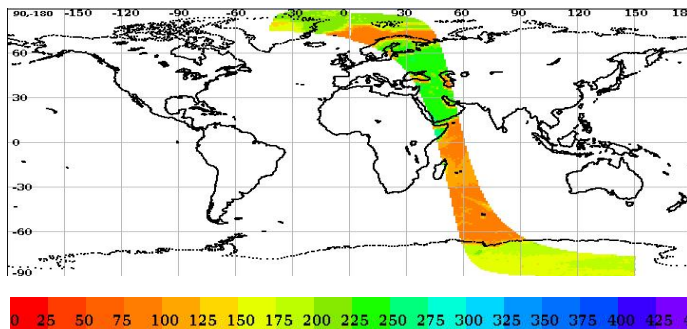


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

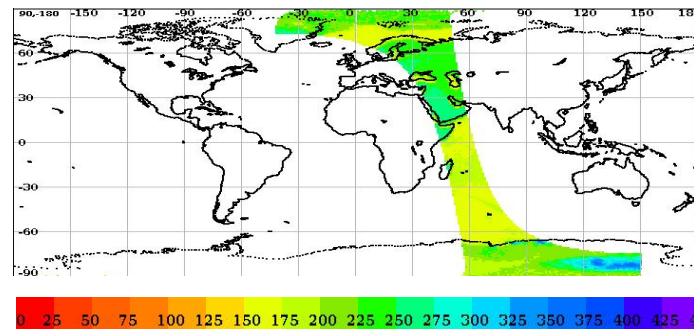
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 2371 | 2372 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 812 | 72 | 08-03-2017 | 08-03-2017 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | 1.1.1 | |

Brightness Temperature

Inner Beam (HH)

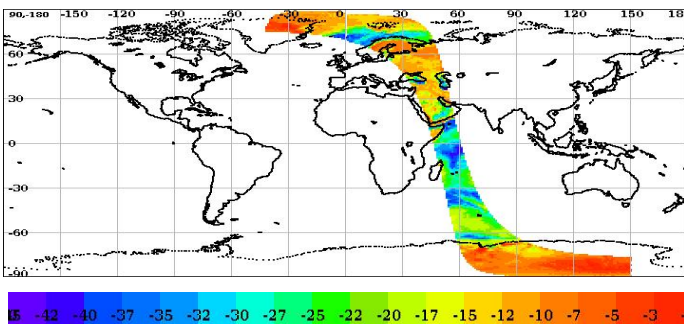


Outer Beam (VV)

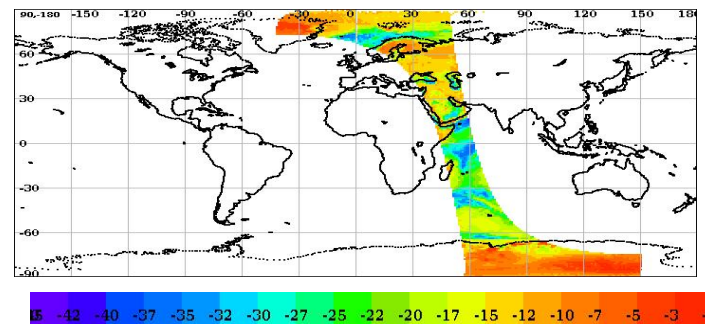


Sigma0(dB)

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 | -11.23 | -3.18 | -7.30 | 1.51 | 152.41 | 196.75 | 174.96 | 10.88 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Aft | -9.84 | -6.51 | -8.46 | 0.80 | 213.23 | 287.12 | 241.96 | 21.71 |
| ANT_1 | -75.00 | 121.00 | Inner | DSC | Fore | -10.70 | -3.32 | -7.08 | 1.87 | 141.31 | 190.96 | 165.96 | 12.12 |
| ANT_1 | -75.00 | 121.00 | Outer | DSC | Fore | -10.27 | -8.09 | -9.03 | 0.63 | 170.52 | 196.28 | 188.34 | 7.14 |
| GreenLand_2 | 77.50 | -41.50 | Inner | DSC | Fore | -5.00 | -4.27 | -4.63 | 0.36 | 139.24 | 160.56 | 149.90 | 10.66 |
| GreenLand_2 | 77.50 | -41.50 | Outer | DSC | Fore | -6.10 | -4.47 | -5.13 | 0.70 | 233.60 | 258.98 | 243.89 | 10.90 |

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 | 27.32 | 12.96 | 0.00 | 26.83 | 13.23 | 0.00 | 200.17 | 3.81 | 0.00 | 71.51 | 4.26 |

| 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 | 44.66 | 3.48 | 0.00 | 50.43 | 3.97 | 0.00 | 37.89 | 0.12 | 0.00 | 35.35 | 0.14 |
| | Outer (VV) | 0.00 | 45.43 | 3.01 | 0.00 | 43.01 | 4.24 | 0.00 | 41.38 | 0.22 | 0.00 | 35.27 | 0.36 |
| Sigma0(dB) | Inner (HH) | 0.00 | 47.20 | 3.68 | 0.00 | 48.72 | 3.69 | 0.00 | 37.25 | 0.08 | 0.00 | 31.58 | 0.09 |
| | Outer (VV) | 0.00 | 48.44 | 3.56 | 0.00 | 39.45 | 3.44 | 0.00 | 41.70 | 0.20 | 0.00 | 29.01 | 0.11 |

| 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

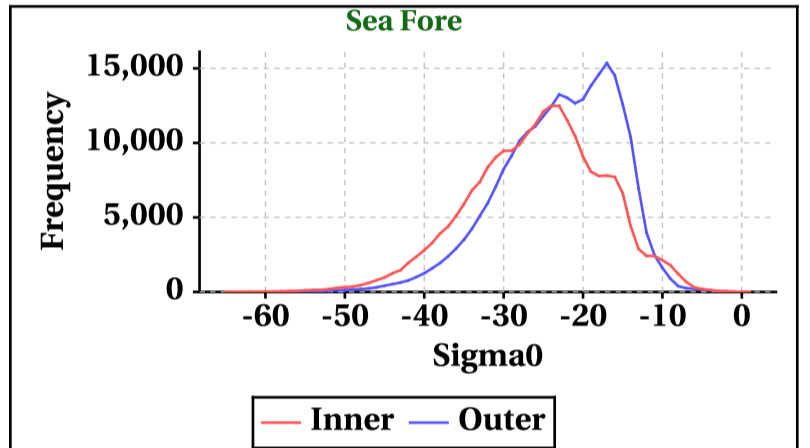
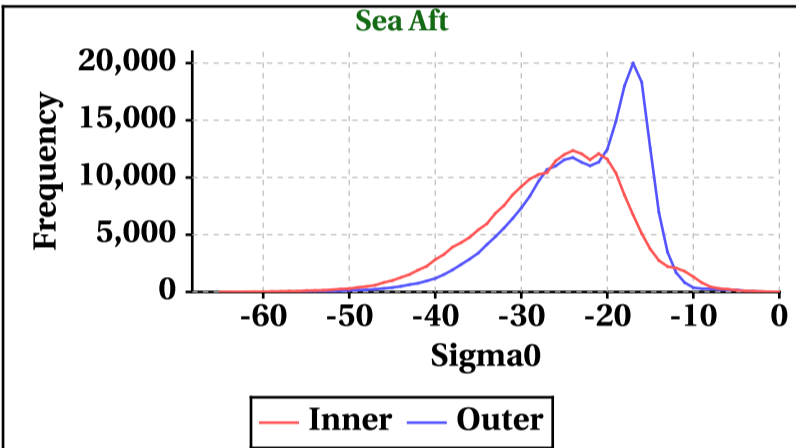
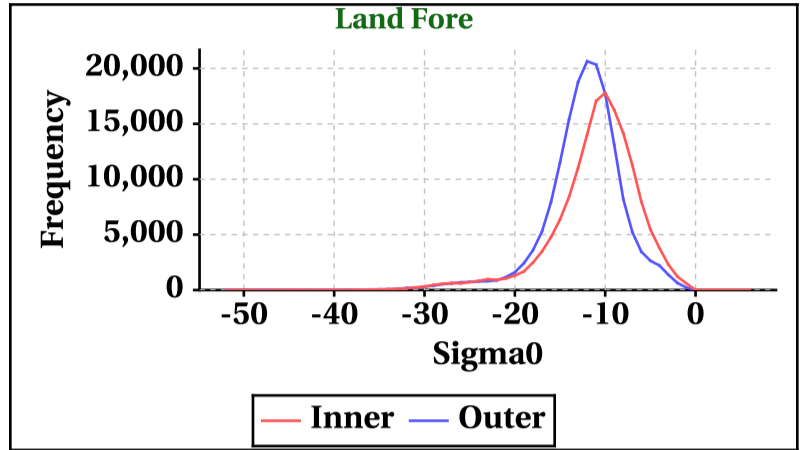
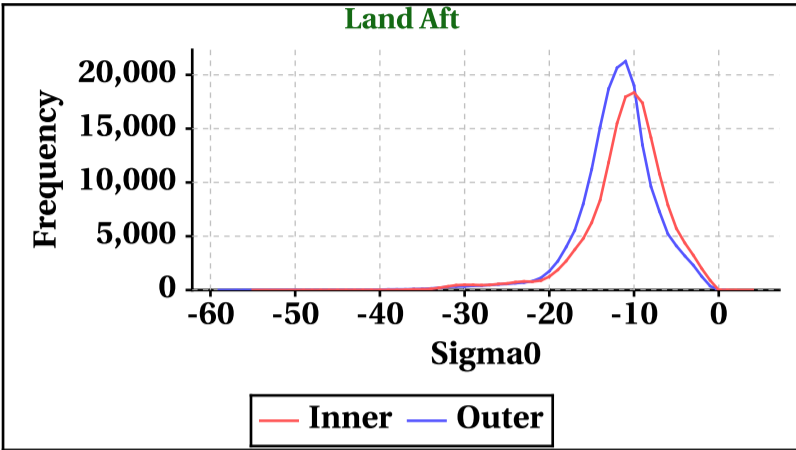
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -55 | -52 | -65 | -65 |
| Max | 4 | 6 | -1 | 1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -59 | -52 | -60 | -60 |
| 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 | 327 | 320 | 265 | 267 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 500 | 326 | 500 | 296 |

