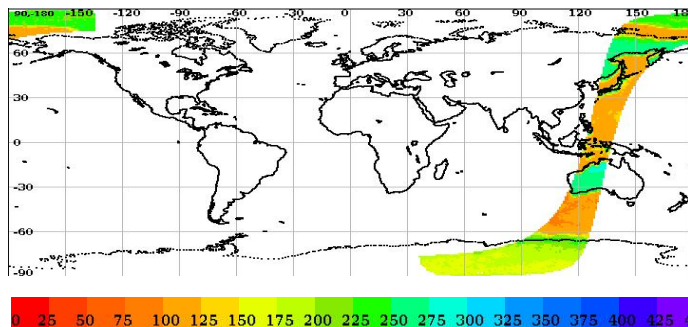


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

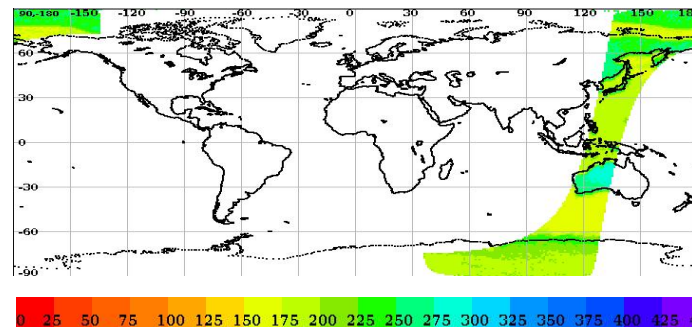
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 16048 | 16049 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 811 | 72 | 07-10-2019 | 08-10-2019 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

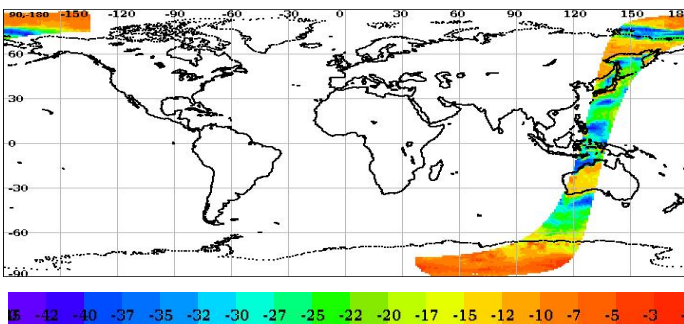


Outer Beam (VV)

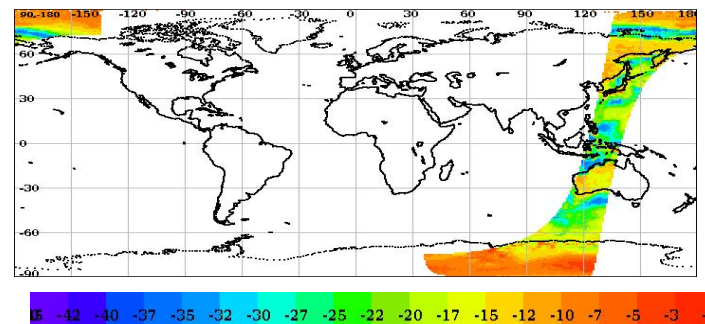


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Aft | -11.87 | -5.77 | -7.82 | 1.09 | 172.48 | 225.44 | 196.91 | 13.38 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Fore | -10.37 | -5.29 | -8.18 | 1.14 | 162.43 | 260.78 | 202.25 | 20.49 |
| Australia | -23.00 | 118.00 | Inner | DSC | Aft | -13.79 | -6.28 | -9.28 | 1.21 | 233.32 | 314.35 | 271.54 | 17.03 |
| Australia | -23.00 | 118.00 | Outer | DSC | Aft | -14.81 | -8.19 | -10.93 | 1.06 | 236.61 | 313.30 | 273.25 | 15.99 |
| Australia | -23.00 | 118.00 | Inner | DSC | Fore | -12.53 | -6.30 | -9.07 | 1.19 | 220.41 | 326.76 | 276.15 | 16.11 |
| Australia | -23.00 | 118.00 | Outer | DSC | Fore | -13.44 | -7.67 | -10.70 | 1.09 | 236.05 | 299.65 | 273.52 | 13.61 |

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 | 190.39 | 6.03 | 0.00 | 24.58 | 6.79 | 0.00 | 249.06 | 2.10 | 0.00 | 42.23 | 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 | 45.01 | 2.83 | 0.00 | 49.18 | 3.55 | 0.00 | 13.34 | 0.00 | 0.00 | 23.19 | 0.01 |
| | Outer (VV) | 0.00 | 41.27 | 2.58 | 0.00 | 45.82 | 3.72 | 0.00 | 17.77 | 0.00 | 0.00 | 24.57 | 0.02 |
| Sigma0(dB) | Inner (HH) | 0.00 | 45.87 | 2.81 | 0.00 | 46.16 | 3.47 | 0.00 | 14.21 | 0.00 | 0.00 | 20.68 | 0.01 |
| | Outer (VV) | 0.00 | 39.53 | 2.63 | 0.00 | 45.74 | 3.46 | 0.00 | 17.28 | 0.00 | 0.00 | 21.03 | 0.00 |

| 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

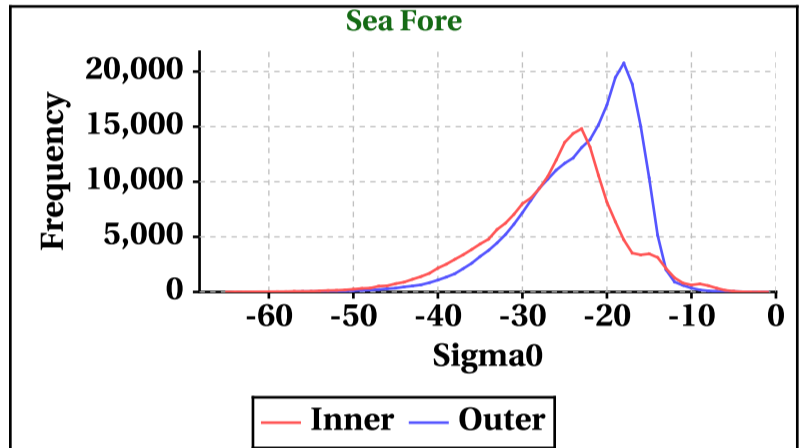
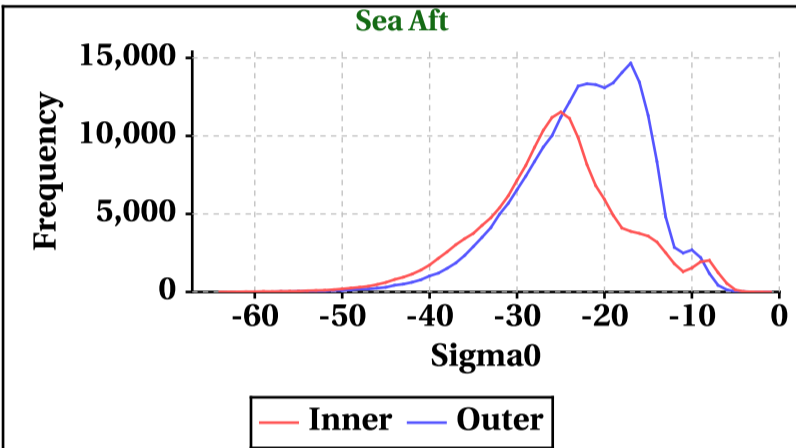
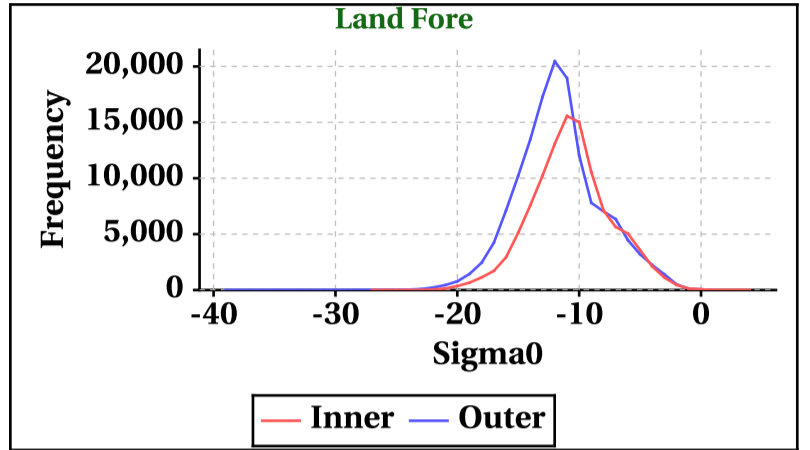
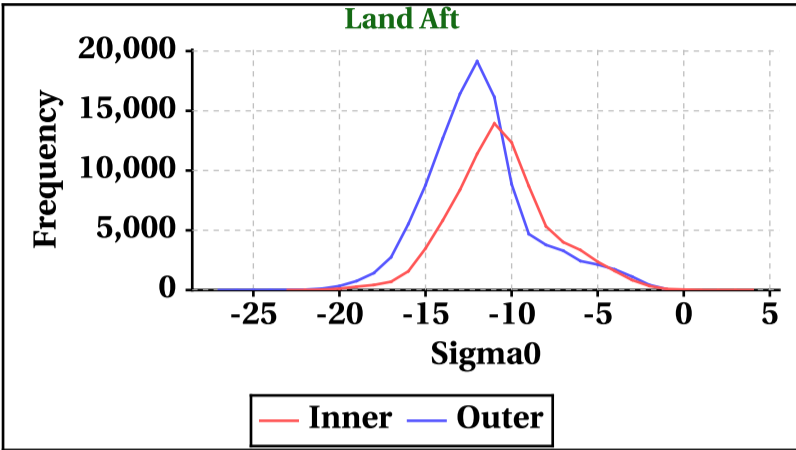
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -23 | -27 | -64 | -65 |
| Max | 4 | 4 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -27 | -39 | -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 | 343 | 349 | 290 | 296 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 345 | 344 | 313 | 310 |

