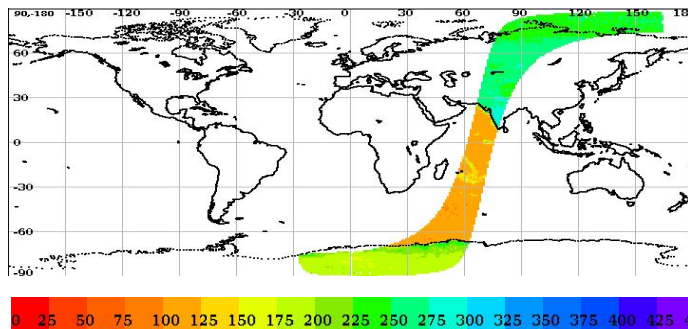


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

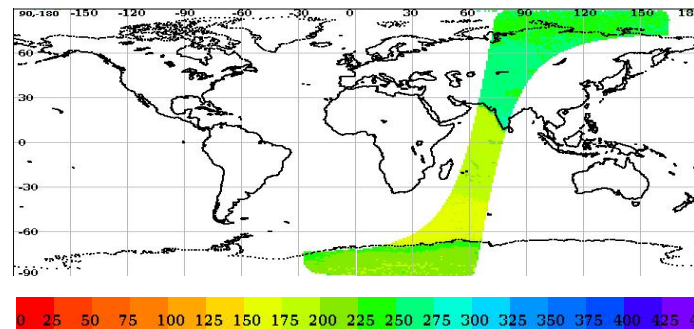
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 17254 | 17255 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 30-12-2019 | 31-12-2019 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

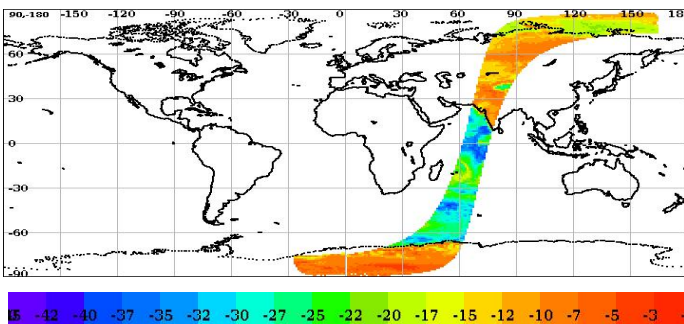


Outer Beam (VV)

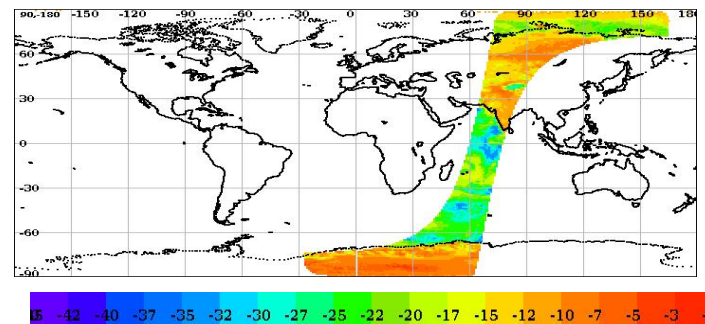


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ROK | 23.00 | 73.60 | Inner | DSC | Aft | -12.07 | -7.08 | -9.54 | 0.90 | 237.00 | 307.63 | 270.87 | 16.14 |
| ROK | 23.00 | 73.60 | Outer | DSC | Aft | -14.98 | -7.61 | -11.14 | 1.08 | 239.08 | 293.35 | 267.82 | 14.61 |
| ROK | 23.00 | 73.60 | Inner | DSC | Fore | -13.19 | -5.76 | -9.31 | 1.15 | 254.96 | 311.00 | 280.68 | 13.28 |
| ROK | 23.00 | 73.60 | Outer | DSC | Fore | -14.27 | -8.16 | -10.96 | 1.06 | 231.95 | 307.86 | 272.29 | 17.67 |

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 | 166.41 | 5.90 | 0.00 | 24.57 | 7.24 | 0.00 | 352.83 | 2.58 | 0.00 | 57.89 | 3.26 |

| 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 | 45.61 | 1.54 | 0.00 | 41.68 | 2.38 | 0.00 | 28.65 | 0.03 | 0.00 | 39.43 | 0.11 |
| | Outer (VV) | 0.00 | 38.64 | 1.86 | 0.00 | 35.81 | 2.78 | 0.00 | 32.51 | 0.06 | 0.00 | 29.76 | 0.19 |
| Sigma0(dB) | Inner (HH) | 0.00 | 45.43 | 1.50 | 0.00 | 41.27 | 2.10 | 0.00 | 29.47 | 0.03 | 0.00 | 37.69 | 0.08 |
| | Outer (VV) | 0.00 | 36.97 | 1.76 | 0.00 | 36.19 | 2.31 | 0.00 | 29.90 | 0.05 | 0.00 | 31.98 | 0.13 |

| 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

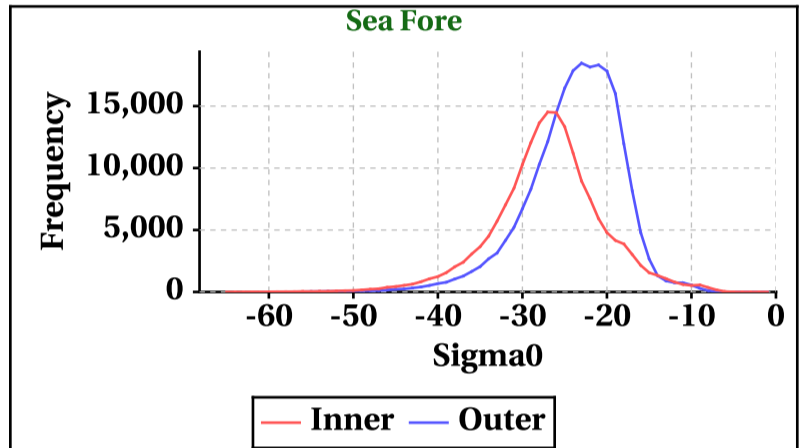
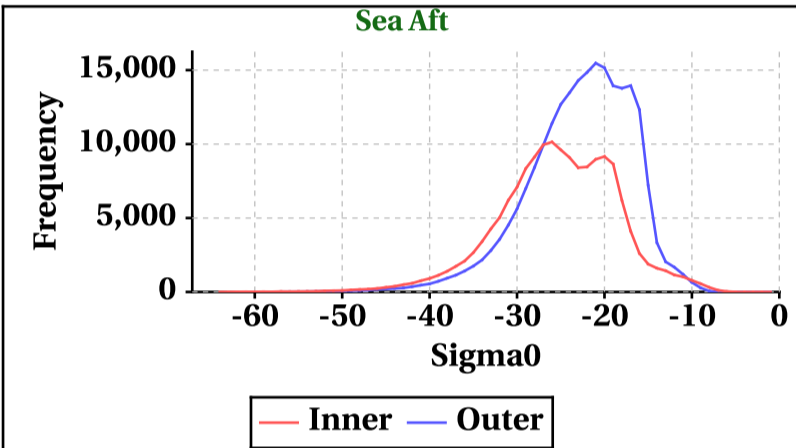
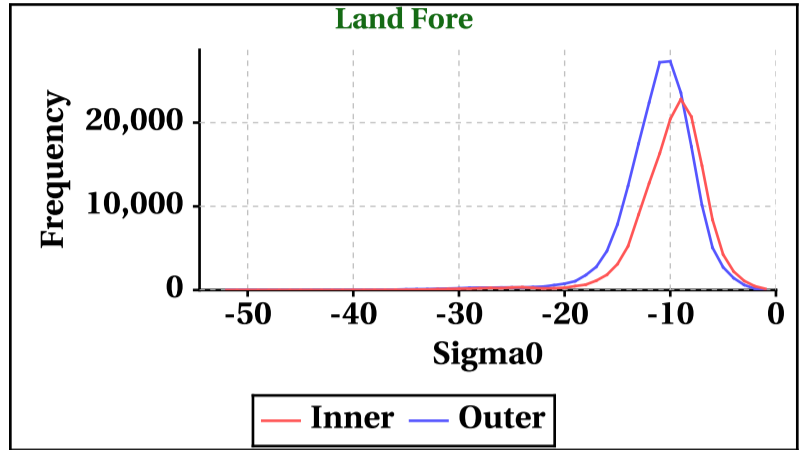
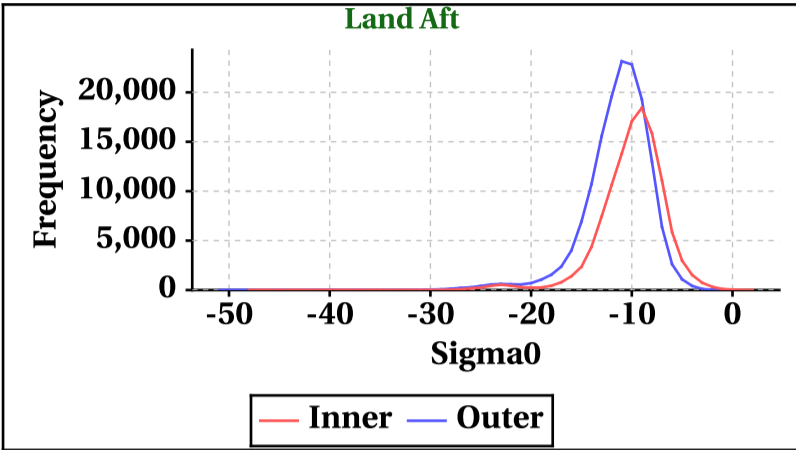
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -48 | -52 | -64 | -65 |
| Max | 2 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -51 | -52 | -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 | 342 | 350 | 309 | 306 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 473 | 362 | 312 | 301 |

