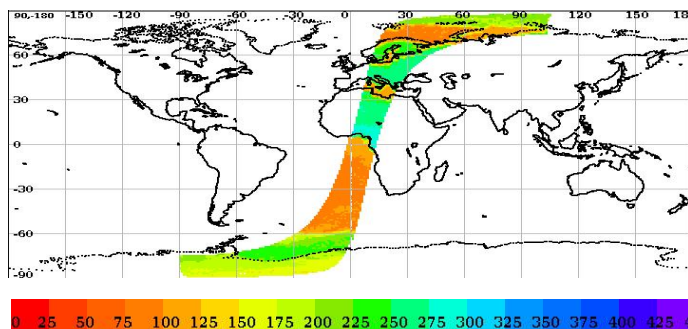


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

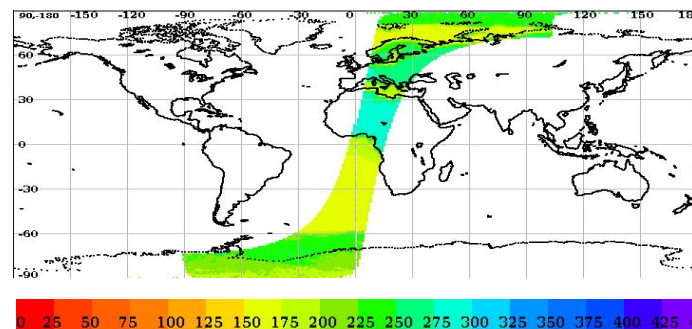
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 5497 | 5498 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 814 | 72 | 10-10-2017 | 10-10-2017 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

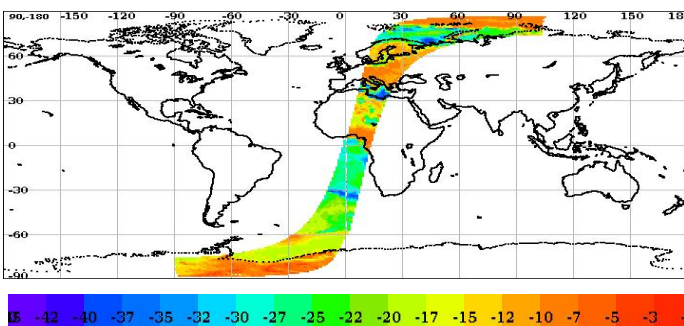


Outer Beam (VV)

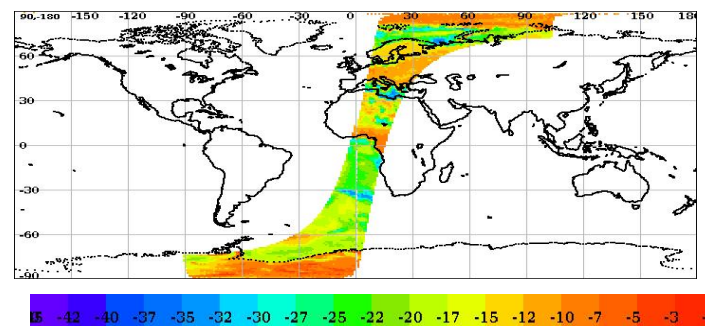


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| Sahara | 19.10 | 14.30 | Inner | DSC | Aft | -43.94 | -18.81 | -27.57 | 4.23 | 207.47 | 301.90 | 252.11 | 18.36 |
| Sahara | 19.10 | 14.30 | Outer | DSC | Aft | -48.90 | -18.47 | -27.20 | 4.61 | 249.93 | 333.85 | 289.91 | 16.92 |
| Sahara | 19.10 | 14.30 | Inner | DSC | Fore | -35.86 | -18.35 | -24.60 | 2.64 | 210.94 | 294.44 | 262.07 | 16.55 |
| Sahara | 19.10 | 14.30 | Outer | DSC | Fore | -55.25 | -18.23 | -26.52 | 5.18 | 254.66 | 318.39 | 289.67 | 12.95 |

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 | 27.23 | 10.28 | 0.00 | 26.91 | 10.44 | 0.00 | 169.29 | 5.84 | 0.00 | 128.80 | 5.45 |

| 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 | 47.26 | 3.37 | 0.00 | 60.50 | 2.91 | 0.00 | 33.58 | 0.23 | 0.00 | 38.72 | 0.21 |
| | Outer (VV) | 0.00 | 43.16 | 2.07 | 0.00 | 38.84 | 1.87 | 0.00 | 40.11 | 0.30 | 0.00 | 40.94 | 0.30 |
| Sigma0(dB) | Inner (HH) | 0.00 | 50.38 | 2.92 | 0.00 | 64.21 | 2.46 | 0.00 | 33.82 | 0.11 | 0.00 | 34.89 | 0.16 |
| | Outer (VV) | 0.00 | 43.36 | 1.76 | 0.00 | 37.92 | 1.56 | 0.00 | 35.35 | 0.16 | 0.00 | 38.68 | 0.19 |

| 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

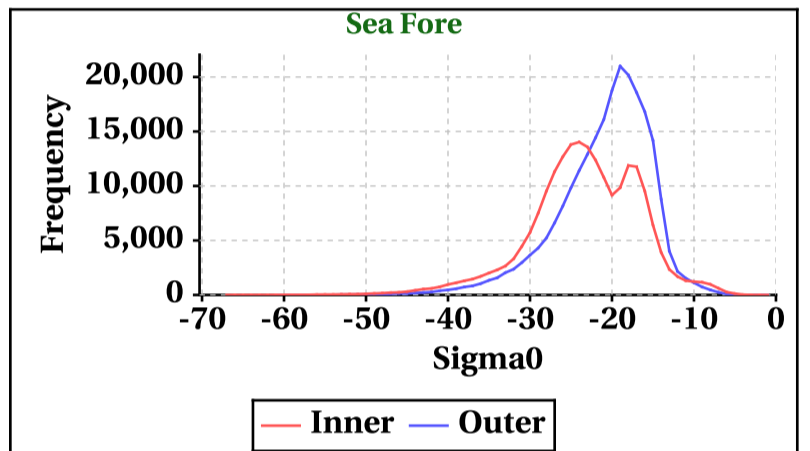
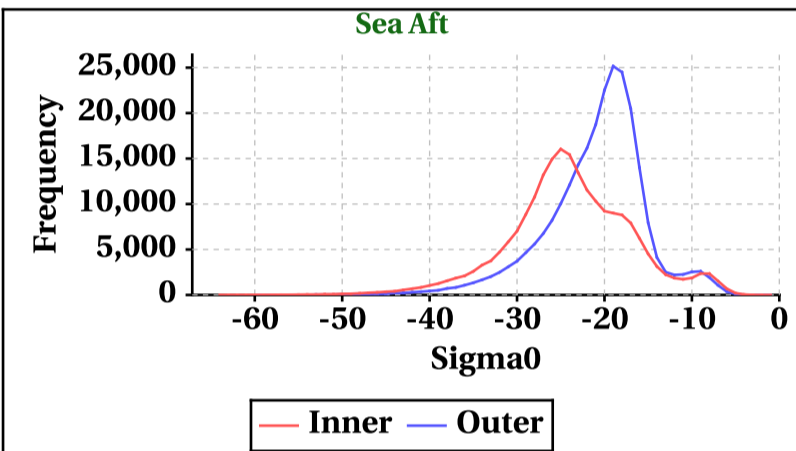
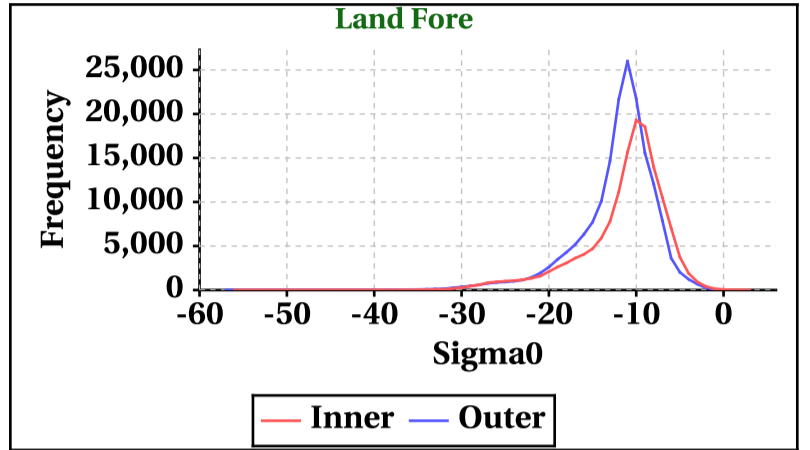
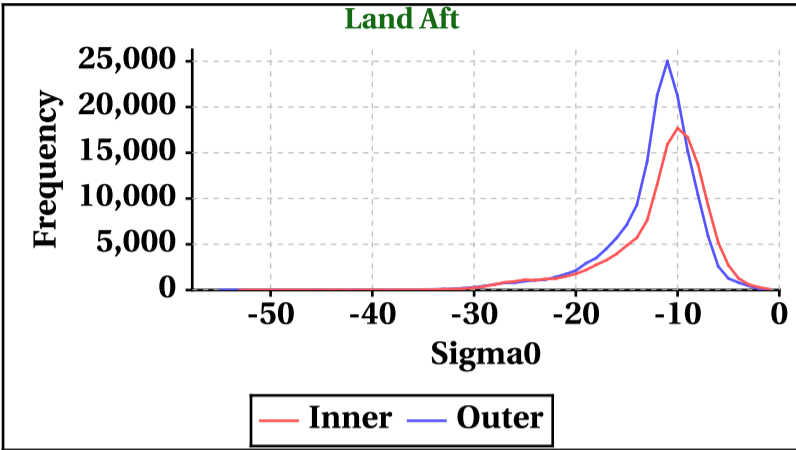
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -53 | -56 | -64 | -67 |
| Max | -1 | 3 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -55 | -57 | -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 | 351 | 352 | 300 | 293 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 396 | 417 | 303 | 306 |

