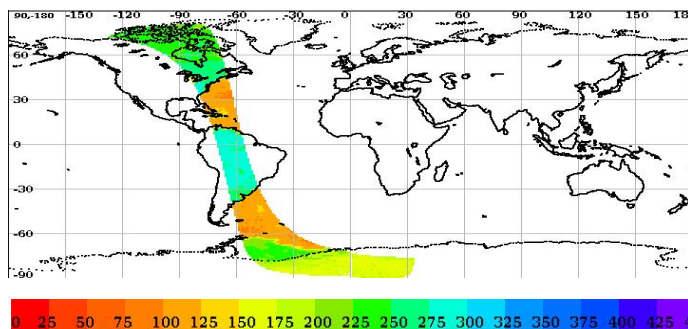


Scatsat-1 Scatterometer Level-2A Data Quality Evaluation Report

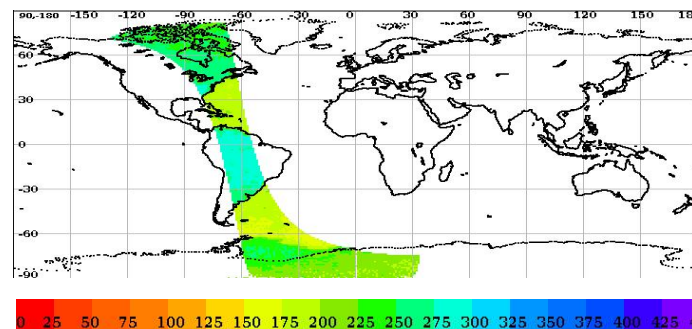
| Satellite | Sensor | Start Orbit | End Orbit |
|----------------|-----------------|-------------------|-----------------|
| SCATSAT-1 | Scatterometer | 8479 | 8480 |
| WV Cells Along | WV Cells Across | EquatorCrossDate | Production Date |
| 385 | 36 | 04-05-2018 | 04-05-2018 |
| Direction | WVC Size(km) | Processor Version | |
| SN | 50 | v1.1.3 | |

Brightness Temperature

Inner Beam (HH)

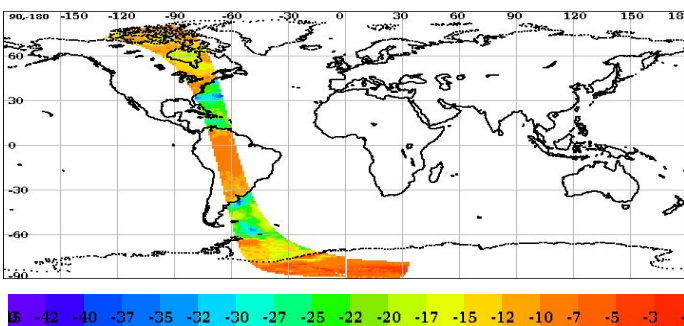


Outer Beam (VV)

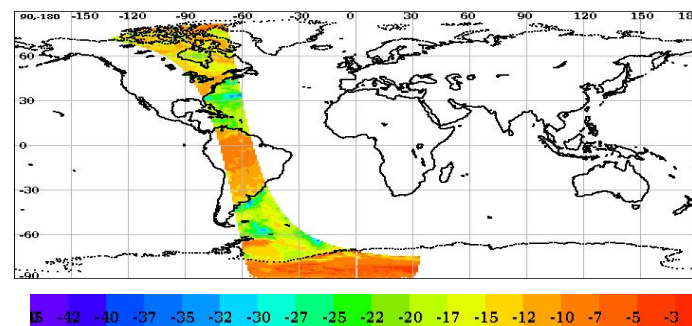


Sigma0(dB)

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 |
|-----------|------------|------------|-------|------|---------|------------|------------|-------------|------------|--------|--------|---------|--------|
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Aft | -10.80 | -5.62 | -8.48 | 0.91 | 235.43 | 333.51 | 289.52 | 18.79 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Aft | -11.60 | -7.83 | -9.51 | 0.73 | 254.23 | 313.78 | 285.25 | 14.17 |
| Amazon_3 | -6.00 | -61.00 | Inner | ASC | Fore | -11.07 | -5.23 | -8.30 | 0.96 | 241.60 | 327.49 | 288.87 | 17.71 |
| Amazon_3 | -6.00 | -61.00 | Outer | ASC | Fore | -11.42 | -7.87 | -9.31 | 0.80 | 249.69 | 311.65 | 283.64 | 17.65 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Aft | -12.24 | -6.74 | -8.89 | 1.16 | 207.14 | 323.47 | 263.22 | 26.78 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Aft | -12.68 | -8.22 | -10.14 | 1.00 | 226.11 | 317.35 | 278.16 | 22.17 |
| Amazon_2 | -3.00 | -61.00 | Inner | ASC | Fore | -14.26 | -6.50 | -9.15 | 1.54 | 210.39 | 307.24 | 258.14 | 22.72 |
| Amazon_2 | -3.00 | -61.00 | Outer | ASC | Fore | -13.73 | -7.33 | -10.26 | 1.22 | 222.33 | 293.96 | 270.99 | 16.01 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Aft | -10.63 | -5.21 | -7.92 | 0.84 | 261.83 | 334.47 | 290.09 | 16.63 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Aft | -11.51 | -6.89 | -8.76 | 0.78 | 233.84 | 320.75 | 283.29 | 16.57 |
| Amazon_1 | 0.00 | -67.00 | Inner | ASC | Fore | -10.58 | -5.76 | -7.76 | 0.89 | 258.99 | 347.15 | 292.02 | 18.29 |
| Amazon_1 | 0.00 | -67.00 | Outer | ASC | Fore | -11.14 | -6.83 | -8.87 | 0.93 | 242.25 | 311.72 | 281.04 | 15.66 |

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 | 28.55 | 12.29 | 0.00 | 48.46 | 12.90 | 0.00 | 122.09 | 7.98 | 0.00 | 37.68 | 10.00 |

| 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 | 44.14 | 2.05 | 0.00 | 44.36 | 2.70 | 0.00 | 51.61 | 1.09 | 0.00 | 54.98 | 1.06 |
| | Outer (VV) | 0.00 | 41.40 | 1.93 | 0.00 | 40.06 | 2.80 | 0.00 | 43.95 | 0.88 | 0.00 | 43.59 | 1.04 |
| Sigma0(dB) | Inner (HH) | 0.00 | 42.90 | 2.00 | 0.00 | 45.21 | 2.31 | 0.00 | 53.07 | 1.11 | 0.00 | 56.94 | 1.08 |
| | Outer (VV) | 0.00 | 42.09 | 1.77 | 0.00 | 36.83 | 2.28 | 0.00 | 45.19 | 0.88 | 0.00 | 44.72 | 0.89 |

| 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 | | | | | | | |

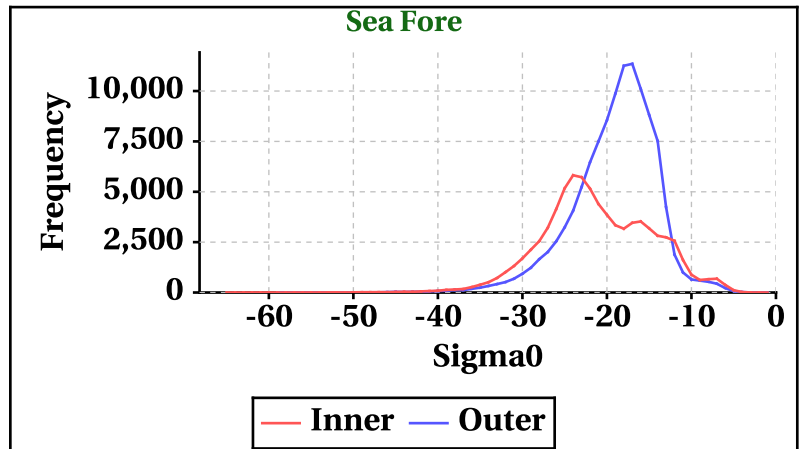
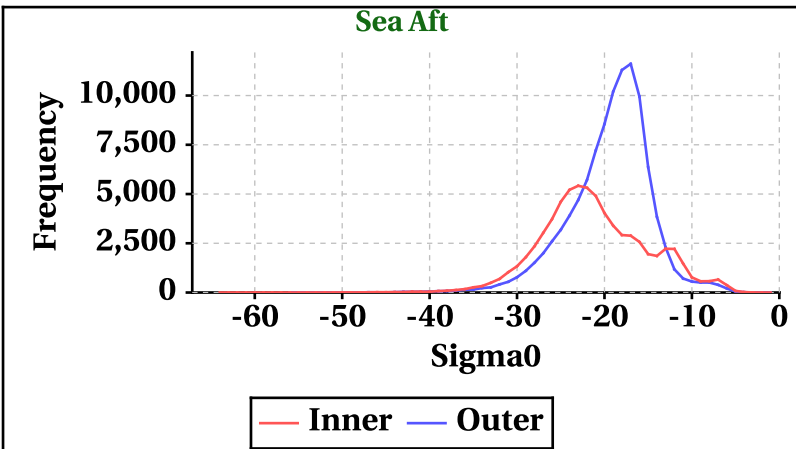
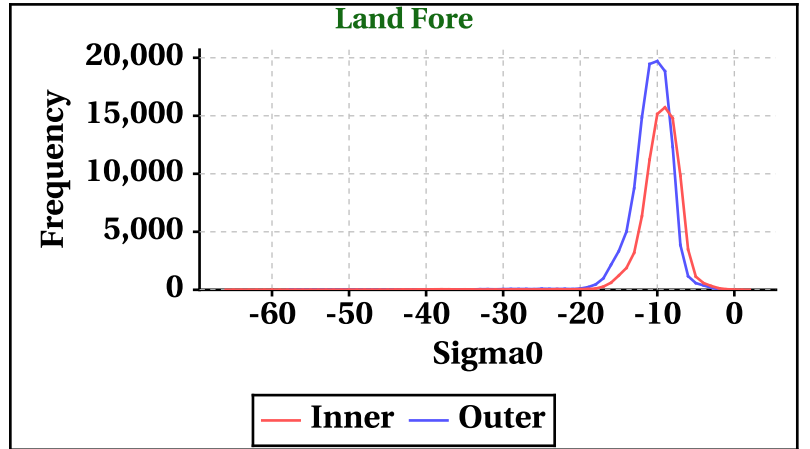
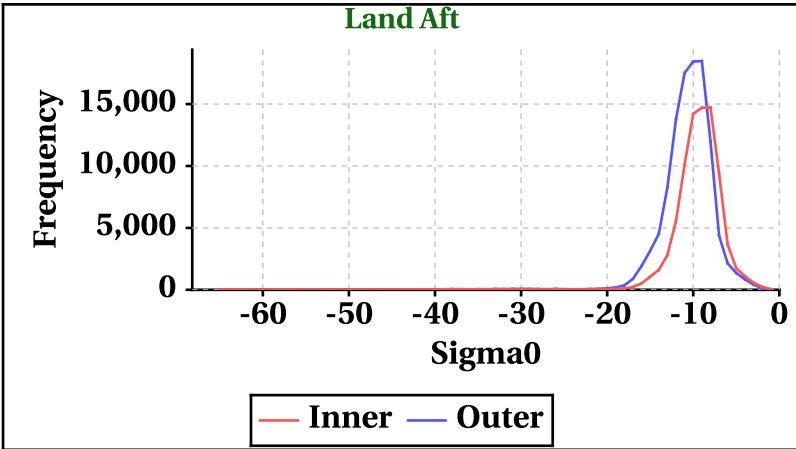
* Note: Deviations within a Cell for a category is observed and flagged if out of range specifications

Dynamic Range (Data Histograms)

Sigma0(db)

| Inner Beam (HH) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -65 | -66 | -64 | -65 |
| Max | -1 | 2 | -1 | -1 |

| Outer Beam (VV) | | | | |
|-----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | -56 | -58 | -56 | -59 |
| 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 | 359 | 359 | 308 | 305 |

| Outer Beam(VV) | | | | |
|----------------|----------|-----------|---------|----------|
| | Land Aft | Land Fore | Sea Aft | Sea Fore |
| Min | 1 | 1 | 1 | 1 |
| Max | 359 | 352 | 323 | 314 |

