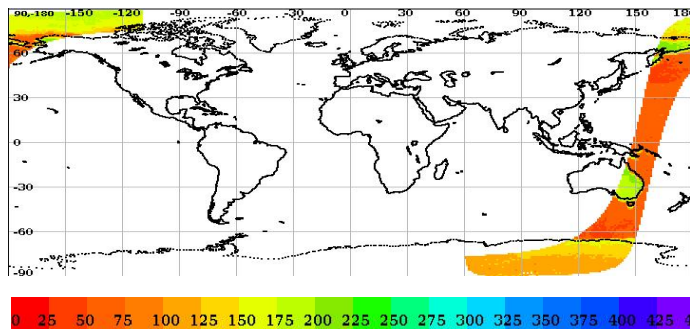


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

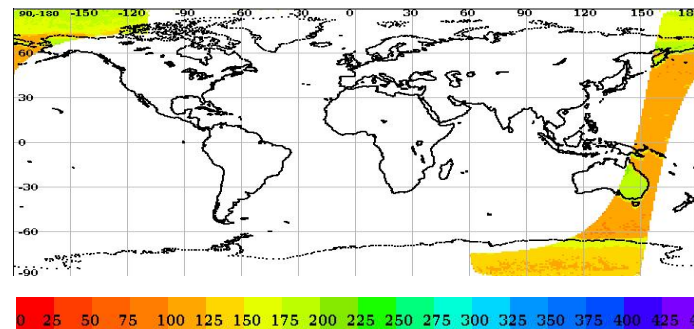
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 14626 | 14627 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 405 | 36 | 01-07-2019 | 02-07-2019 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

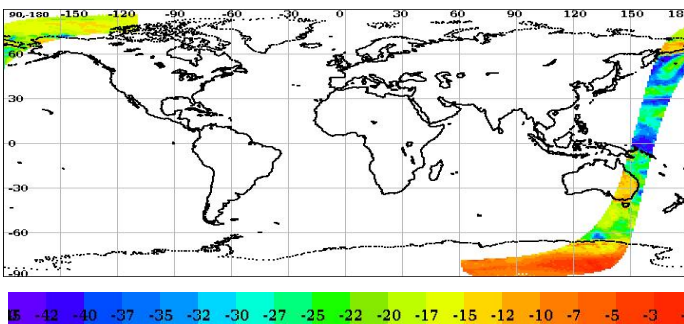


Outer Beam (VV)

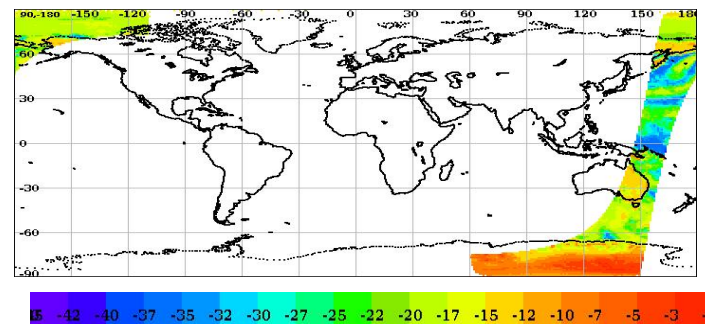


Sigma0(dB)

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 | Inner | DSC | Aft | -7.49 | -5.01 | -6.31 | 0.83 | 89.72 | 145.55 | 121.38 | 16.17 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Aft | -9.72 | -5.57 | -7.61 | 1.02 | 101.46 | 161.22 | 136.28 | 13.83 |
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Fore | -7.79 | -4.42 | -6.49 | 0.89 | 87.13 | 137.76 | 119.48 | 10.93 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Fore | -11.60 | -5.71 | -8.28 | 1.34 | 106.29 | 153.10 | 135.12 | 13.35 |

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 | 169.74 | 10.24 | 0.64 | 29.99 | 14.56 | 0.00 | 351.80 | 10.19 | 0.00 | 73.37 | 12.88 |

| 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 | 49.10 | 9.59 | 0.00 | 43.84 | 11.42 | 0.00 | 18.11 | 0.00 | 0.00 | 20.48 | 0.04 |
| | Outer (VV) | 0.00 | 43.20 | 8.62 | 0.00 | 47.01 | 10.78 | 0.00 | 18.06 | 0.00 | 0.00 | 27.75 | 0.03 |
| Sigma0(dB) | Inner (HH) | 0.00 | 49.77 | 9.83 | 0.00 | 45.51 | 11.79 | 0.00 | 17.60 | 0.00 | 0.00 | 19.86 | 0.00 |
| | Outer (VV) | 0.00 | 43.07 | 9.04 | 0.00 | 44.17 | 11.84 | 0.00 | 19.88 | 0.00 | 0.00 | 22.54 | 0.03 |

| 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

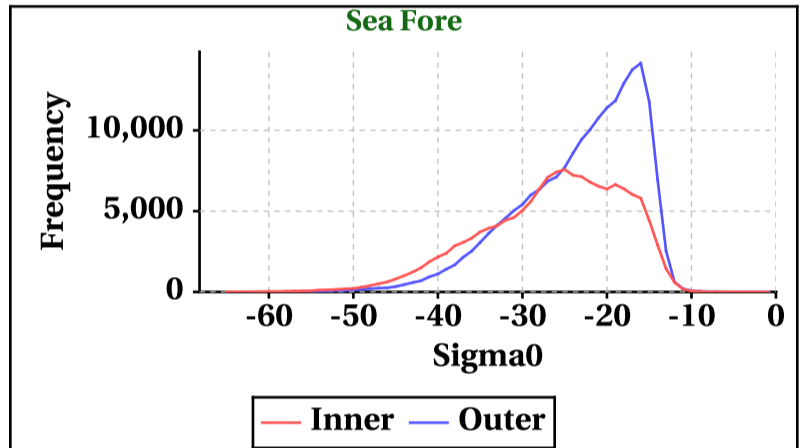
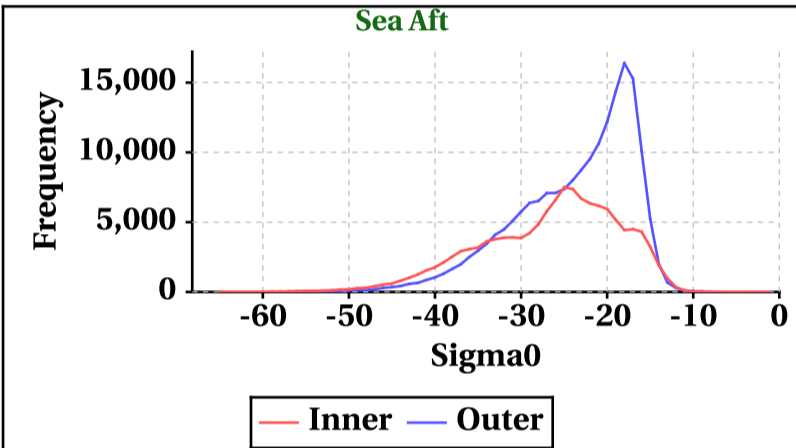
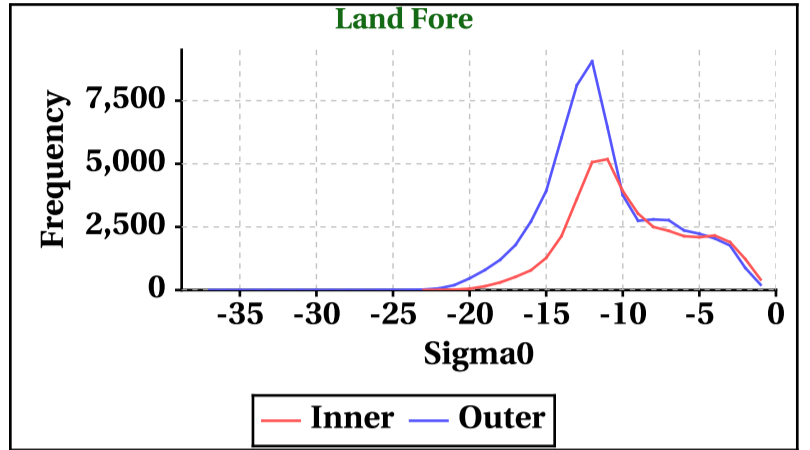
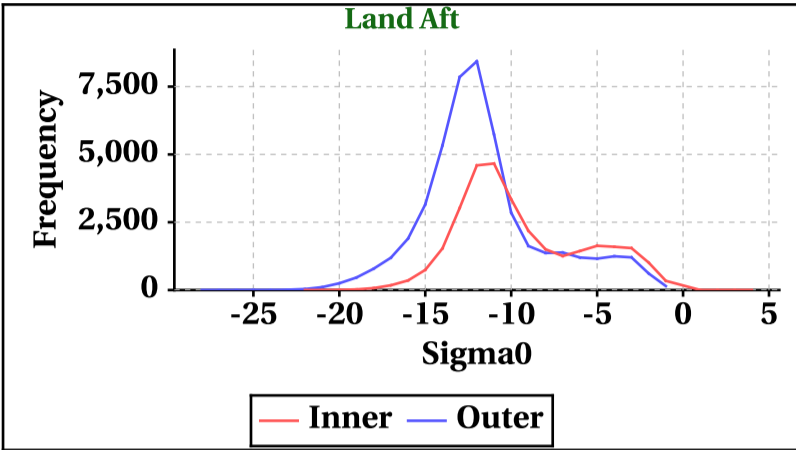
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -22 | -23 | -65 | -65 |
| Max | 4 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -28 | -37 | -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 | 264 | 260 | 231 | 228 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 262 | 267 | 238 | 232 |

