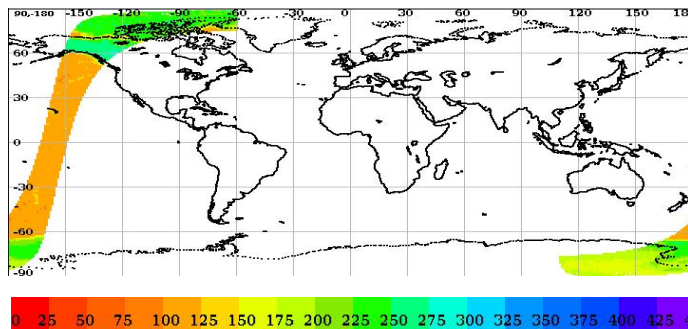


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

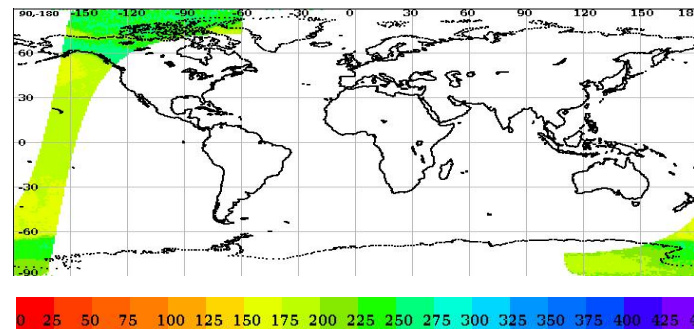
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 16248 | 16249 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 21-10-2019 | 22-10-2019 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

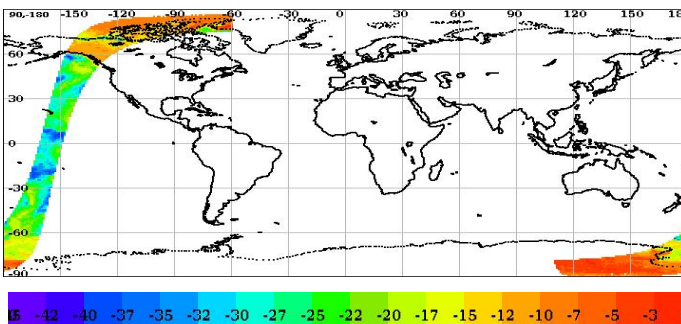


Outer Beam (VV)

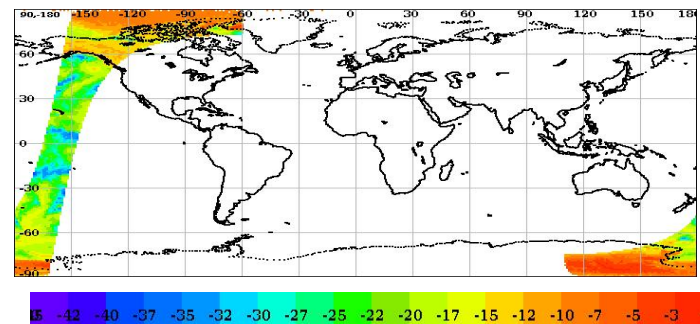


Sigma0(dB)

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 | Outer | DSC | Fore | -11.85 | -6.46 | -8.37 | 1.18 | 159.37 | 243.54 | 202.63 | 18.86 |

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 | 264.99 | 10.29 | 0.00 | 29.97 | 14.49 | 0.00 | 355.52 | 9.98 | 0.00 | 66.39 | 12.94 |

| 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 | 39.88 | 3.28 | 0.00 | 39.76 | 4.90 | 0.00 | 36.58 | 0.58 | 0.00 | 39.96 | 0.92 |
| | Outer (VV) | 0.00 | 35.60 | 4.44 | 0.00 | 38.72 | 6.18 | 0.00 | 28.52 | 0.27 | 0.00 | 31.53 | 0.47 |
| Sigma0(dB) | Inner (HH) | 0.00 | 39.78 | 3.25 | 0.00 | 40.32 | 4.61 | 0.00 | 37.80 | 0.52 | 0.00 | 38.85 | 0.82 |
| | Outer (VV) | 0.00 | 36.40 | 4.36 | 0.00 | 36.59 | 5.24 | 0.00 | 27.60 | 0.27 | 0.00 | 30.00 | 0.31 |

| 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

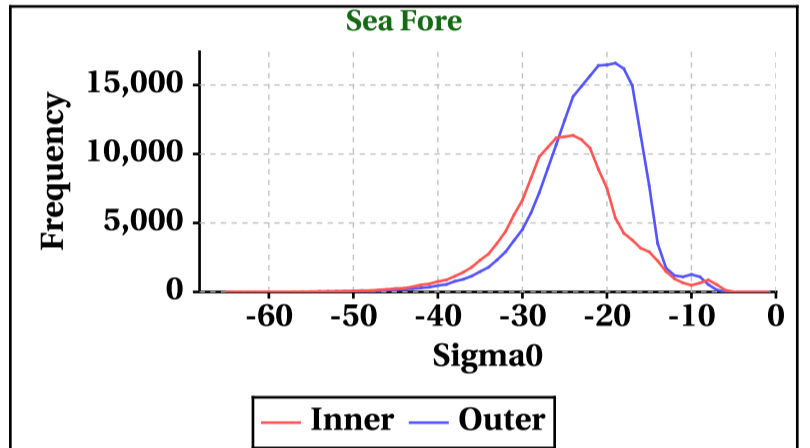
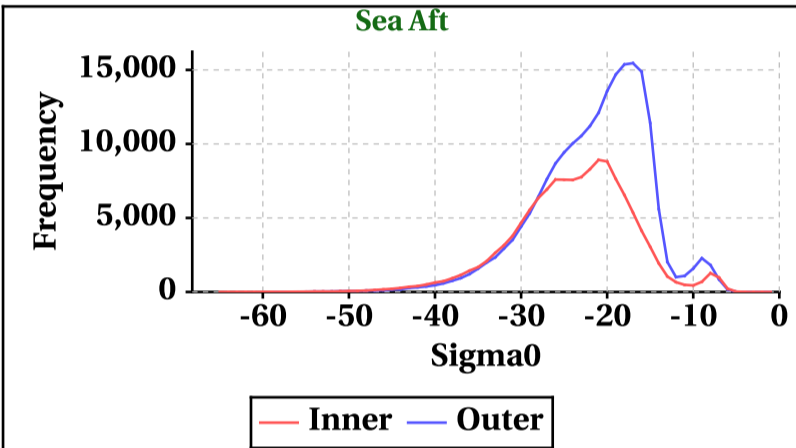
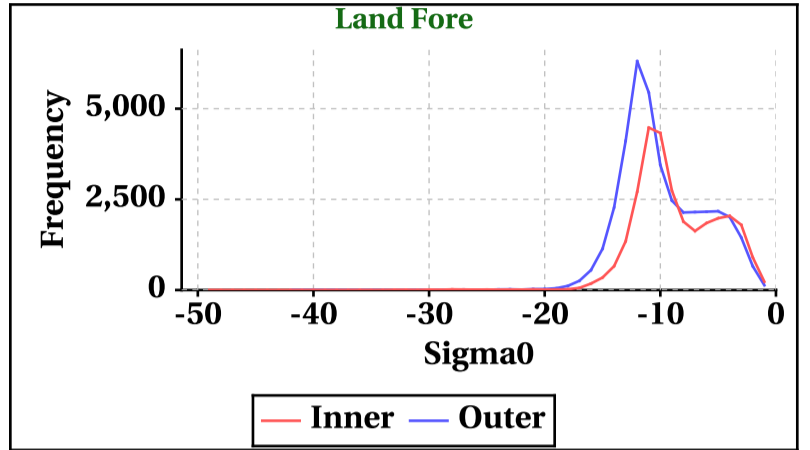
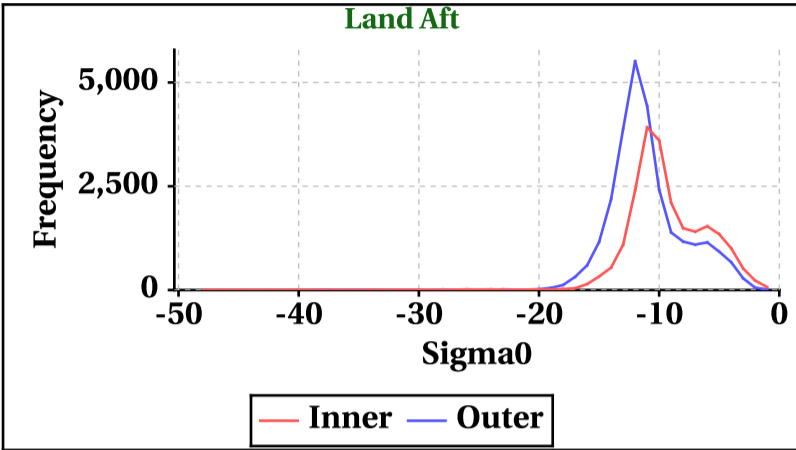
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -48 | -49 | -65 | -65 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -39 | -42 | -59 | -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 | 326 | 333 | 311 | 309 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 313 | 326 | 314 | 308 |

