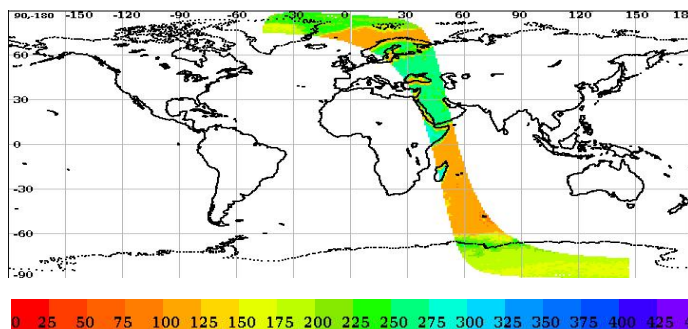


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

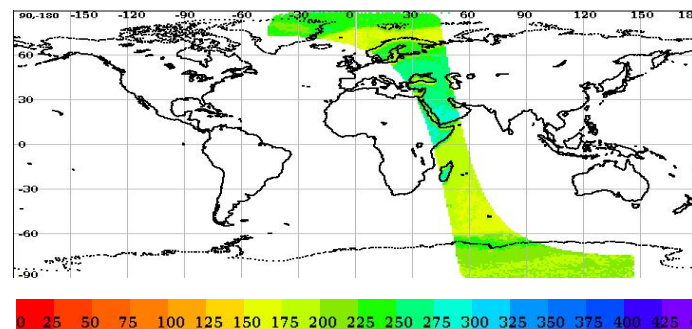
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 16348 | 16349 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 28-10-2019 | 28-10-2019 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

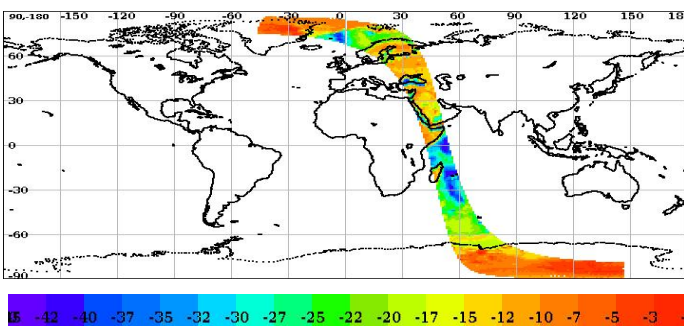


Outer Beam (VV)

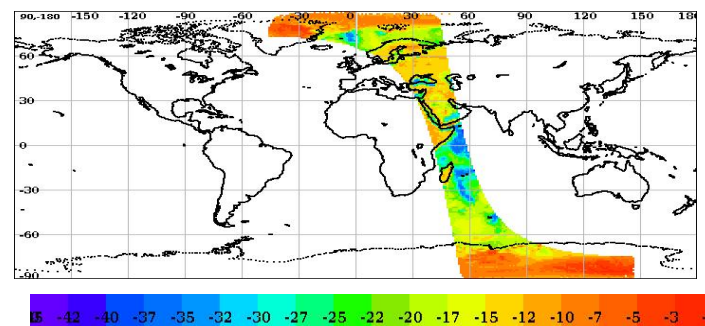


Sigma0(dB)

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 | ASC | Aft | -10.21 | -6.77 | -8.13 | 0.94 | 182.48 | 240.41 | 209.17 | 15.68 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Fore | -9.63 | -7.68 | -8.67 | 0.80 | 184.50 | 197.12 | 190.15 | 5.24 |
| GreenLand_2 | 77.50 | -41.50 | Inner | ASC | Fore | -6.72 | -4.12 | -4.91 | 0.74 | 153.06 | 210.14 | 179.86 | 14.76 |
| GreenLand_2 | 77.50 | -41.50 | Outer | ASC | Fore | -6.37 | -3.95 | -5.00 | 0.75 | 215.41 | 261.15 | 234.42 | 12.35 |
| GreenLand_1 | 74.69 | -42.50 | Outer | ASC | Fore | -10.90 | -6.83 | -8.83 | 0.90 | 204.84 | 261.82 | 231.96 | 17.63 |

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 | 27.88 | 12.94 | 0.00 | 37.89 | 13.01 | 0.00 | 135.15 | 11.06 | 0.00 | 70.52 | 13.63 |

| 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 | 49.76 | 8.14 | 0.00 | 46.39 | 9.52 | 0.00 | 38.82 | 0.27 | 0.00 | 39.63 | 0.66 |
| | Outer (VV) | 0.00 | 44.15 | 7.89 | 0.00 | 45.25 | 9.14 | 0.00 | 38.21 | 0.57 | 0.00 | 37.31 | 0.94 |
| Sigma0(dB) | Inner (HH) | 0.00 | 48.54 | 8.32 | 0.00 | 44.27 | 9.59 | 0.00 | 39.21 | 0.25 | 0.00 | 40.53 | 0.49 |
| | Outer (VV) | 0.00 | 42.10 | 8.75 | 0.00 | 42.87 | 9.83 | 0.00 | 38.40 | 0.53 | 0.00 | 35.47 | 0.61 |

| 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

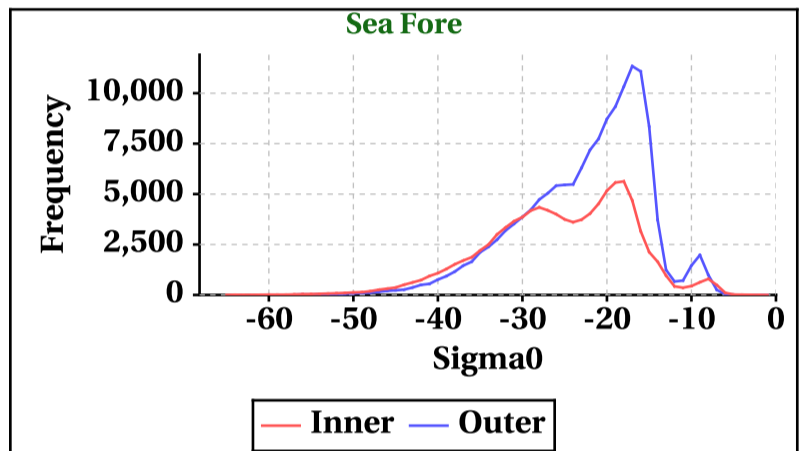
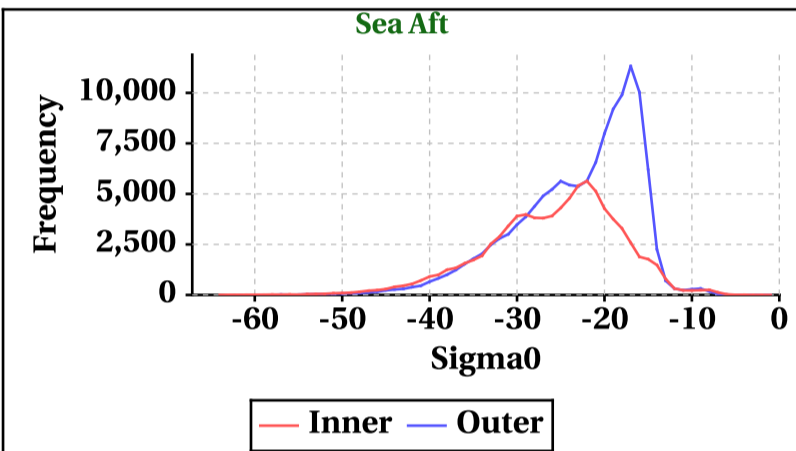
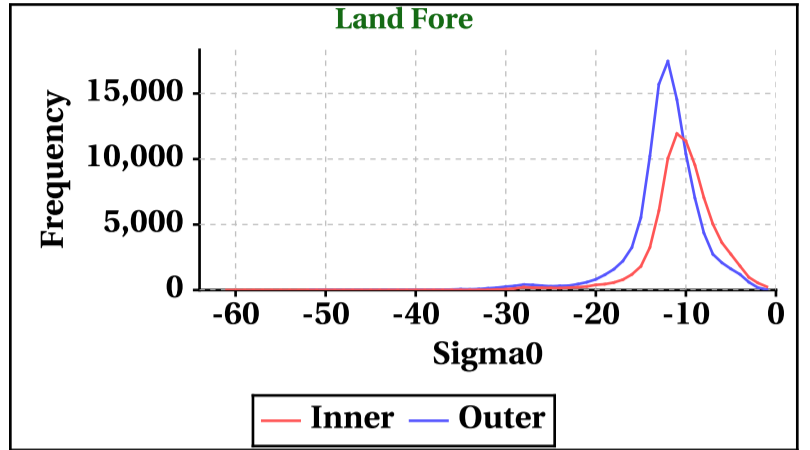
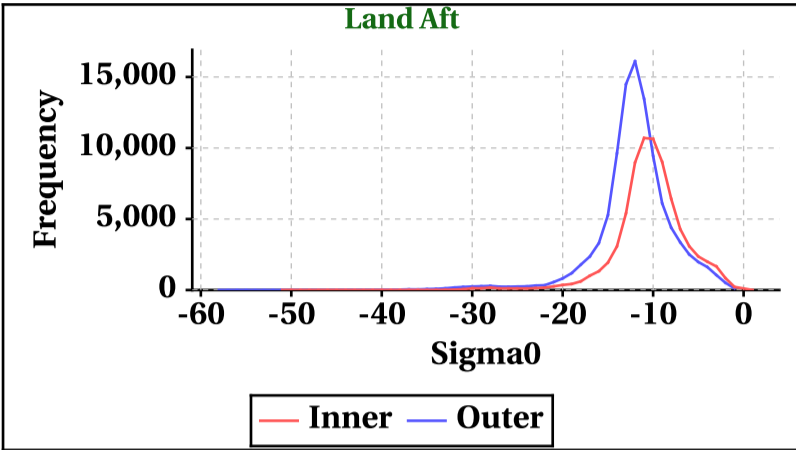
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -51 | -61 | -64 | -65 |
| Max | 1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -58 | -52 | -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 | 350 | 354 | 452 | 300 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 354 | 428 | 460 | 401 |

