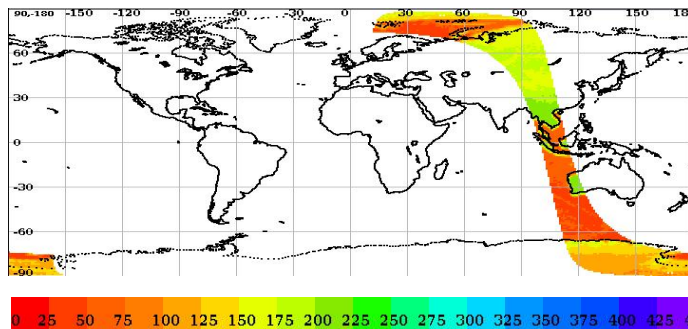


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

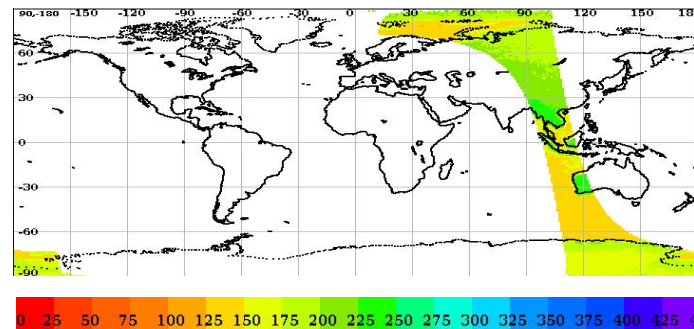
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 1282 | 1283 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 813 | 72 | 23-12-2016 | 23-12-2016 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | 1.0 | |

Brightness Temperature

Inner Beam (HH)

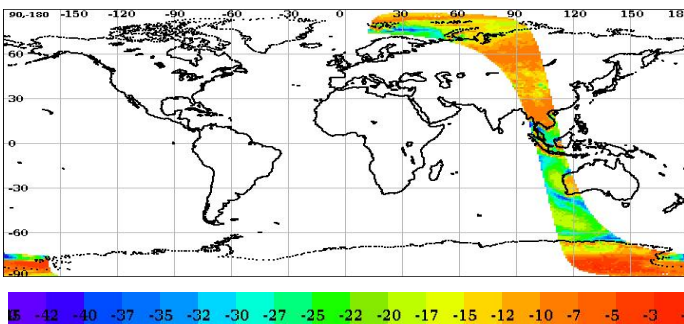


Outer Beam (VV)

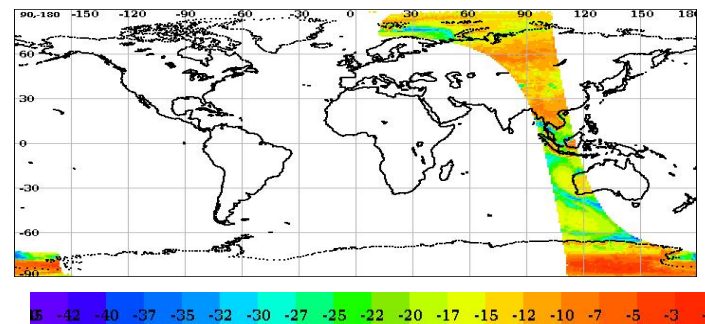


Sigma0(dB)

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 | -11.10 | -3.94 | -7.82 | 1.59 | 90.32 | 139.14 | 115.58 | 13.12 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Aft | -10.15 | -5.38 | -8.10 | 1.25 | 145.67 | 194.44 | 168.49 | 14.79 |
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Fore | -13.14 | -4.05 | -7.73 | 1.83 | 85.25 | 146.30 | 114.34 | 13.43 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Fore | -11.05 | -5.48 | -7.97 | 1.33 | 149.09 | 194.69 | 164.75 | 9.58 |
| Australia | -23.00 | 118.00 | Inner | DSC | Aft | -13.72 | -6.53 | -10.42 | 1.18 | 179.35 | 260.99 | 210.58 | 15.52 |
| Australia | -23.00 | 118.00 | Outer | DSC | Aft | -15.85 | -9.36 | -12.05 | 1.13 | 208.94 | 266.51 | 234.33 | 15.09 |
| Australia | -23.00 | 118.00 | Inner | DSC | Fore | -17.21 | -4.80 | -10.54 | 1.92 | 168.32 | 252.74 | 209.44 | 14.15 |
| Australia | -23.00 | 118.00 | Outer | DSC | Fore | -20.33 | -8.73 | -12.50 | 2.27 | 195.63 | 265.42 | 234.95 | 15.27 |

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 | 37.19 | 12.85 | 0.00 | 37.19 | 12.91 | 0.00 | 22.24 | 5.34 | 0.00 | 19.87 | 5.36 |

| 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 | 48.05 | 2.29 | 0.00 | 53.46 | 2.13 | 0.00 | 27.41 | 0.04 | 0.00 | 29.79 | 0.02 |
| | Outer (VV) | 0.00 | 42.22 | 1.95 | 0.00 | 47.29 | 2.08 | 0.00 | 32.36 | 0.05 | 0.00 | 35.34 | 0.09 |
| Sigma0(dB) | Inner (HH) | 0.00 | 91.42 | 2.36 | 0.00 | 93.44 | 2.18 | 0.00 | 95.48 | 0.19 | 0.00 | 95.81 | 0.17 |
| | Outer (VV) | 0.00 | 42.17 | 1.94 | 0.00 | 47.26 | 2.08 | 0.00 | 95.11 | 0.08 | 0.00 | 94.40 | 0.10 |

| 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

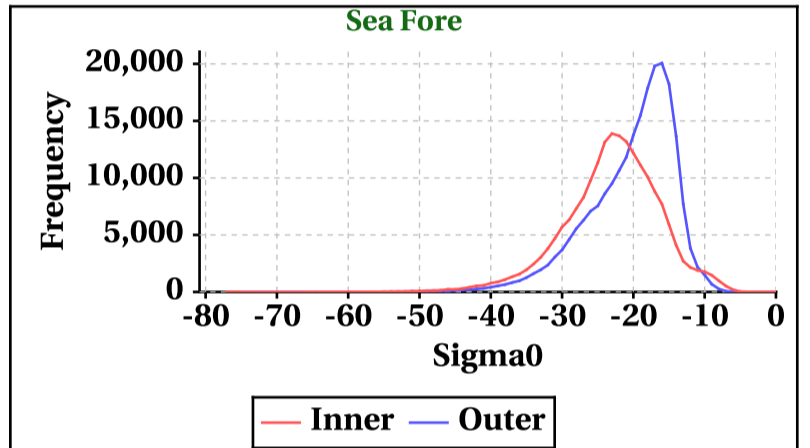
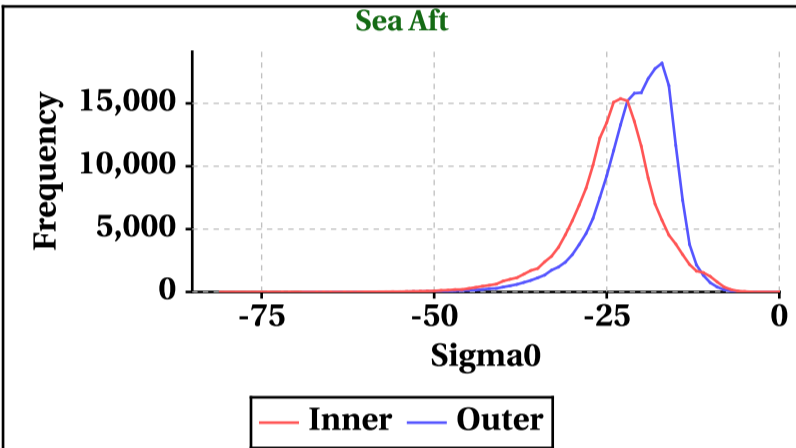
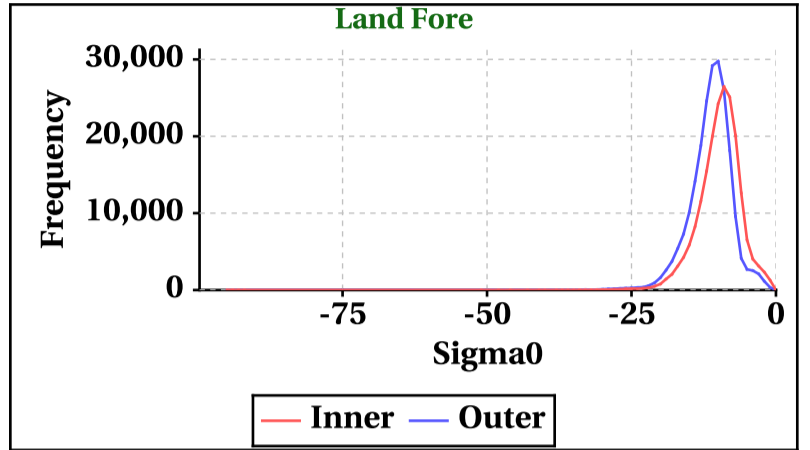
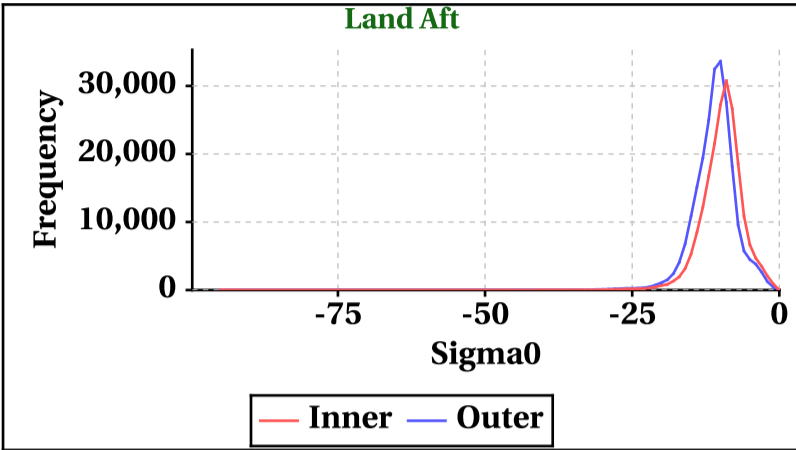
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -95 | -95 | -81 | -77 |
| Max | -1 | -1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -95 | -95 | -69 | -75 |
| 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 | 272 | 274 | 500 | 231 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 353 | 339 | 265 | 264 |

