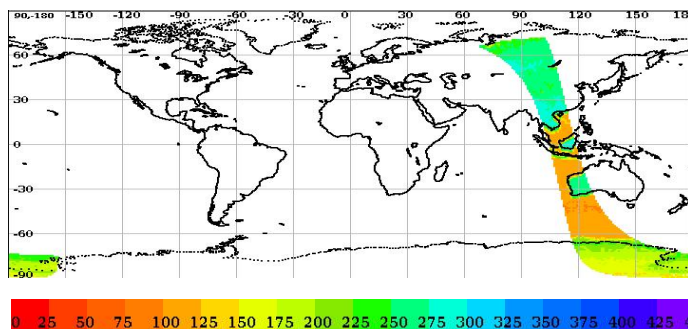


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

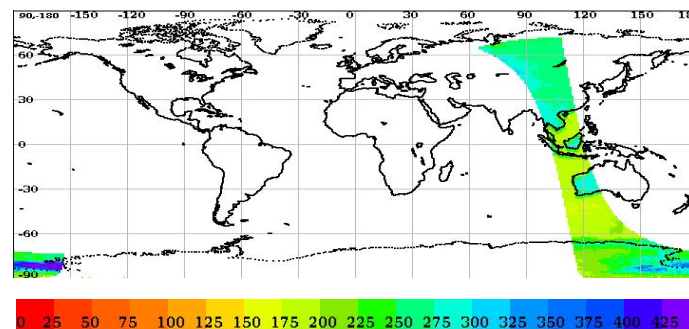
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 10676 | 10677 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 733 | 72 | 02-10-2018 | 02-10-2018 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

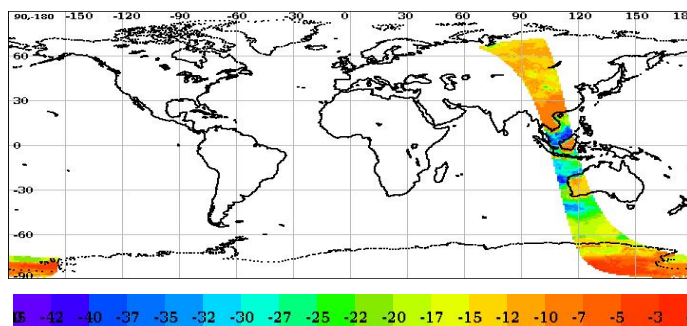


Outer Beam (VV)

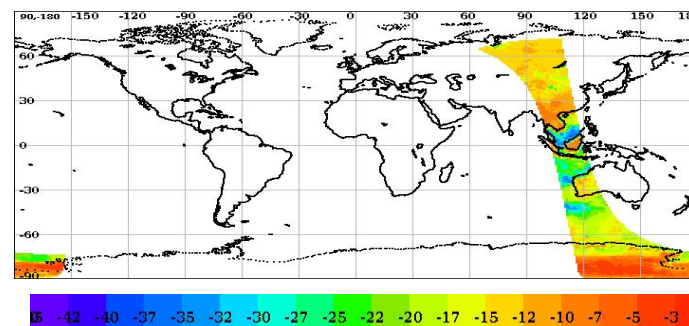


Sigma0(dB)

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 | ASC | Aft | -10.64 | -5.87 | -8.45 | 1.11 | 198.27 | 268.79 | 232.77 | 16.80 |
| ANT_1 | -75.00 | 121.00 | Outer | ASC | Fore | -11.69 | -6.31 | -8.65 | 1.17 | 163.64 | 226.83 | 196.08 | 13.51 |
| Australia | -23.00 | 118.00 | Inner | ASC | Aft | -15.12 | -6.14 | -9.96 | 1.28 | 230.46 | 307.61 | 273.06 | 12.78 |
| Australia | -23.00 | 118.00 | Outer | ASC | Aft | -13.89 | -8.99 | -11.62 | 0.97 | 252.02 | 326.46 | 285.10 | 15.72 |
| Australia | -23.00 | 118.00 | Inner | ASC | Fore | -13.14 | -5.91 | -9.55 | 1.26 | 235.90 | 308.18 | 275.00 | 15.99 |
| Australia | -23.00 | 118.00 | Outer | ASC | Fore | -15.61 | -9.07 | -11.39 | 1.07 | 248.26 | 313.03 | 276.26 | 15.05 |

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 | 23.18 | 5.31 | 0.00 | 127.74 | 6.34 | 0.00 | 133.22 | 1.89 | 0.00 | 138.72 | 2.62 |

| 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 | 49.69 | 2.93 | 0.00 | 42.84 | 3.76 | 0.00 | 36.25 | 0.07 | 0.00 | 42.90 | 0.11 |
| | Outer (VV) | 0.00 | 43.59 | 2.30 | 0.00 | 44.64 | 2.80 | 0.00 | 32.87 | 0.10 | 0.00 | 34.62 | 0.12 |
| Sigma0(dB) | Inner (HH) | 0.00 | 48.09 | 2.93 | 0.00 | 43.54 | 3.58 | 0.00 | 34.86 | 0.07 | 0.00 | 40.63 | 0.08 |
| | Outer (VV) | 0.00 | 42.10 | 2.34 | 0.00 | 44.48 | 2.61 | 0.00 | 35.06 | 0.09 | 0.00 | 30.79 | 0.08 |

| 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 | | | | | | | |

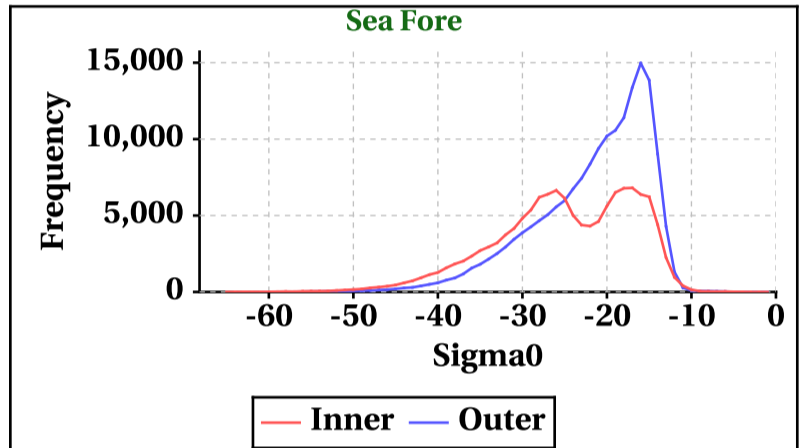
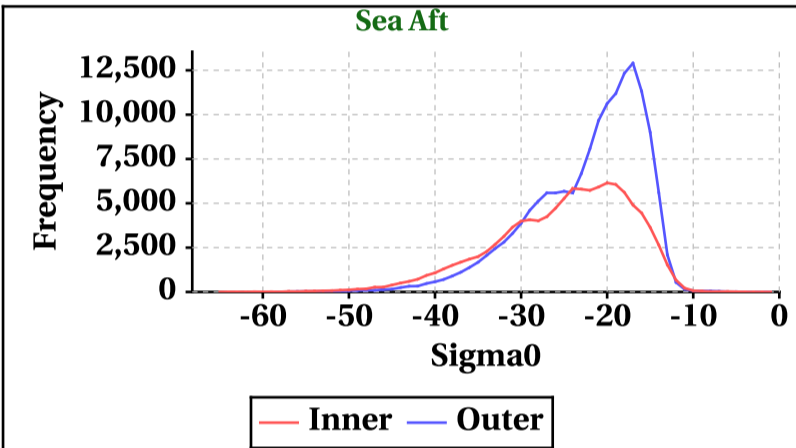
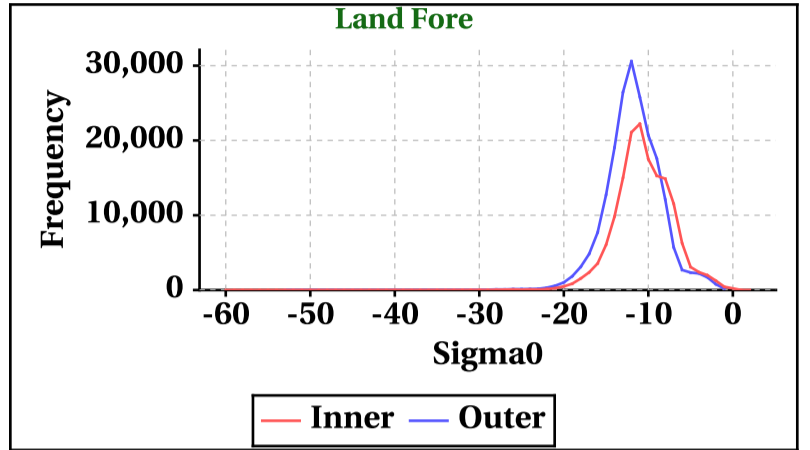
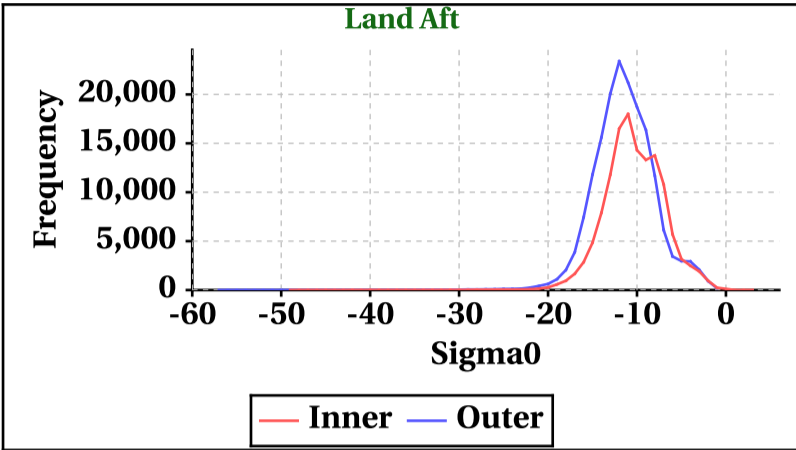
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -49 | -60 | -65 | -65 |
| Max | 3 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -57 | -53 | -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 | 347 | 357 | 302 | 290 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 408 | 468 | 297 |

