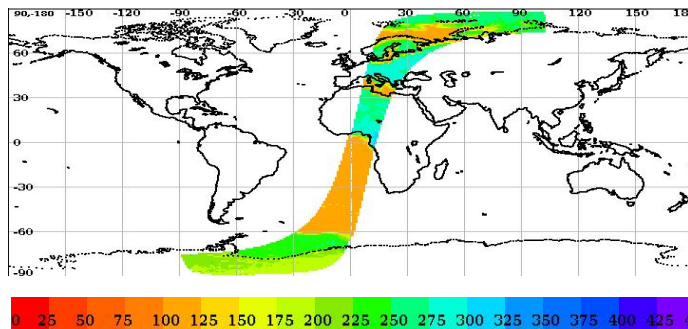


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

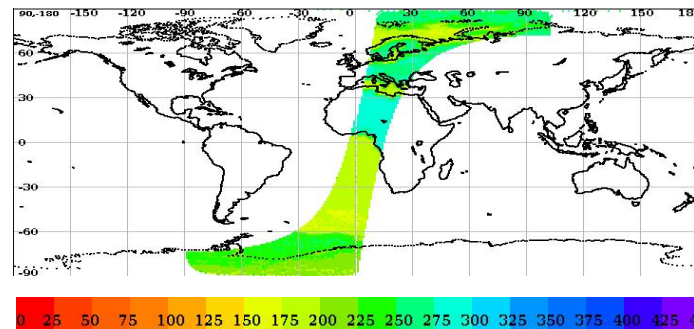
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 19475 | 19476 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 811 | 72 | 31-05-2020 | 31-05-2020 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.4 | |

Brightness Temperature

Inner Beam (HH)

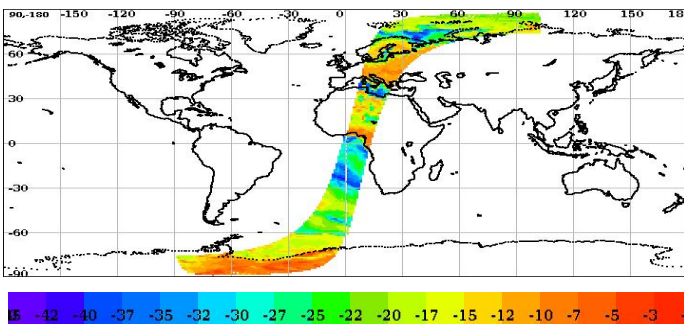


Outer Beam (VV)

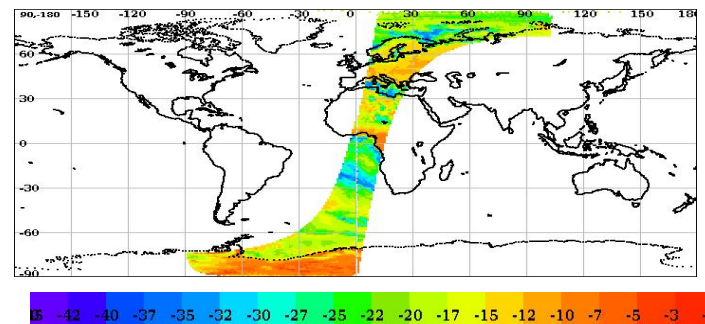


Sigma0(dB)

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 | -38.97 | -20.72 | -27.11 | 3.26 | 223.47 | 308.15 | 270.00 | 17.91 |
| Sahara | 19.10 | 14.30 | Outer | DSC | Aft | -47.83 | -20.37 | -27.43 | 4.19 | 252.95 | 323.57 | 293.96 | 14.72 |
| Sahara | 19.10 | 14.30 | Inner | DSC | Fore | -28.80 | -19.21 | -23.78 | 1.92 | 228.13 | 304.69 | 267.31 | 14.24 |
| Sahara | 19.10 | 14.30 | Outer | DSC | Fore | -37.69 | -19.65 | -26.24 | 3.49 | 258.15 | 329.62 | 292.50 | 17.73 |

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 | 54.13 | 6.07 | 0.00 | 24.57 | 6.85 | 0.00 | 335.43 | 2.10 | 0.00 | 43.10 | 3.06 |

| 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 | 50.95 | 2.18 | 0.00 | 50.49 | 2.72 | 0.00 | 25.34 | 0.04 | 0.00 | 37.48 | 0.11 |
| | Outer (VV) | 0.00 | 41.16 | 2.07 | 0.00 | 41.49 | 2.59 | 0.00 | 39.08 | 0.14 | 0.00 | 41.81 | 0.25 |
| Sigma0(dB) | Inner (HH) | 0.00 | 51.18 | 2.23 | 0.00 | 51.76 | 2.55 | 0.00 | 24.54 | 0.04 | 0.00 | 37.93 | 0.09 |
| | Outer (VV) | 0.00 | 40.70 | 2.04 | 0.00 | 39.43 | 2.43 | 0.00 | 37.95 | 0.11 | 0.00 | 37.76 | 0.11 |

| 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

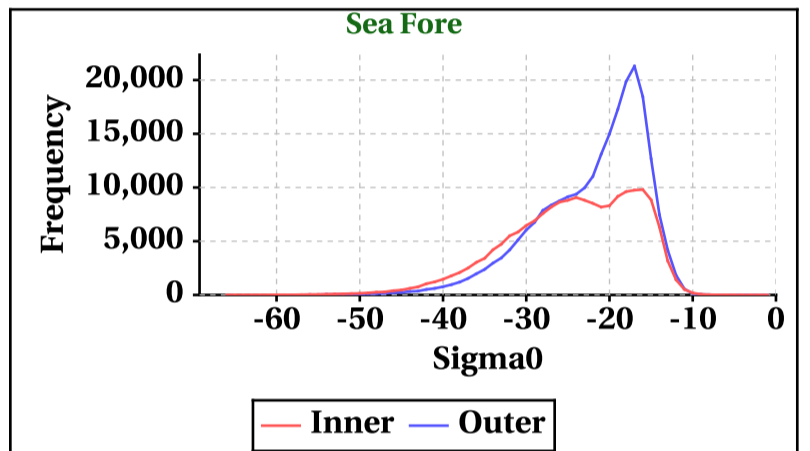
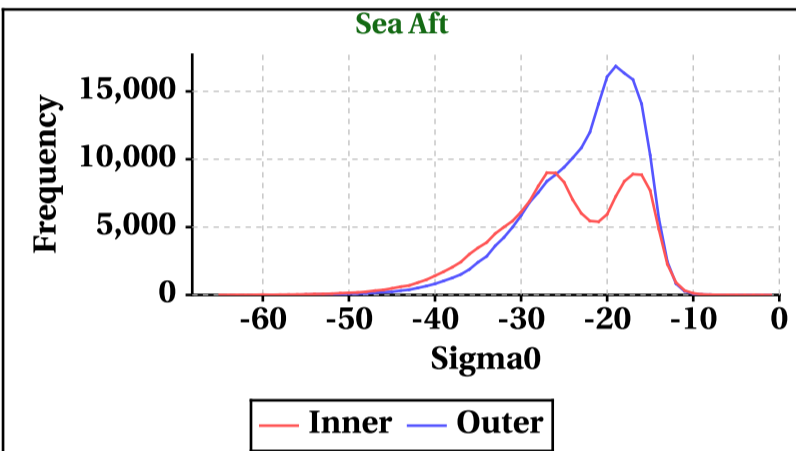
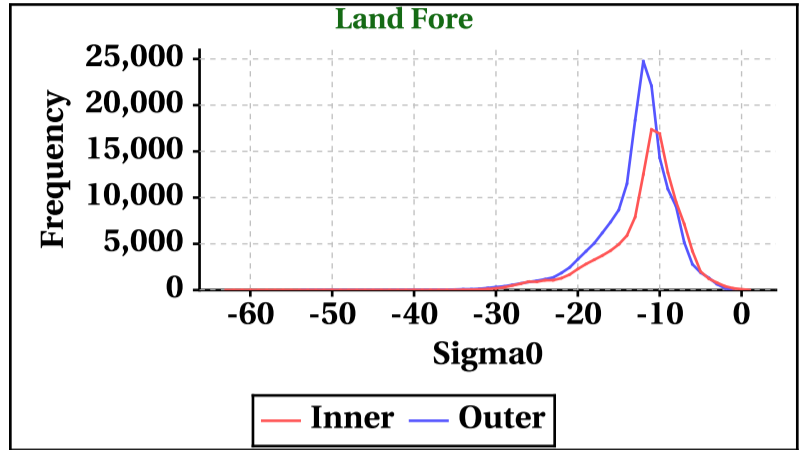
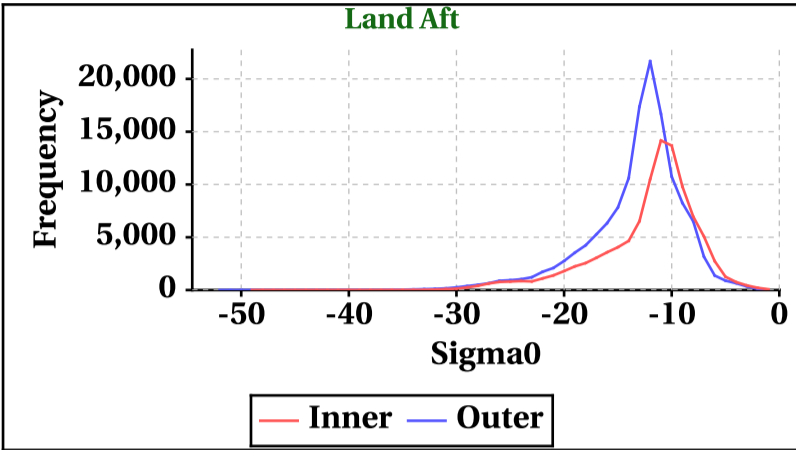
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -49 | -63 | -65 | -66 |
| Max | -1 | 1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -52 | -54 | -60 | -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 | 364 | 365 | 319 | 311 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 359 | 353 | 312 | 316 |

