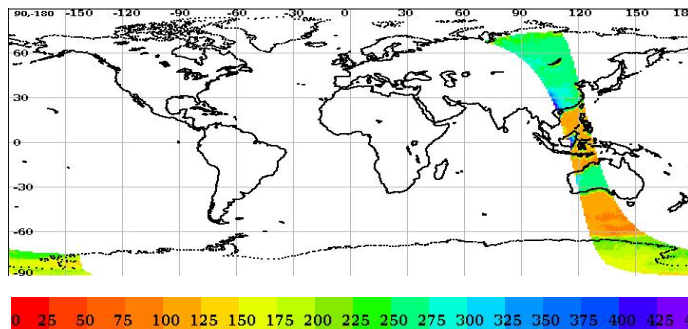


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

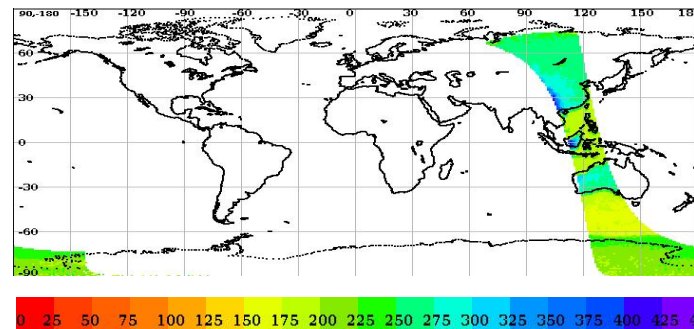
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 4687 | 4688 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 373 | 36 | 15-08-2017 | 15-08-2017 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

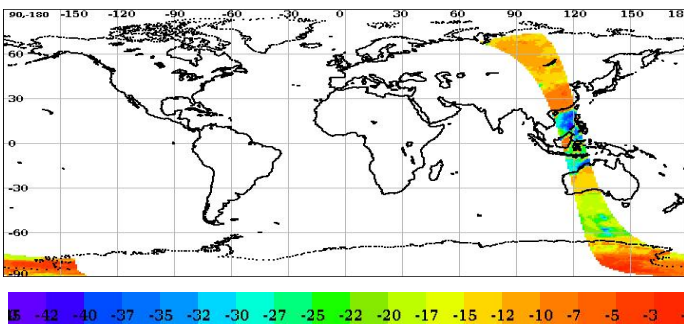


Outer Beam (VV)

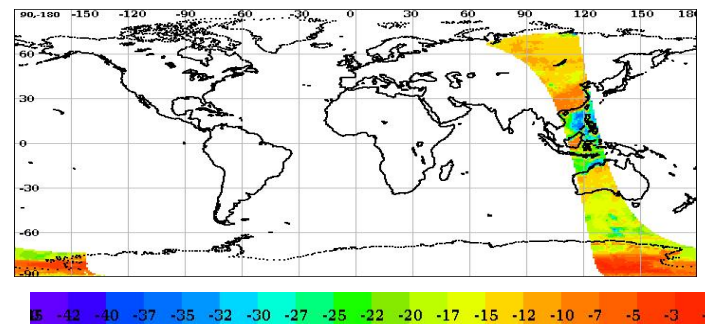


Sigma0(dB)

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 | ASC | Aft | -14.69 | -8.68 | -10.76 | 1.06 | 290.11 | 383.22 | 331.84 | 20.14 |
| Australia | -23.00 | 118.00 | Outer | ASC | Aft | -14.68 | -9.54 | -11.53 | 0.96 | 243.77 | 351.47 | 294.77 | 22.08 |
| Australia | -23.00 | 118.00 | Inner | ASC | Fore | -12.97 | -8.11 | -10.47 | 1.14 | 273.83 | 379.32 | 322.68 | 25.13 |
| Australia | -23.00 | 118.00 | Outer | ASC | Fore | -14.02 | -9.10 | -11.21 | 0.91 | 282.46 | 373.25 | 320.43 | 21.20 |

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 | 33.32 | 16.32 | 0.00 | 26.96 | 13.22 | 0.00 | 158.26 | 15.97 | 0.00 | 15.64 | 14.44 |

| 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 | 51.03 | 17.01 | 0.00 | 51.86 | 15.63 | 0.00 | 42.79 | 0.50 | 0.00 | 47.66 | 0.44 |
| | Outer (VV) | 0.00 | 46.45 | 11.32 | 0.00 | 46.97 | 11.98 | 0.00 | 36.09 | 0.31 | 0.00 | 27.45 | 0.22 |
| Sigma0(dB) | Inner (HH) | 0.00 | 51.12 | 15.68 | 0.00 | 51.07 | 14.28 | 0.00 | 41.25 | 0.38 | 0.00 | 45.99 | 0.40 |
| | Outer (VV) | 0.00 | 45.25 | 10.32 | 0.00 | 45.04 | 10.70 | 0.00 | 32.74 | 0.28 | 0.00 | 26.56 | 0.15 |

| 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

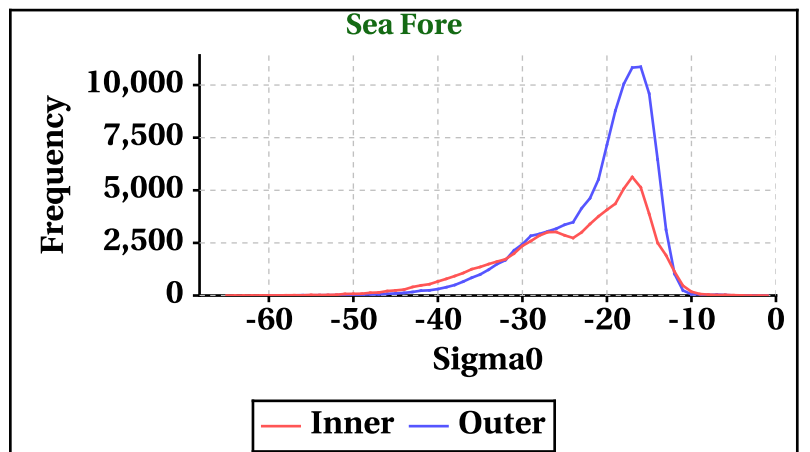
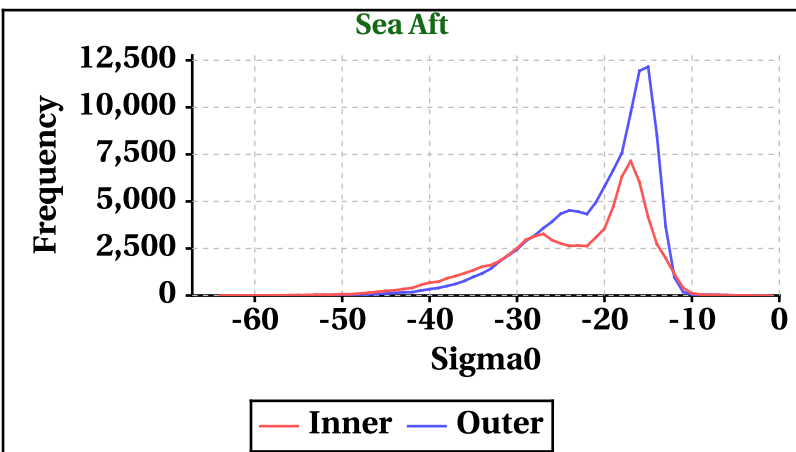
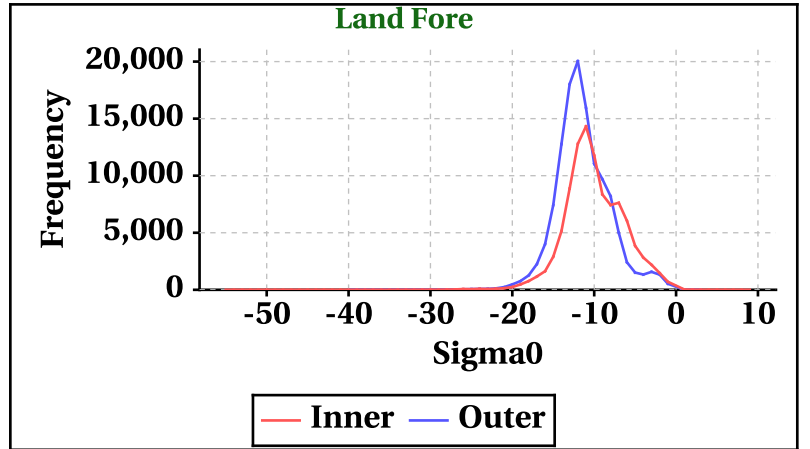
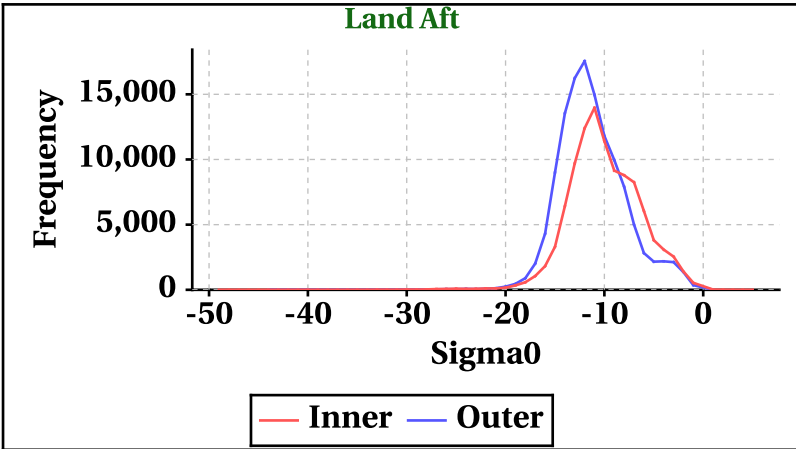
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -49 | -55 | -64 | -65 |
| Max | 5 | 9 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -44 | -40 | -60 | -60 |
| Max | 1 | 3 | -1 | -1 |



Brightness Temperature(K)

| Inner Beam(HH) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 500 | 500 | 500 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 500 | 386 | 441 |

