5.93 | -8.52 | 1.16 | 168.97 | 227.92 | 195.72 | 14.50 |

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 | 266.80 | 7.22 | 0.00 | 25.57 | 8.51 | 0.00 | 271.30 | 4.65 | 0.00 | 131.09 | 5.36 |

| 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 | 44.36 | 1.92 | 0.00 | 44.23 | 2.18 | 0.00 | 22.42 | 0.02 | 0.00 | 17.76 | 0.00 |
| | Outer (VV) | 0.00 | 41.65 | 1.68 | 0.00 | 46.16 | 2.35 | 0.00 | 13.12 | 0.00 | 0.00 | 20.37 | 0.02 |
| Sigma0(dB) | Inner (HH) | 0.00 | 43.87 | 1.88 | 0.00 | 44.77 | 2.06 | 0.00 | 21.00 | 0.02 | 0.00 | 14.71 | 0.00 |
| | Outer (VV) | 0.00 | 40.83 | 1.65 | 0.00 | 43.20 | 2.01 | 0.00 | 12.24 | 0.00 | 0.00 | 17.03 | 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 | | | | | | | |

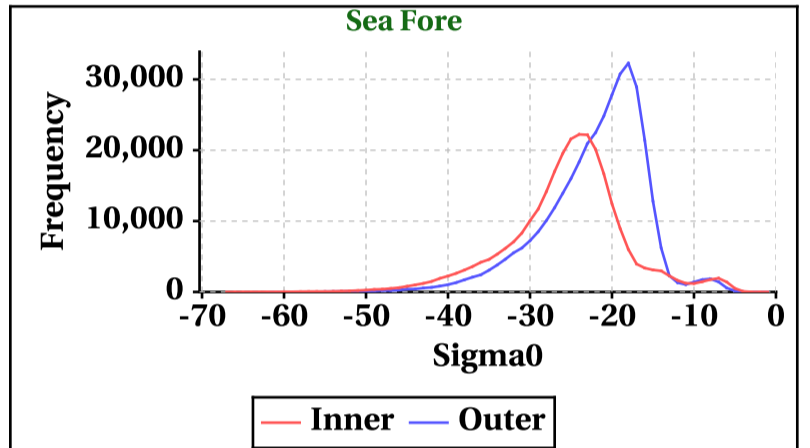
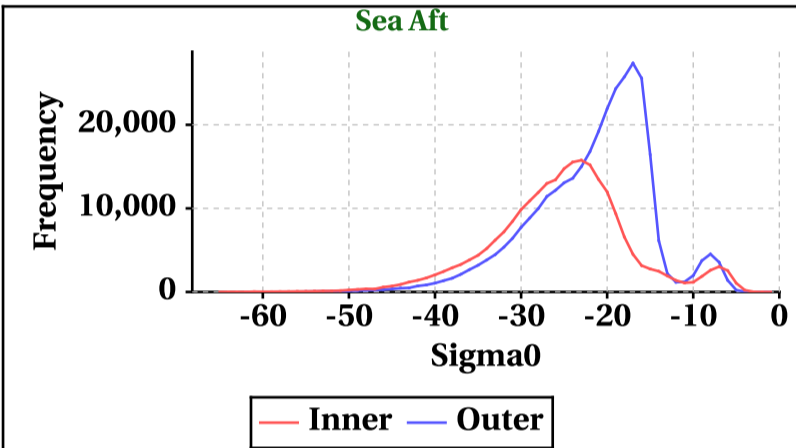
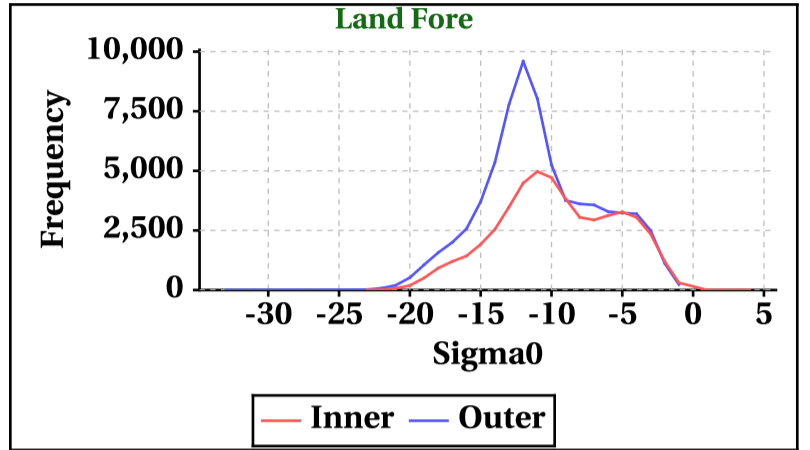
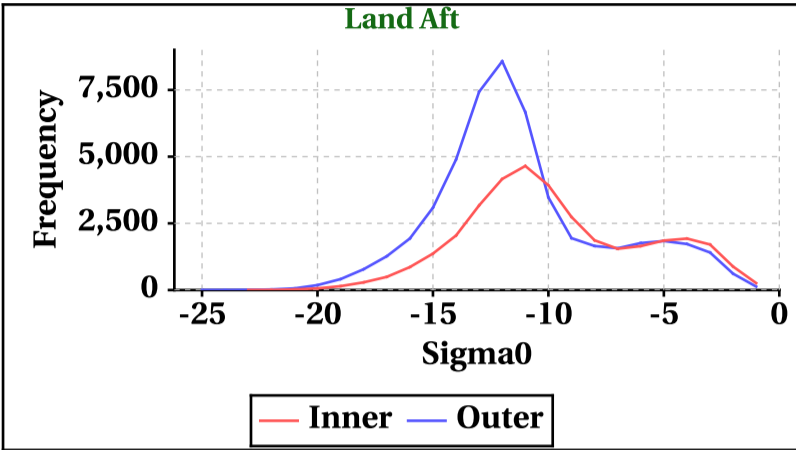
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -23 | -23 | -65 | -67 |
| Max | -1 | 4 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -25 | -33 | -62 | -62 |
| 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 | 329 | 314 | 297 | 288 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 334 | 349 | 310 | 334 |

