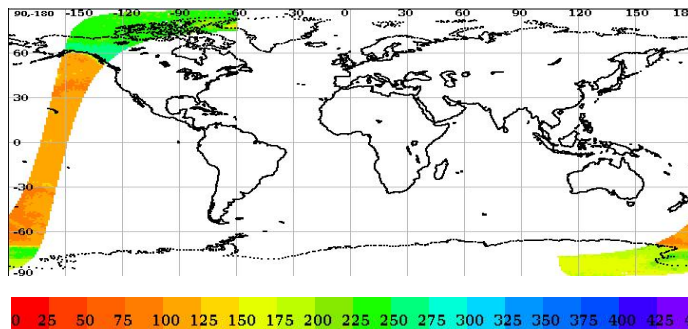


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

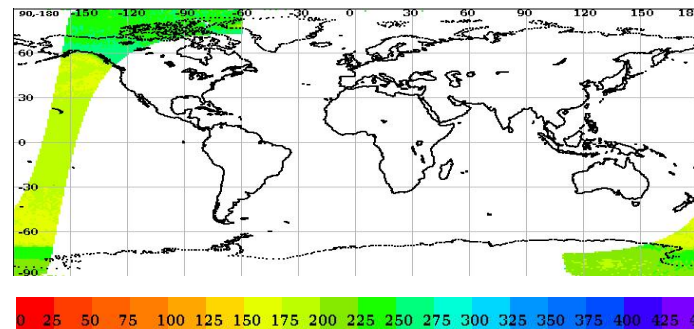
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 13435 | 13436 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 813 | 72 | 10-04-2019 | 11-04-2019 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

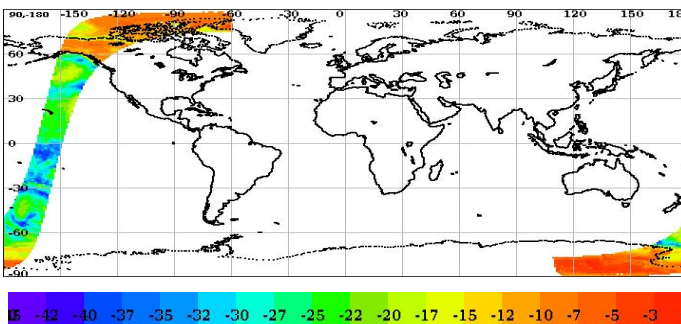


Outer Beam (VV)

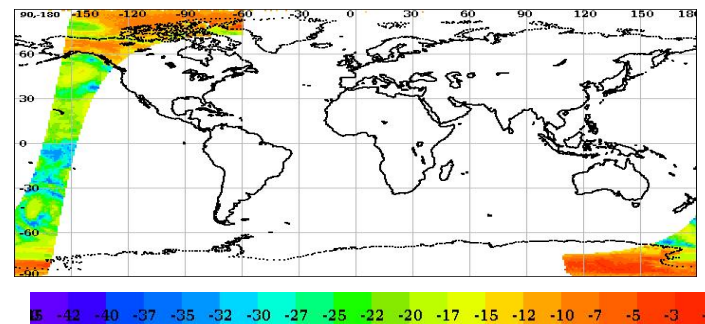


Sigma0(dB)

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 | -10.83 | -5.01 | -7.06 | 1.24 | 162.35 | 193.45 | 175.67 | 10.09 |
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Fore | -8.98 | -5.04 | -6.94 | 1.00 | 148.15 | 198.98 | 174.17 | 13.97 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Fore | -10.70 | -6.15 | -8.30 | 1.13 | 175.39 | 240.13 | 212.89 | 15.57 |

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 | 156.67 | 6.00 | 0.00 | 24.15 | 7.54 | 0.00 | 342.61 | 2.24 | 0.00 | 125.22 | 3.77 |

| 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 | 44.03 | 1.07 | 0.00 | 36.13 | 1.43 | 0.00 | 15.08 | 0.00 | 0.00 | 33.14 | 0.03 |
| | Outer (VV) | 0.00 | 36.50 | 1.37 | 0.00 | 43.03 | 2.12 | 0.00 | 21.78 | 0.02 | 0.00 | 20.76 | 0.01 |
| Sigma0(dB) | Inner (HH) | 0.00 | 45.67 | 1.04 | 0.00 | 36.52 | 1.31 | 0.00 | 15.85 | 0.00 | 0.00 | 28.81 | 0.03 |
| | Outer (VV) | 0.00 | 33.84 | 1.28 | 0.00 | 42.88 | 1.68 | 0.00 | 19.81 | 0.00 | 0.00 | 21.16 | 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

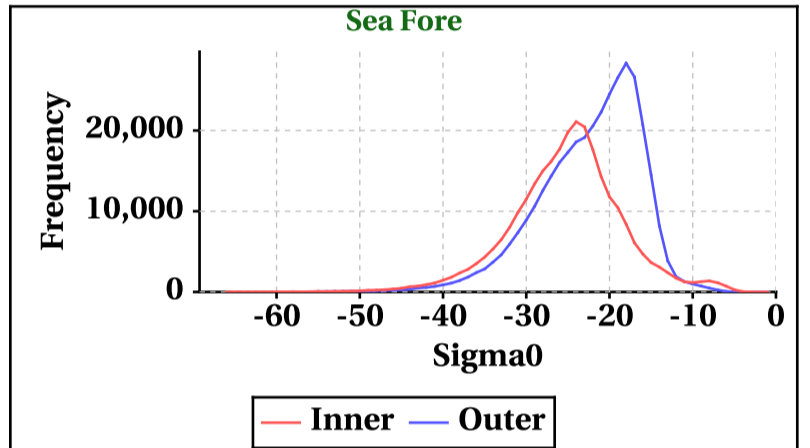
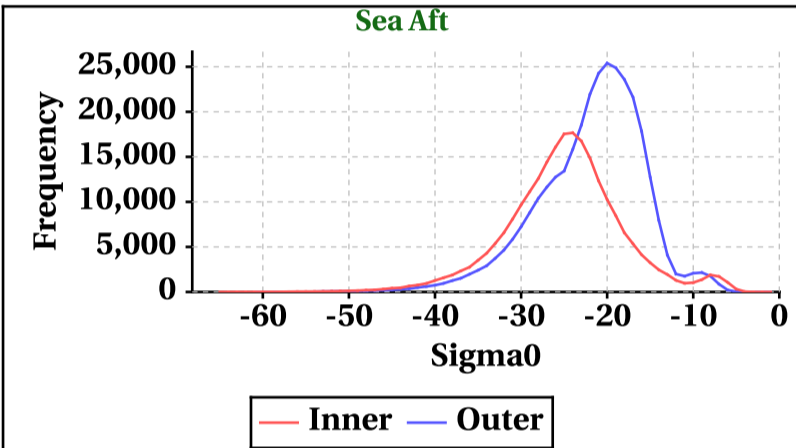
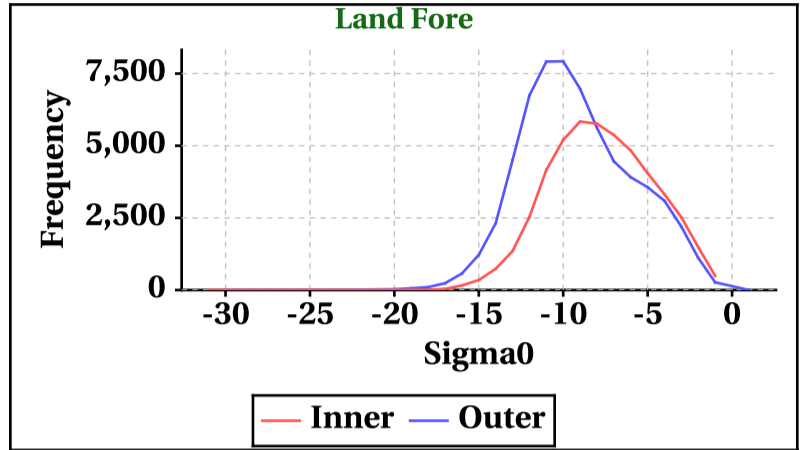
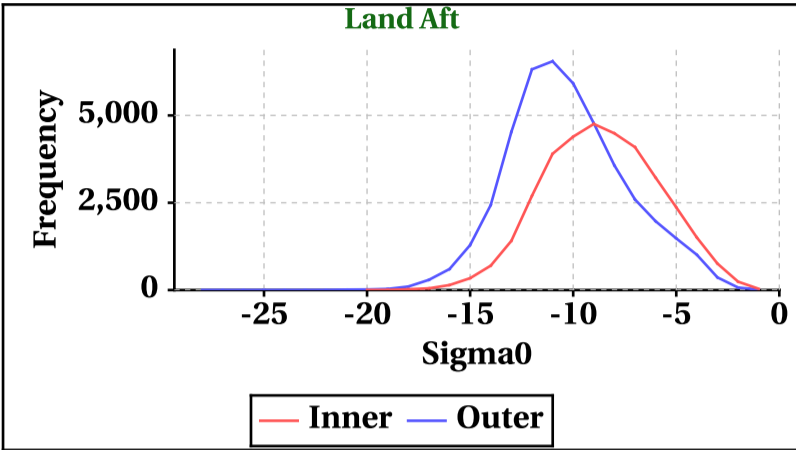
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -20 | -31 | -65 | -66 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -28 | -30 | -61 | -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 | 322 | 325 | 296 | 296 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 326 | 324 | 323 | 304 |

