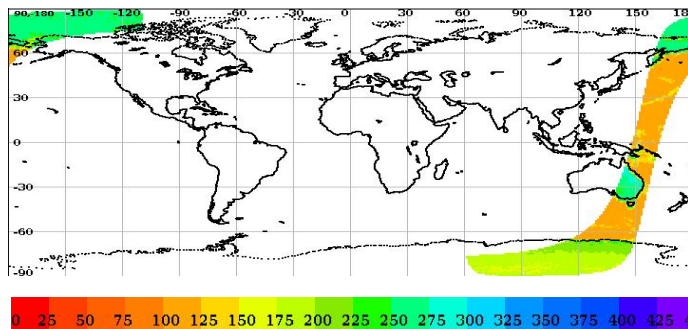


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

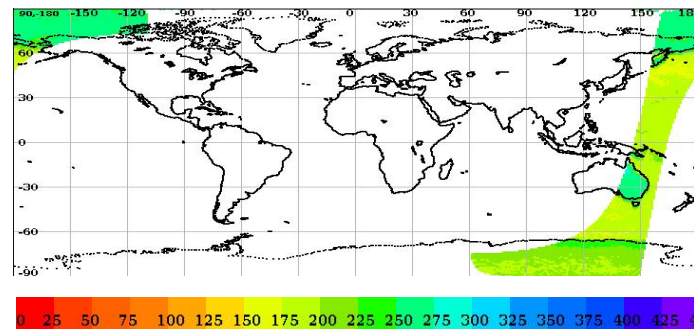
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 19237 | 19238 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 811 | 72 | 14-05-2020 | 15-05-2020 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 25 | v1.1.4 | |

Brightness Temperature

Inner Beam (HH)

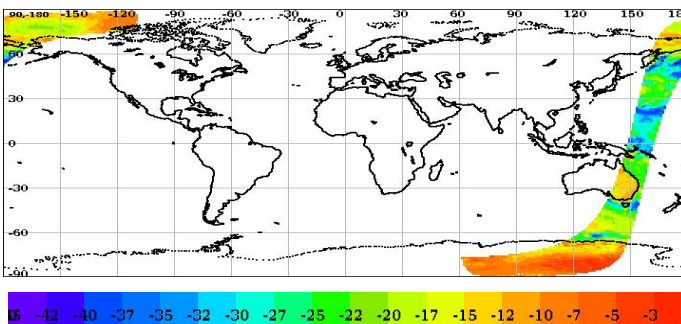


Outer Beam (VV)

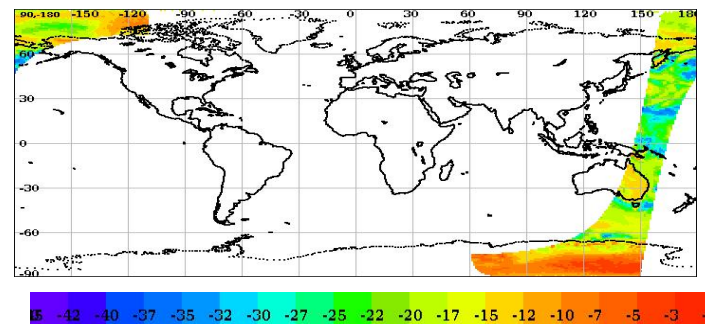


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Aft | -9.19 | -5.88 | -7.13 | 0.92 | 171.93 | 224.03 | 193.77 | 16.67 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Aft | -10.84 | -6.66 | -8.46 | 1.00 | 179.16 | 221.18 | 201.15 | 11.05 |
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Fore | -11.55 | -5.17 | -7.82 | 1.32 | 165.13 | 202.78 | 183.04 | 11.38 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Fore | -11.61 | -7.05 | -8.69 | 1.17 | 189.12 | 240.27 | 213.42 | 13.98 |

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 | 191.52 | 5.90 | 0.00 | 24.55 | 6.66 | 0.00 | 339.33 | 2.24 | 0.00 | 26.32 | 2.84 |

| 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 | 43.03 | 1.66 | 0.00 | 46.27 | 2.71 | 0.00 | 16.59 | 0.00 | 0.00 | 22.67 | 0.01 |
| | Outer (VV) | 0.00 | 39.53 | 1.66 | 0.00 | 39.97 | 2.78 | 0.00 | 23.24 | 0.02 | 0.00 | 46.20 | 0.02 |
| Sigma0(dB) | Inner (HH) | 0.00 | 43.22 | 1.67 | 0.00 | 47.73 | 2.48 | 0.00 | 16.79 | 0.00 | 0.00 | 19.66 | 0.00 |
| | Outer (VV) | 0.00 | 38.22 | 1.68 | 0.00 | 36.89 | 2.63 | 0.00 | 23.30 | 0.01 | 0.00 | 41.44 | 0.01 |

| 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

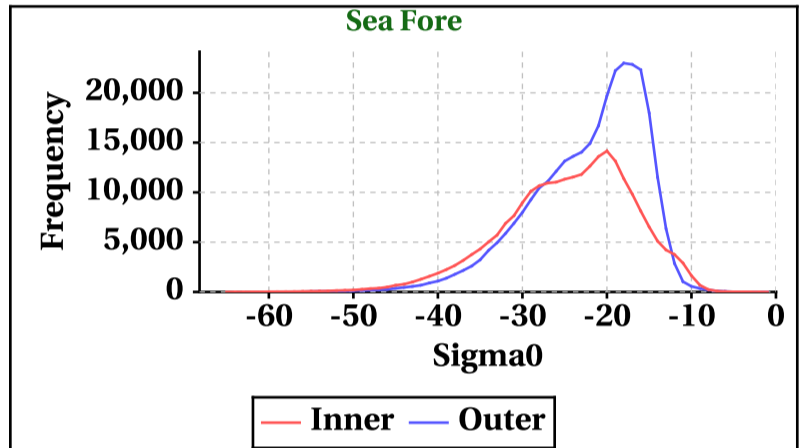
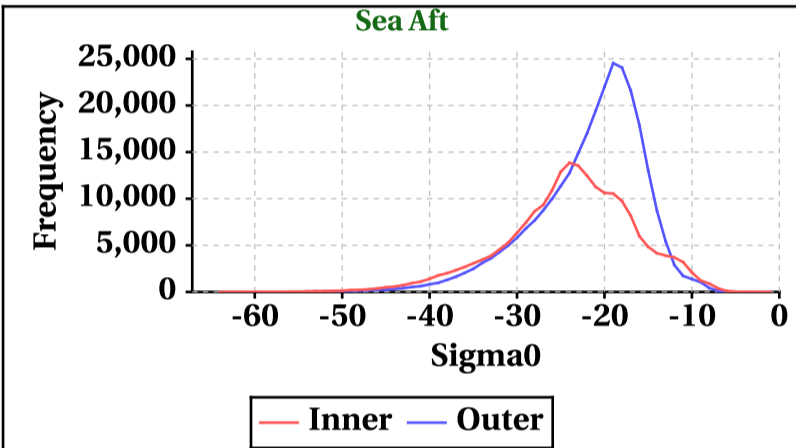
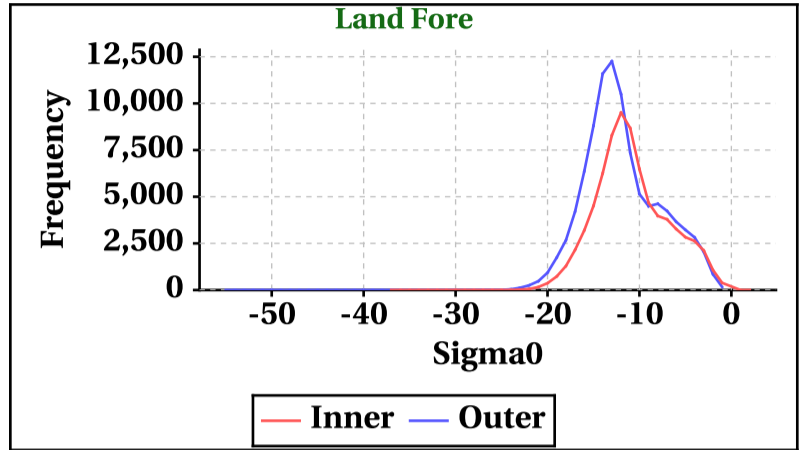
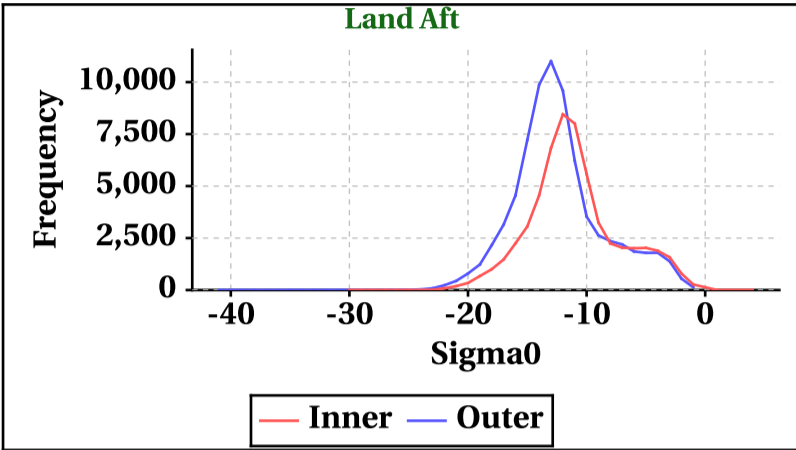
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -30 | -37 | -64 | -65 |
| Max | 4 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -41 | -55 | -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 | 338 | 340 | 330 | 324 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 330 | 342 | 318 | 320 |

