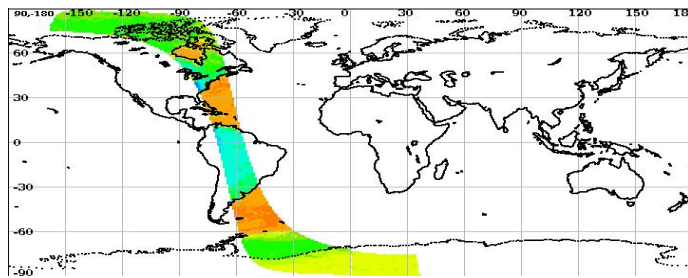


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

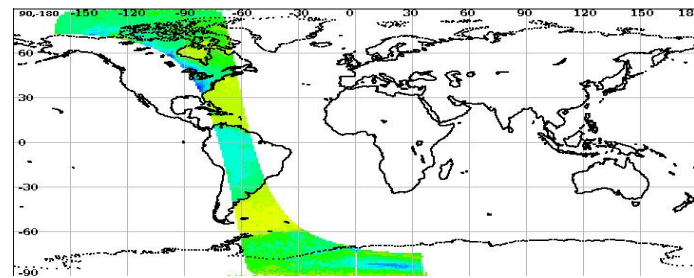
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 5811 | 5812 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 813 | 72 | 01-11-2017 | 01-11-2017 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 25 | v1.1.2 | |

Brightness Temperature

Inner Beam (HH)

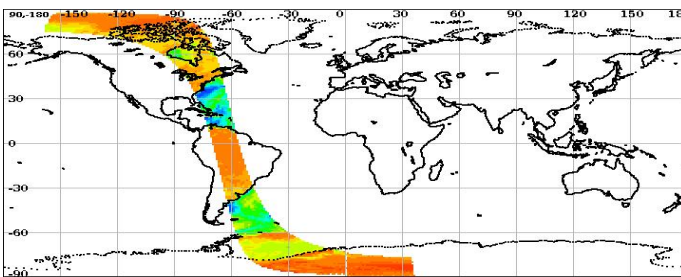


Outer Beam (VV)

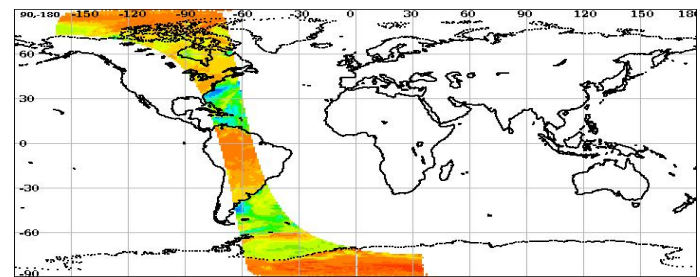


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Aft | -12.66 | -5.39 | -8.62 | 1.32 | 264.51 | 332.28 | 292.14 | 16.26 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Aft | -12.57 | -7.24 | -9.43 | 0.85 | 251.38 | 329.66 | 286.27 | 18.71 |
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Fore | -13.21 | -4.29 | -8.35 | 1.77 | 246.42 | 335.70 | 293.53 | 19.07 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Fore | -14.58 | -7.13 | -9.46 | 1.16 | 244.15 | 326.62 | 281.75 | 20.05 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Aft | -17.60 | -6.24 | -9.04 | 1.69 | 205.95 | 318.05 | 267.43 | 26.80 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Aft | -13.03 | -7.56 | -10.05 | 1.19 | 230.52 | 327.72 | 276.47 | 19.96 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Fore | -20.71 | -3.52 | -9.15 | 2.49 | 218.65 | 309.43 | 268.79 | 20.57 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Fore | -14.02 | -6.85 | -9.96 | 1.43 | 237.39 | 312.77 | 273.54 | 16.46 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Aft | -10.89 | -3.68 | -7.65 | 1.44 | 261.62 | 331.33 | 302.89 | 14.11 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Aft | -12.67 | -4.58 | -8.39 | 1.16 | 248.62 | 339.31 | 285.09 | 18.65 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Fore | -11.64 | -4.50 | -7.41 | 1.19 | 233.96 | 356.07 | 292.36 | 21.58 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Fore | -13.14 | -6.45 | -8.43 | 1.15 | 252.95 | 324.66 | 287.59 | 13.18 |

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 | 25.89 | 9.99 | 0.00 | 28.45 | 9.82 | 0.00 | 147.77 | 4.53 | 0.00 | 63.99 | 4.91 |

| 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 | 47.88 | 2.50 | 0.00 | 39.57 | 1.94 | 0.00 | 43.46 | 0.12 | 0.00 | 38.14 | 0.13 |
| | Outer (VV) | 0.00 | 39.26 | 1.65 | 0.00 | 37.15 | 1.49 | 0.00 | 33.82 | 0.11 | 0.00 | 33.32 | 0.04 |
| Sigma0(dB) | Inner (HH) | 0.00 | 46.18 | 2.02 | 0.00 | 38.68 | 1.54 | 0.00 | 39.81 | 0.10 | 0.00 | 33.78 | 0.09 |
| | Outer (VV) | 0.00 | 34.48 | 1.33 | 0.00 | 35.57 | 1.17 | 0.00 | 30.16 | 0.07 | 0.00 | 30.27 | 0.02 |

| 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

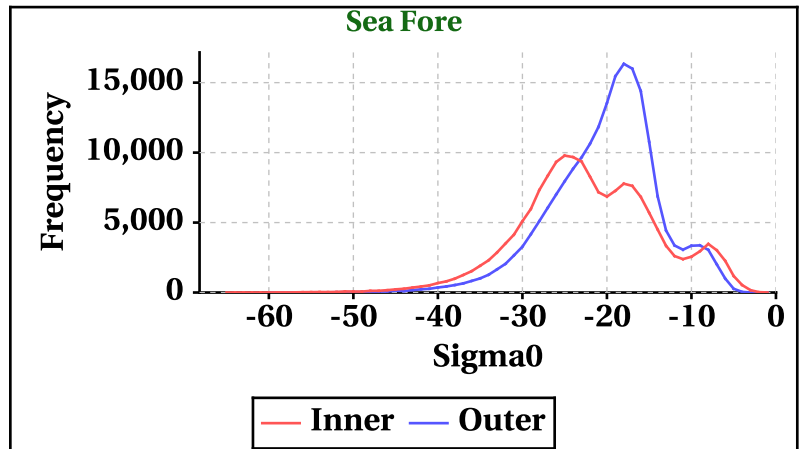
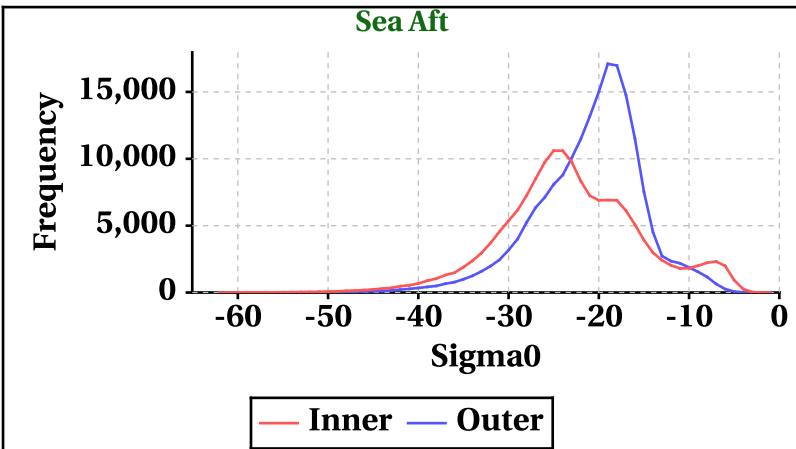
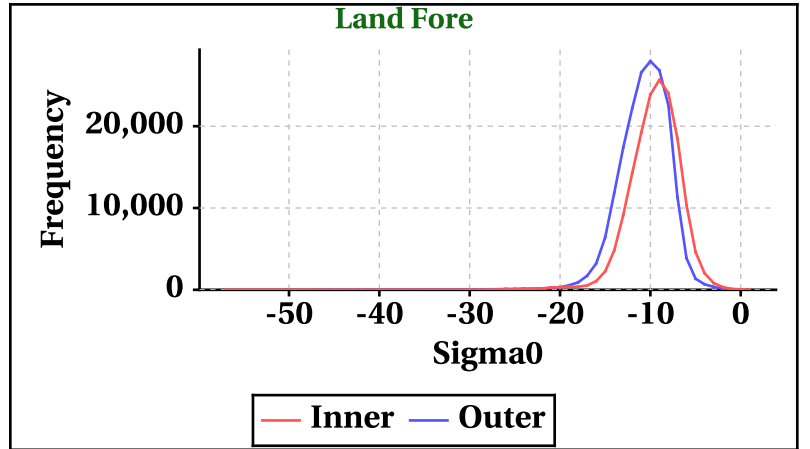
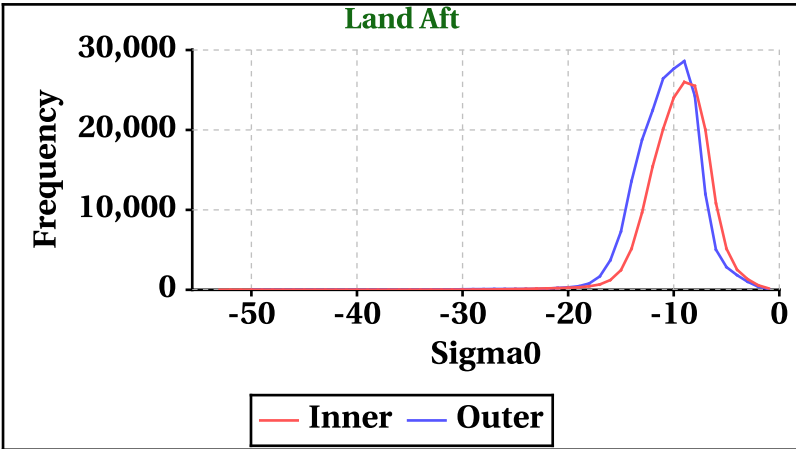
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -53 | -57 | -62 | -65 |
| Max | -1 | 1 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -50 | -47 | -61 | -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 | 500 | 500 | 341 | 308 |

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

