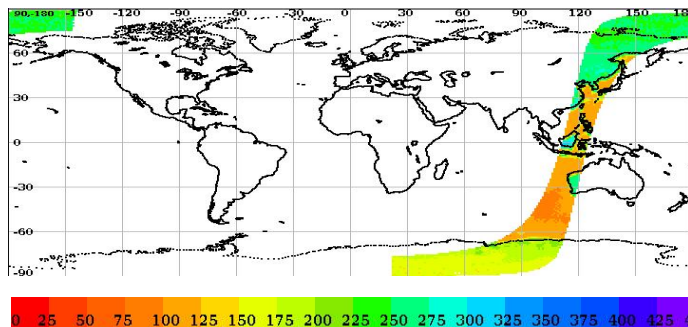


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

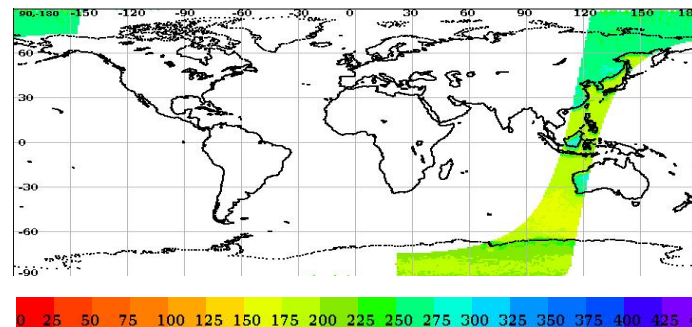
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 13714 | 13715 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 406 | 36 | 30-04-2019 | 30-04-2019 |
| Direction | WVC Size(km) | Processor Version | |
| NS | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

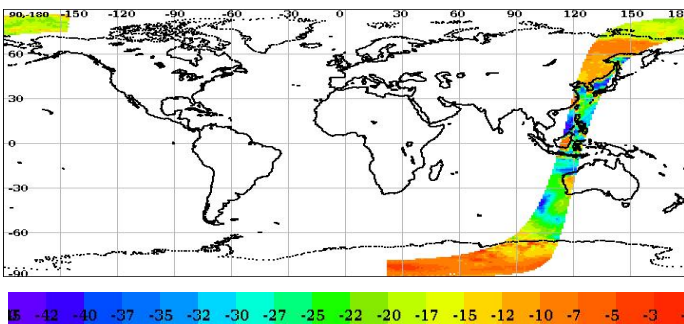


Outer Beam (VV)

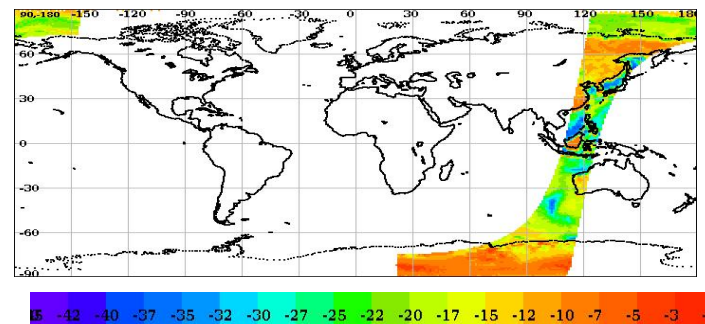


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| Australia | -23.00 | 118.00 | Inner | DSC | Aft | -13.35 | -6.72 | -9.87 | 1.18 | 237.05 | 306.12 | 273.62 | 14.98 |
| Australia | -23.00 | 118.00 | Outer | DSC | Aft | -14.88 | -8.22 | -11.28 | 1.05 | 242.89 | 332.47 | 282.96 | 15.32 |
| Australia | -23.00 | 118.00 | Inner | DSC | Fore | -12.77 | -6.46 | -9.91 | 1.13 | 234.34 | 316.21 | 267.77 | 18.25 |
| Australia | -23.00 | 118.00 | Outer | DSC | Fore | -16.04 | -8.38 | -11.33 | 1.31 | 234.79 | 306.76 | 274.65 | 16.92 |

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 | 124.52 | 10.79 | 0.00 | 31.61 | 15.81 | 0.00 | 353.04 | 13.47 | 0.00 | 143.42 | 15.25 |

| 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 | 53.90 | 11.94 | 0.00 | 53.82 | 14.21 | 0.00 | 22.61 | 0.03 | 0.00 | 23.54 | 0.07 |
| | Outer (VV) | 0.00 | 44.50 | 9.10 | 0.00 | 47.19 | 11.79 | 0.00 | 38.40 | 0.09 | 0.00 | 31.86 | 0.12 |
| Sigma0(dB) | Inner (HH) | 0.00 | 53.86 | 11.92 | 0.00 | 56.94 | 13.84 | 0.00 | 23.16 | 0.03 | 0.00 | 22.24 | 0.02 |
| | Outer (VV) | 0.00 | 45.27 | 9.18 | 0.00 | 46.36 | 11.19 | 0.00 | 35.14 | 0.06 | 0.00 | 26.90 | 0.05 |

| 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 | | | | | | | |

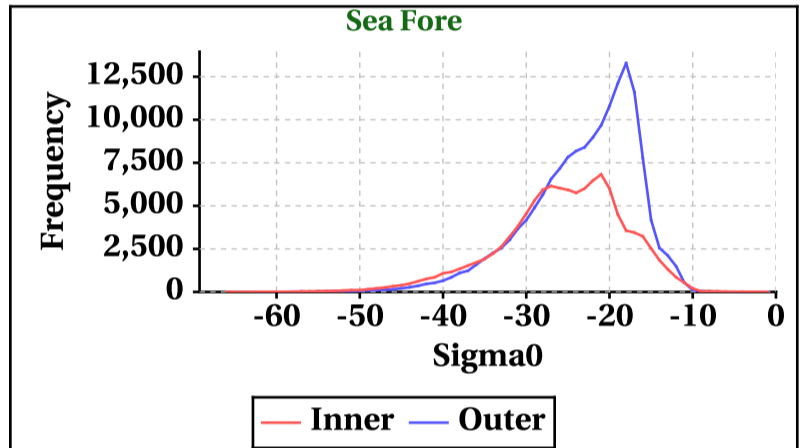
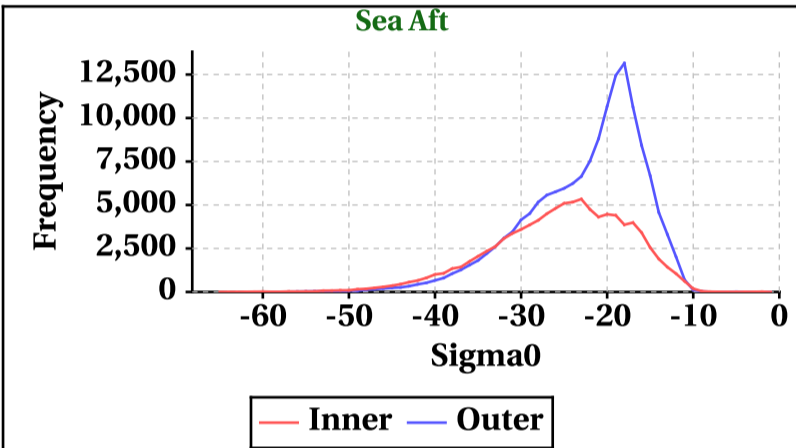
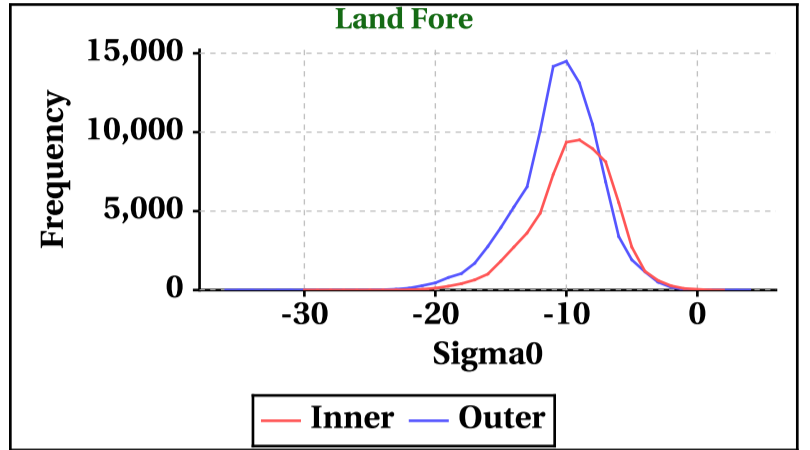
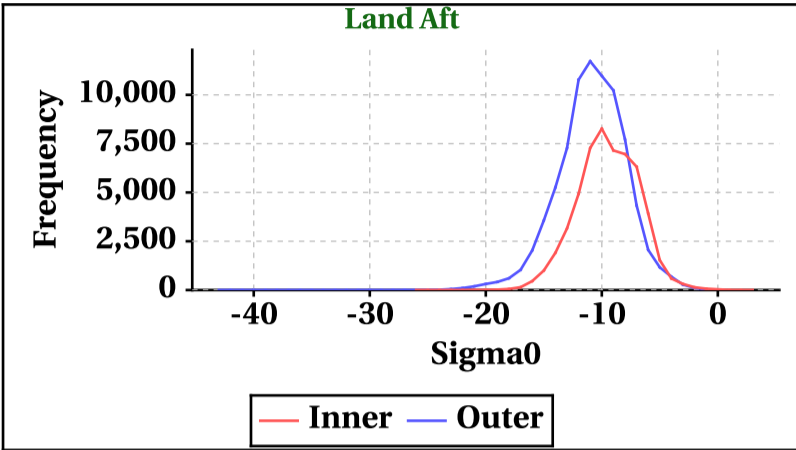
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -26 | -30 | -65 | -66 |
| Max | 3 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -43 | -36 | -61 | -61 |
| Max | -1 | 4 | -1 | -1 |



Brightness Temperature(K)

| Inner Beam(HH) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 395 | 395 | 316 | 311 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 346 | 384 | 321 | 316 |

