

ASCAT DAILY Report

Metop-A

OPE

DAY 2020_100

20200409000000 - 20200409235959

DATA STATISTICS

BASED ON ORBITS (#14)

69902 69903 69904 69905 69906 69907 69908 69909 69910 69911 69912 69913 69914
69915 69916

DB STATISTICS : OPE M02_20200409

| | | | | | |
|-----|-----|-------|------|------|-------|
| SMO | 480 | 1.16 | .44 | .63 | 4.30 |
| SMR | 480 | 2.95 | 1.14 | 1.95 | 9.82 |
| SZF | 471 | .50 | 2.13 | .15 | 38.98 |
| xxx | 480 | 10.43 | 4.68 | 7.43 | 33.65 |

INGATE (STORE) STATISTICS : OPE M02_20200409

| | | |
|--------|---------------------------------------|-----------------------------------|
| xxx_1A | /fbf/tcdras/store/gsl/ASCA_xxx_1A_M02 | -- number of files (xxx_1A) : 480 |
| SZO_1B | /fbf/tcdras/store/gsl/ASCA_SZO_1B_M02 | -- number of files (SZO_1B) : 480 |
| SZR_1B | /fbf/tcdras/store/gsl/ASCA_SZR_1B_M02 | -- number of files (SZR_1B) : 480 |
| SZF_1B | /fbf/tcdras/store/gsl/ASCA_SZF_1B_M02 | -- number of files (SZF_1B) : 480 |
| SMO_02 | /fbf/tcdras/store/gsl/ASCA_SMO_02_M02 | -- number of files (SMO_02) : 480 |
| SMR_02 | /fbf/tcdras/store/gsl/ASCA_SMR_02_M02 | -- number of files (SMR_02) : 480 |

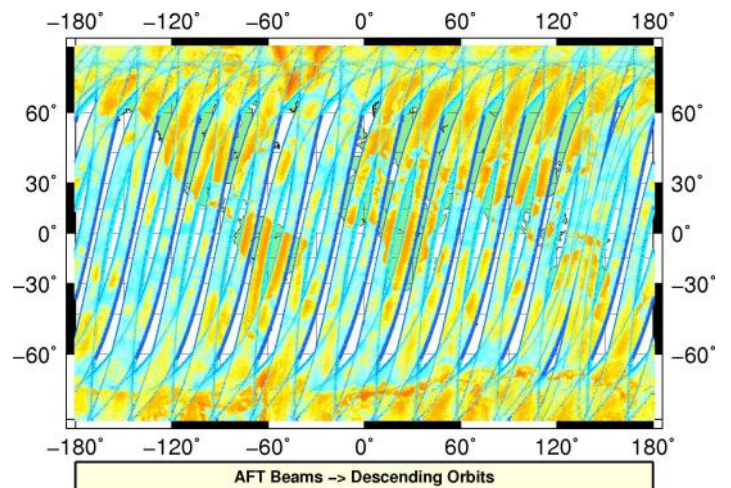
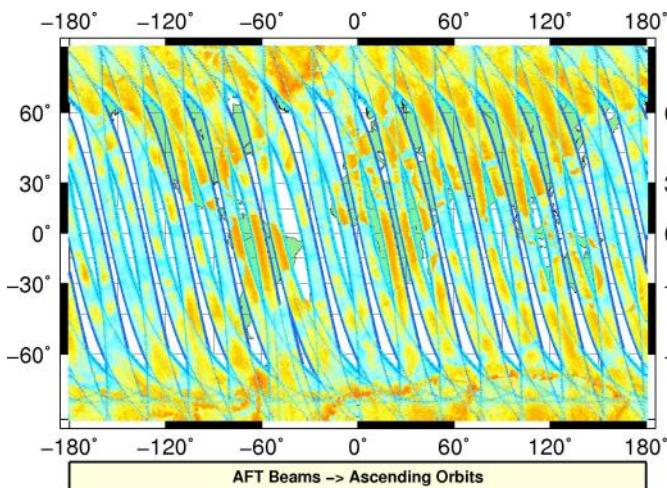
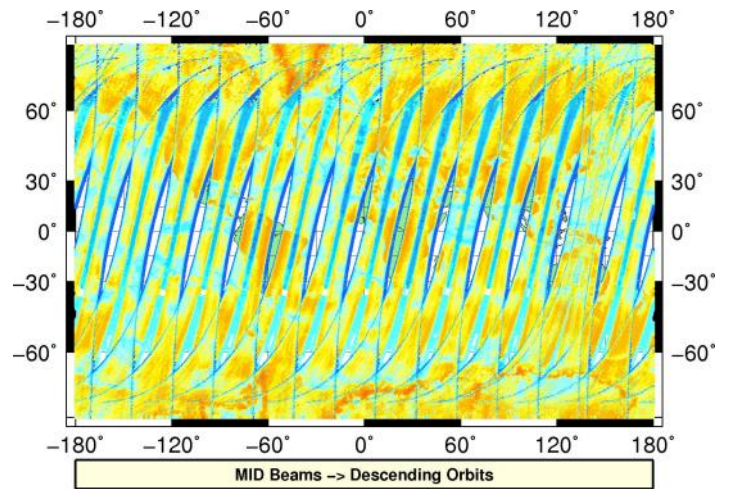
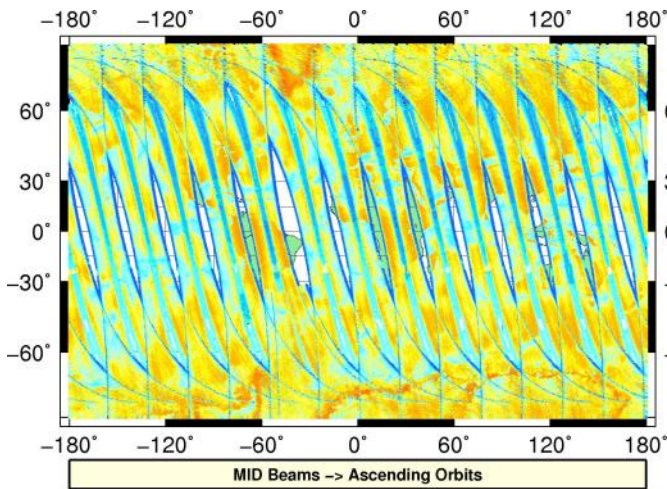
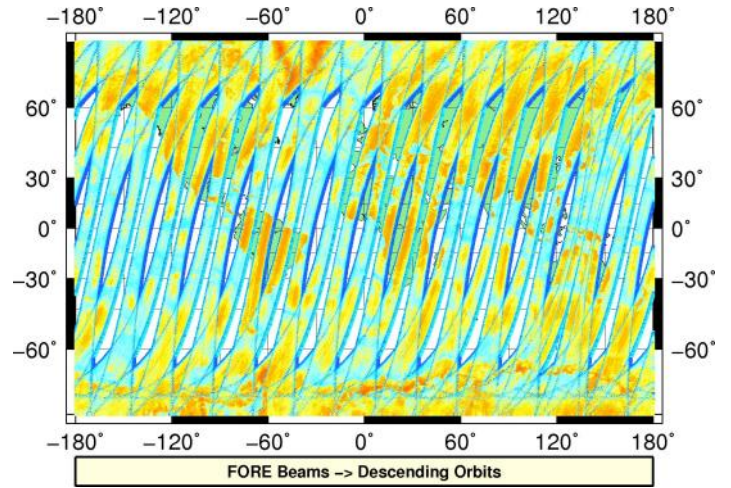
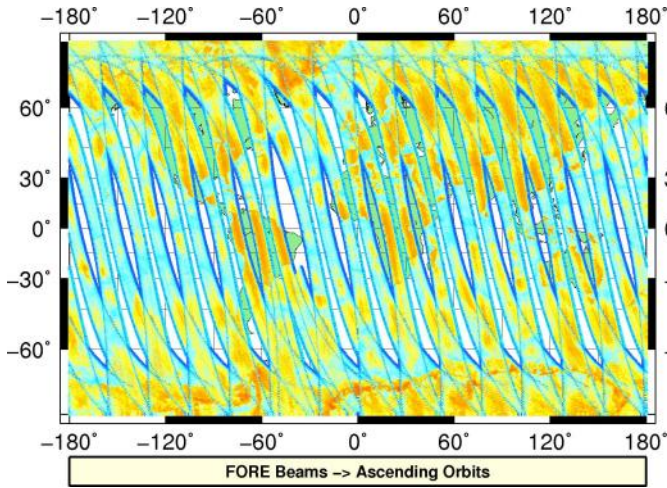
Overview

Configuration and SPHR content

| Parameter | Value |
|--------------------------|---|
| SENSING START-STOP | 20200409000000 - 20200409235959 |
| ORBIT START-STOP | - |
| SATELLITE | M02 |
| SW - DPU Version | 3.9 (57) |
| SW - ICU Version | 2.03 (35) |
| PARAM - Drive Level ID | 0 (Nominal drive level as defined in the active DPU Data Set) |
| PARAM - DPU Data Set ID | 4 |
| PARAM - Revision ID | 0 |
| INST - Table Set ID | 0 (no calibration, nominal table set used) |
| INST - Redundancy Config | 127 |
| | nominal ICU |
| | nominal DPU |
| | nominal RFU |
| | nominal HPA |
| | nominal SFE |
| | nominal SFE LNA |
| | nominal signal path (from HPA_B) |
| N_L1A_MDR | 610398 |
| N_L1A_MDR_B0 | 101733 |
| N_L1A_MDR_B1 | 101733 |
| N_L1A_MDR_B2 | 101733 |
| N_L1A_MDR_B3 | 101733 |
| N_L1A_MDR_B4 | 101733 |
| N_L1A_MDR_B5 | 101733 |
| N_GAPS | 0 |
| TOTAL_GAPS_SIZE | 0 |
| N_HKTM_PACKETS_RECEIVED | 16161 |
| N_F_NOISE | 0 |
| N_F_PG | 0 |
| N_V_PG | 0 |
| N_F_FILTER | 0 |
| N_V_FILTER | 0 |
| N_F_PGP | 0 |
| N_F_NP | 0 |
| N_F_ORBIT | 0 |
| N_F_ATTITUDE | 0 |
| N_F_OMEGA | 0 |
| N_F_MAN | 0 |
| N_F_OSV | 0 |
| N_F_E_TEL_PRES | 0 |
| N_F_E_TEL_IR | 0 |
| N_F_CE | 0 |
| N_V_CE | 0 |
| N_F_OA | 0 |
| N_F_TEL | 0 |
| N_F_REF | 0 |
| N_F_SA | 1054537 |
| N_F_LAND | 49205299 |
| N_F_GEO | 3301186 |
| N_F_SIGN | 0 |
| N_L1B_MDR | 0 |
| N_EMPTY_S0_TRIP | 0 |
| N_L1B_MDR_F | 0 |
| N_EMPTY_S0_TRIP_F | 0 |
| N_L1B_MDR_M | 0 |

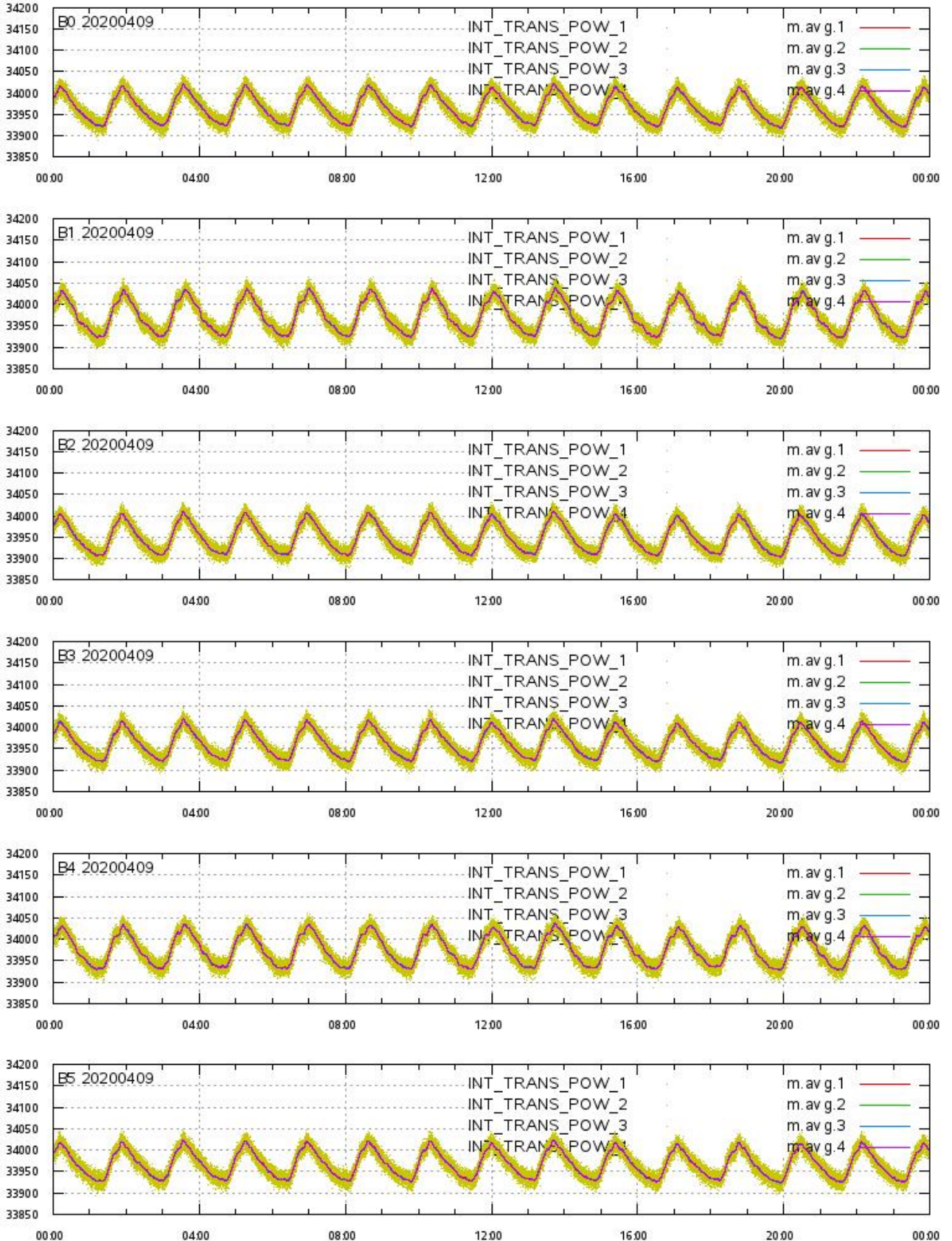
L1A Product

Echo Data Coverage maps



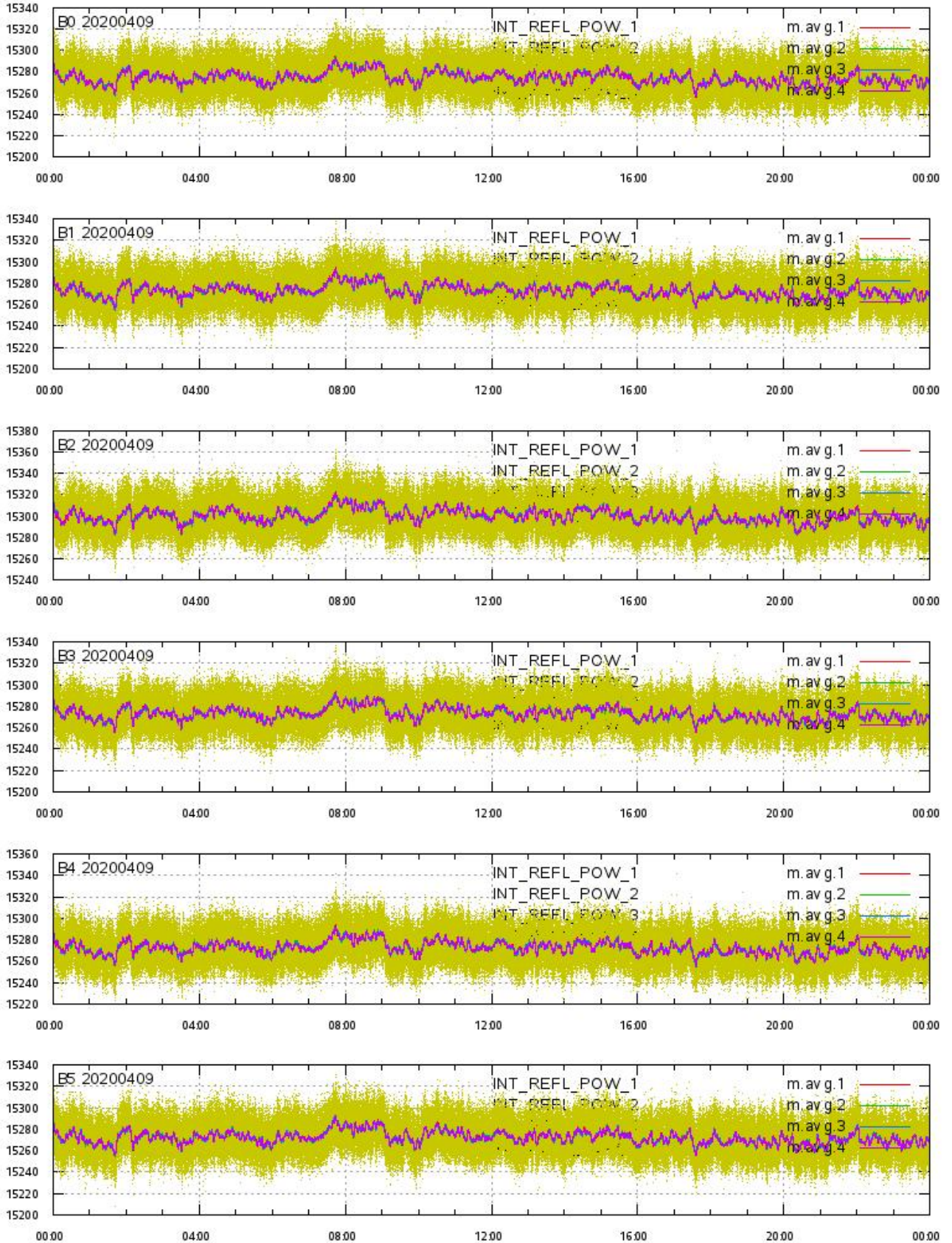
L1A Product

Integrated Transmitted Powers 1-4 per beam 0-5 vs. UTC_LOCALISATION



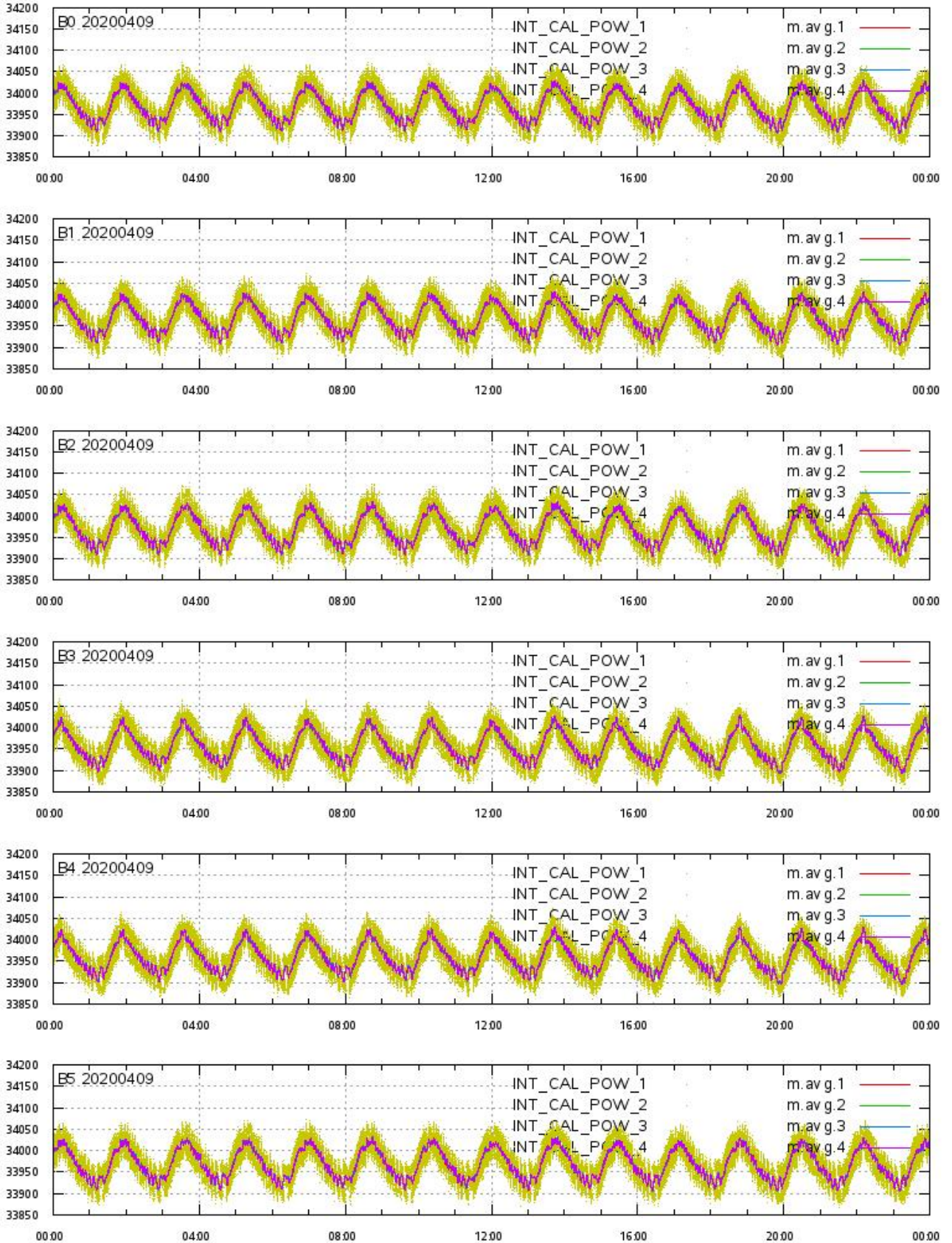
L1A Product

Integrated Reflected Powers 1-4 per beam 0-5 vs. UTC_LOCALISATION



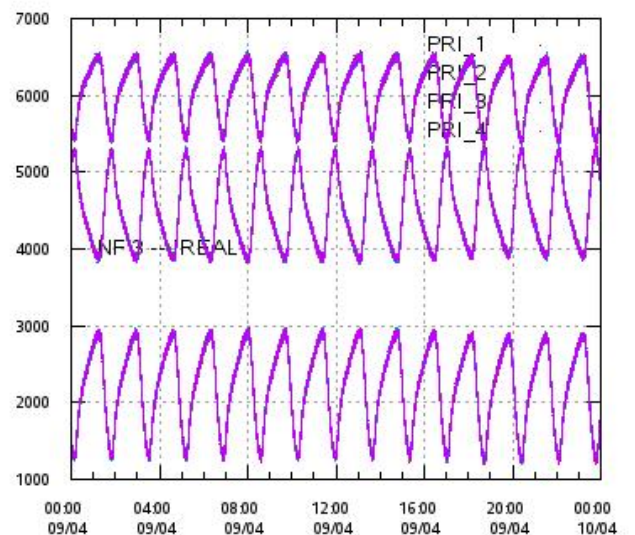
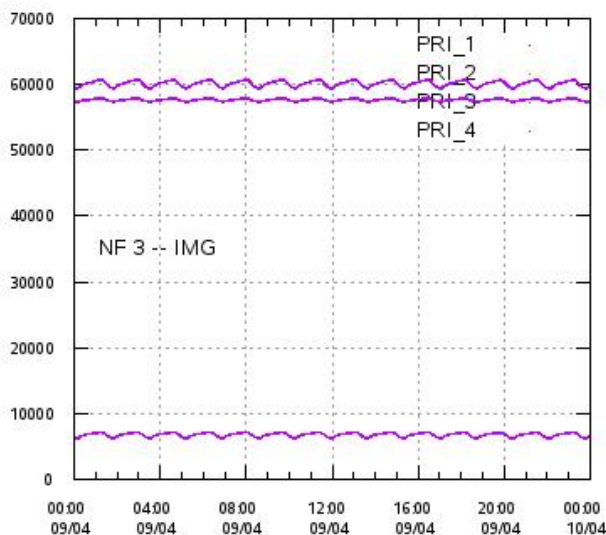
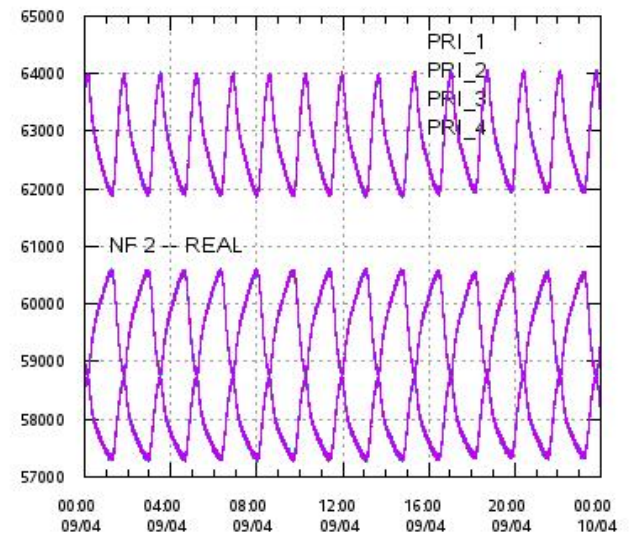
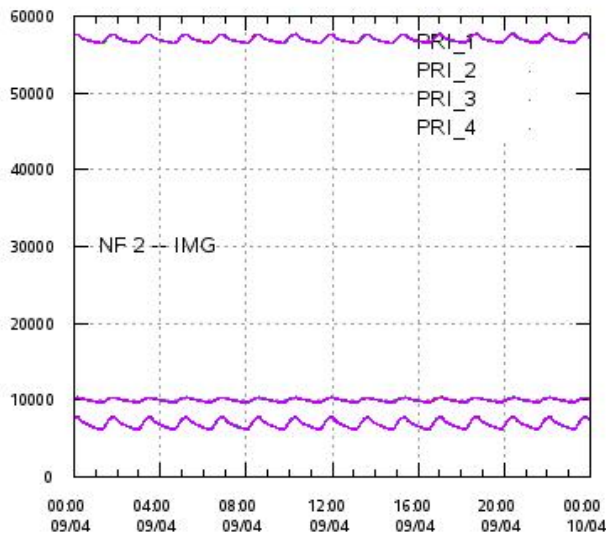
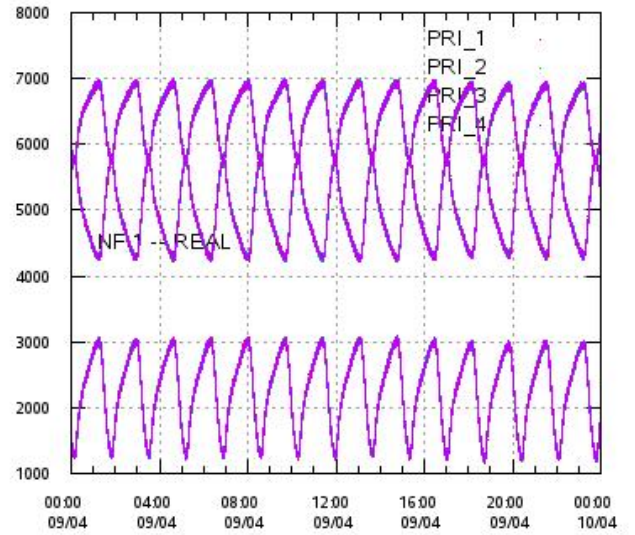
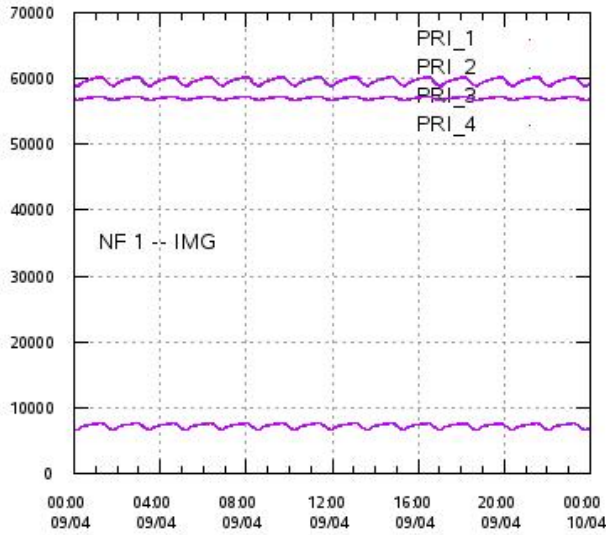
L1A Product

Integrated Calibration Powers 1-4 per beam 0-5 vs. UTC_LOCALISATION



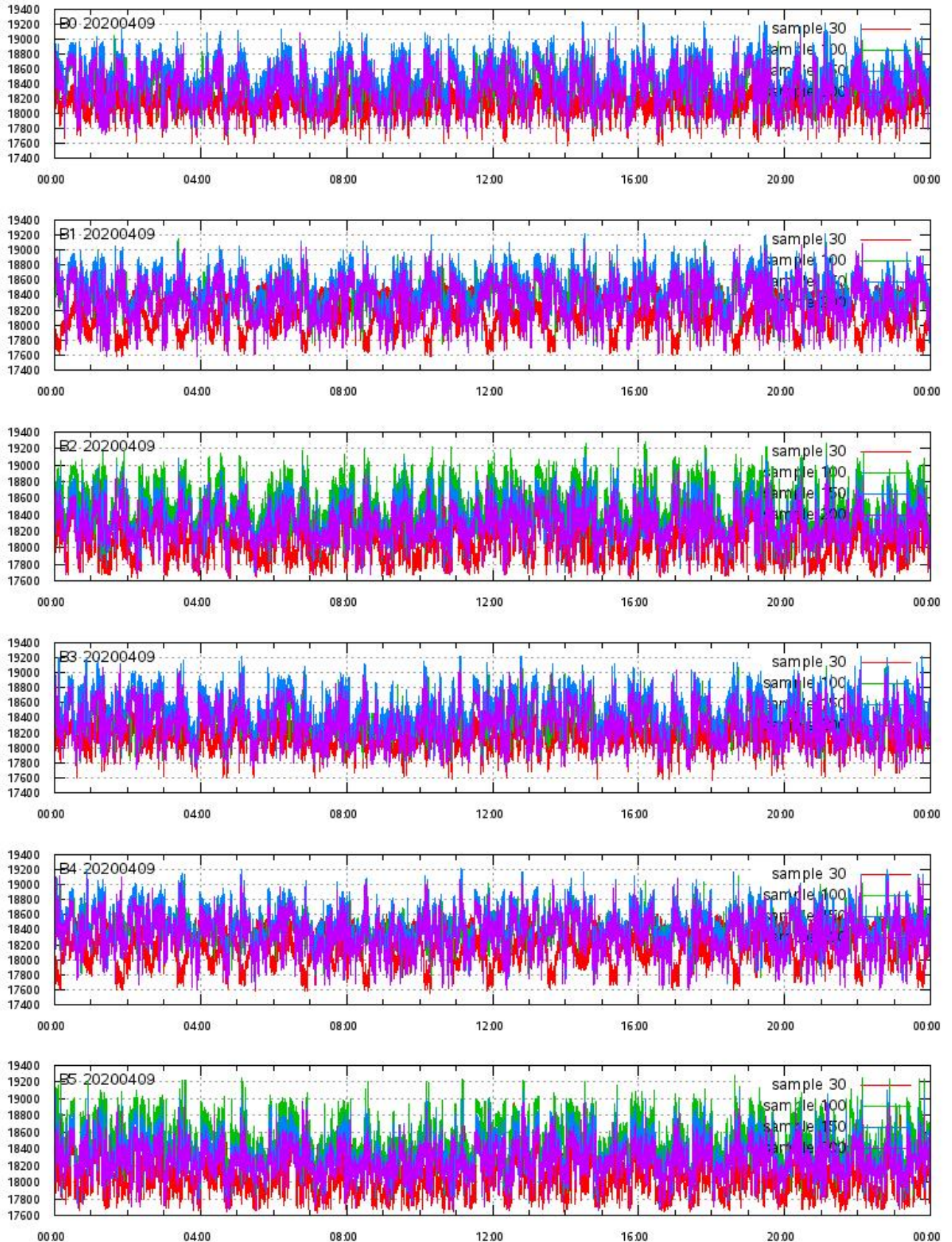
L1A Product

Calibration Powers vs. UTC_LOCALISATION



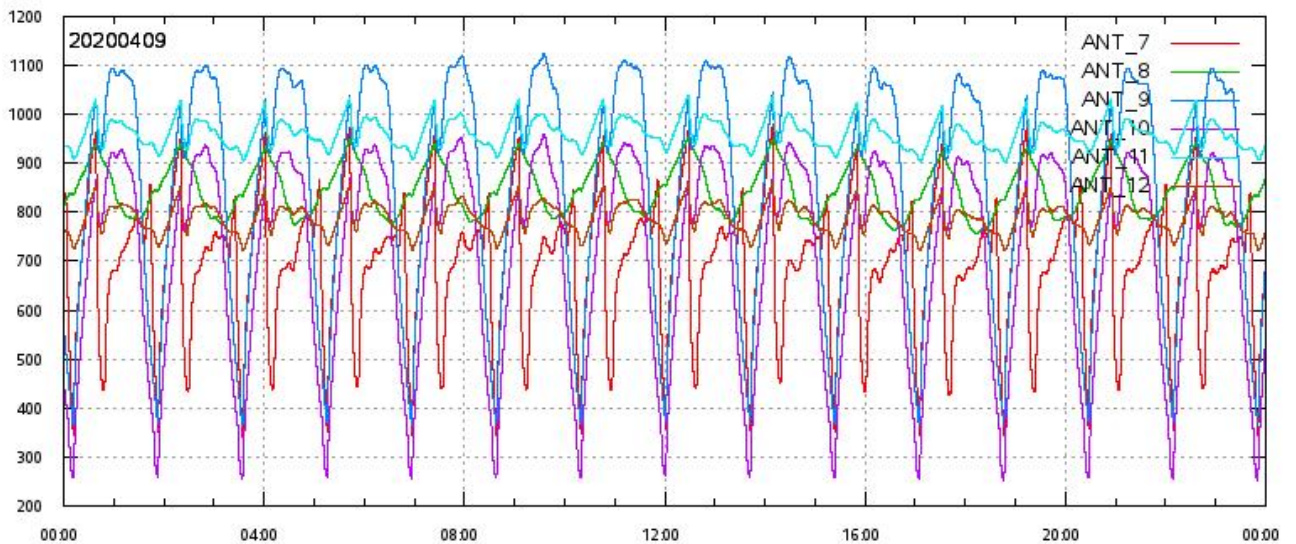
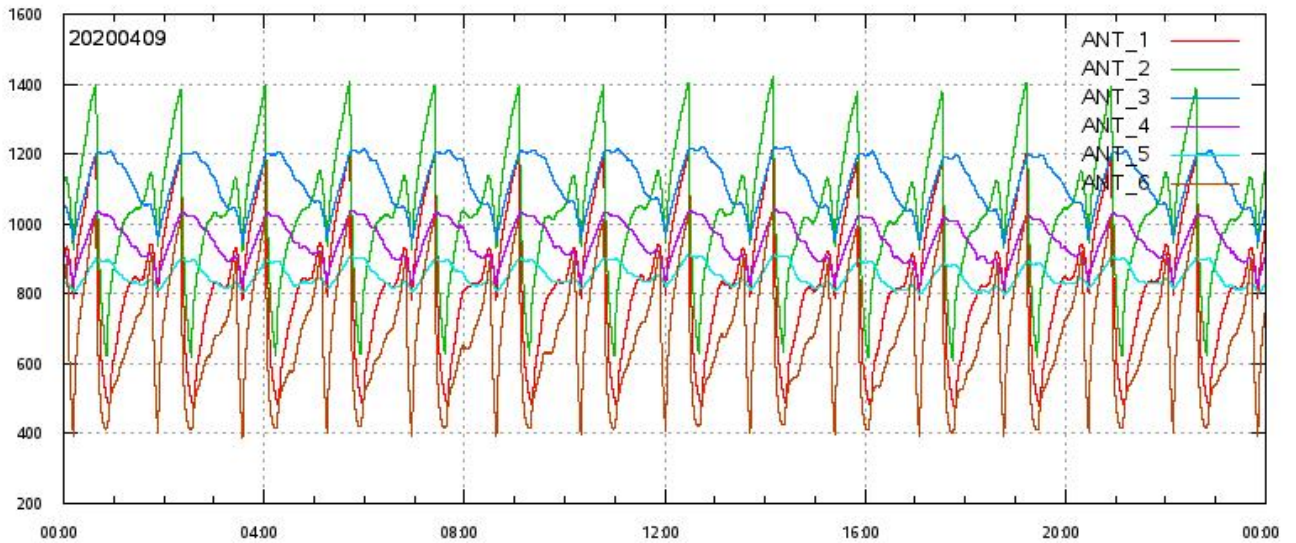
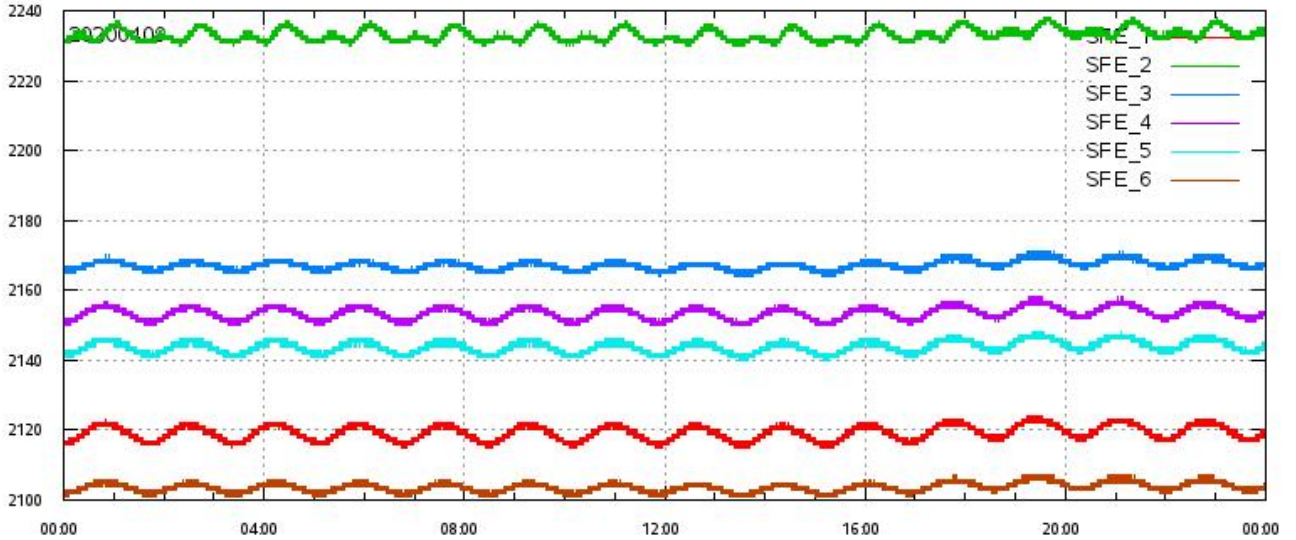
L1A Product

ECHO DATA (raw) for samples 30, 100, 150 and 200 vs. UTC_LOCALISATION



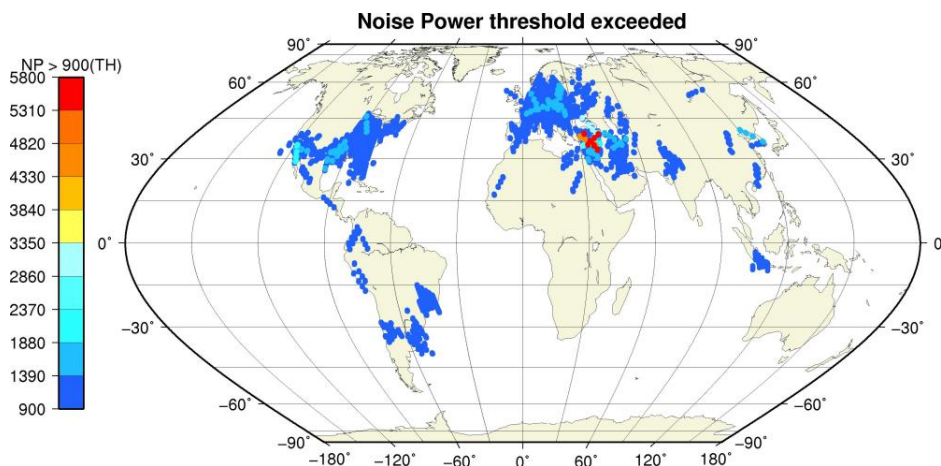
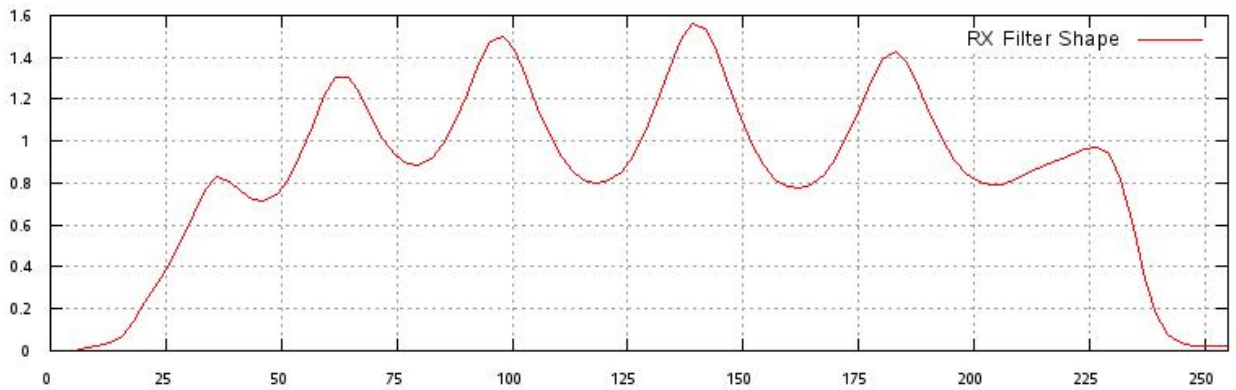
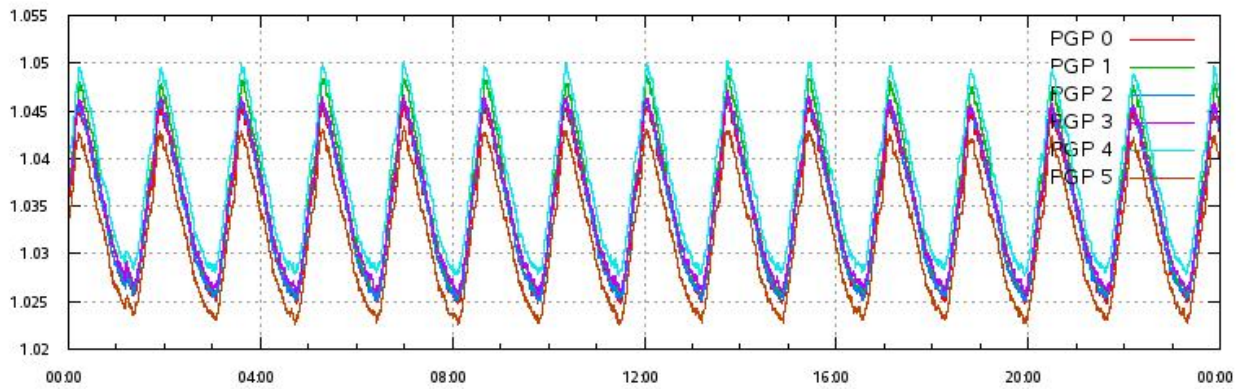
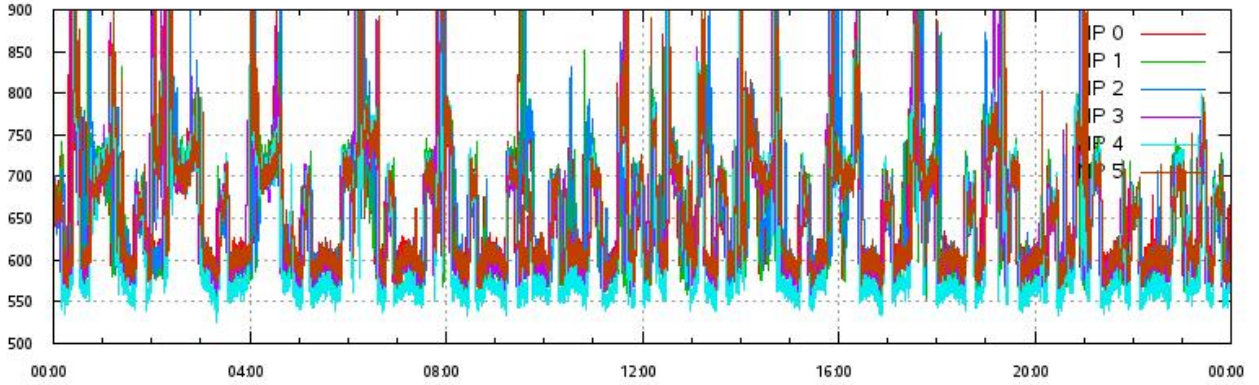
L1A Product

SFE & ANT Temperatures (raw) vs. UTC_LOCALISATION



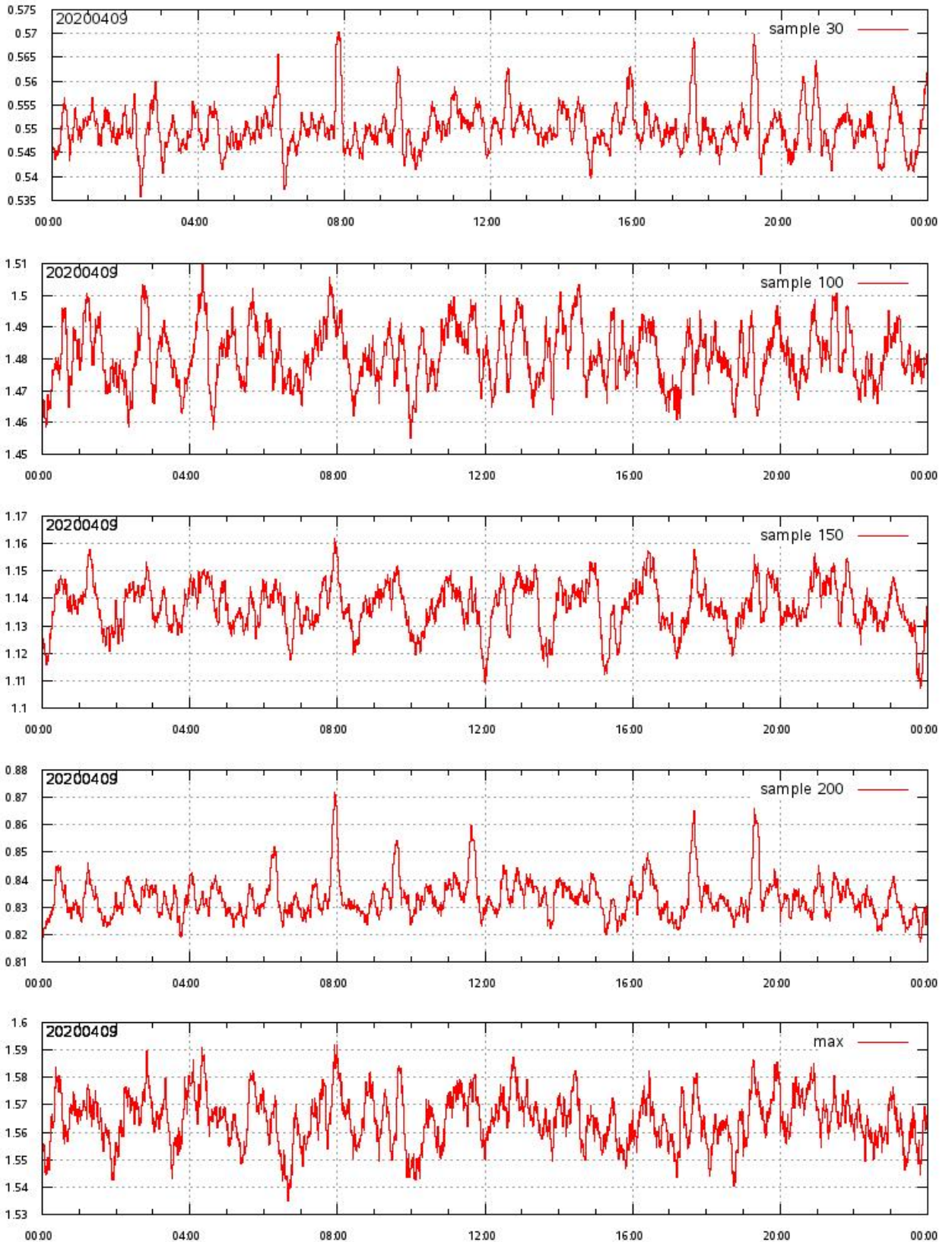
L1A Product

Noise Power & Power Gain Product per beam 0-5 vs. UTC_LOCALISATION
RX Filter Shape average over sample number
Noise Power threshold exceeded (TH=900) on map



L1A Product

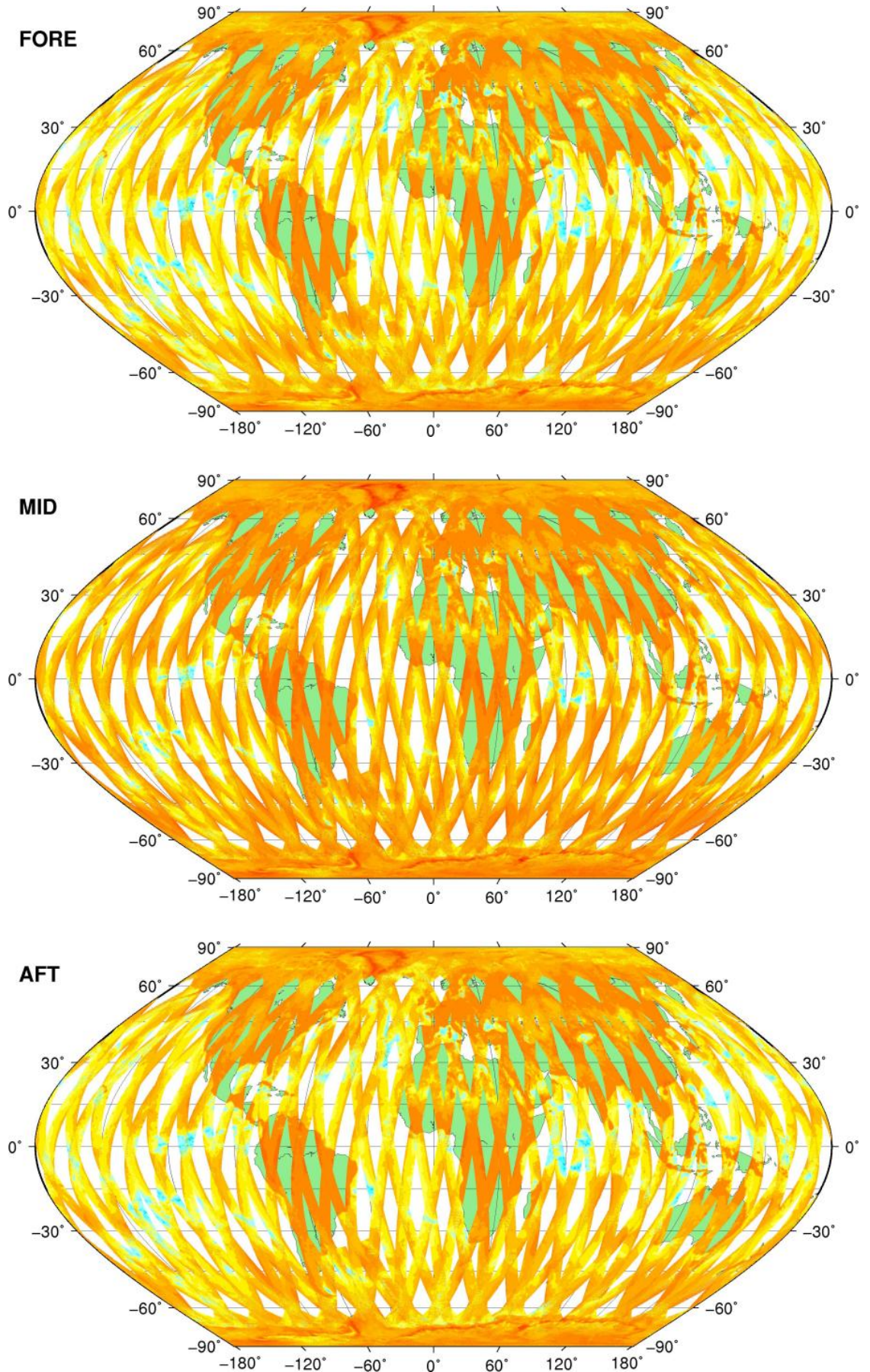
RX filter shape in detail for sample 30,100,150, 200 & max vs. UTC_LOCALISATION



SZO Product

Sigma0_TRIP Coverage map

SIGMA0_TRIP Coverage

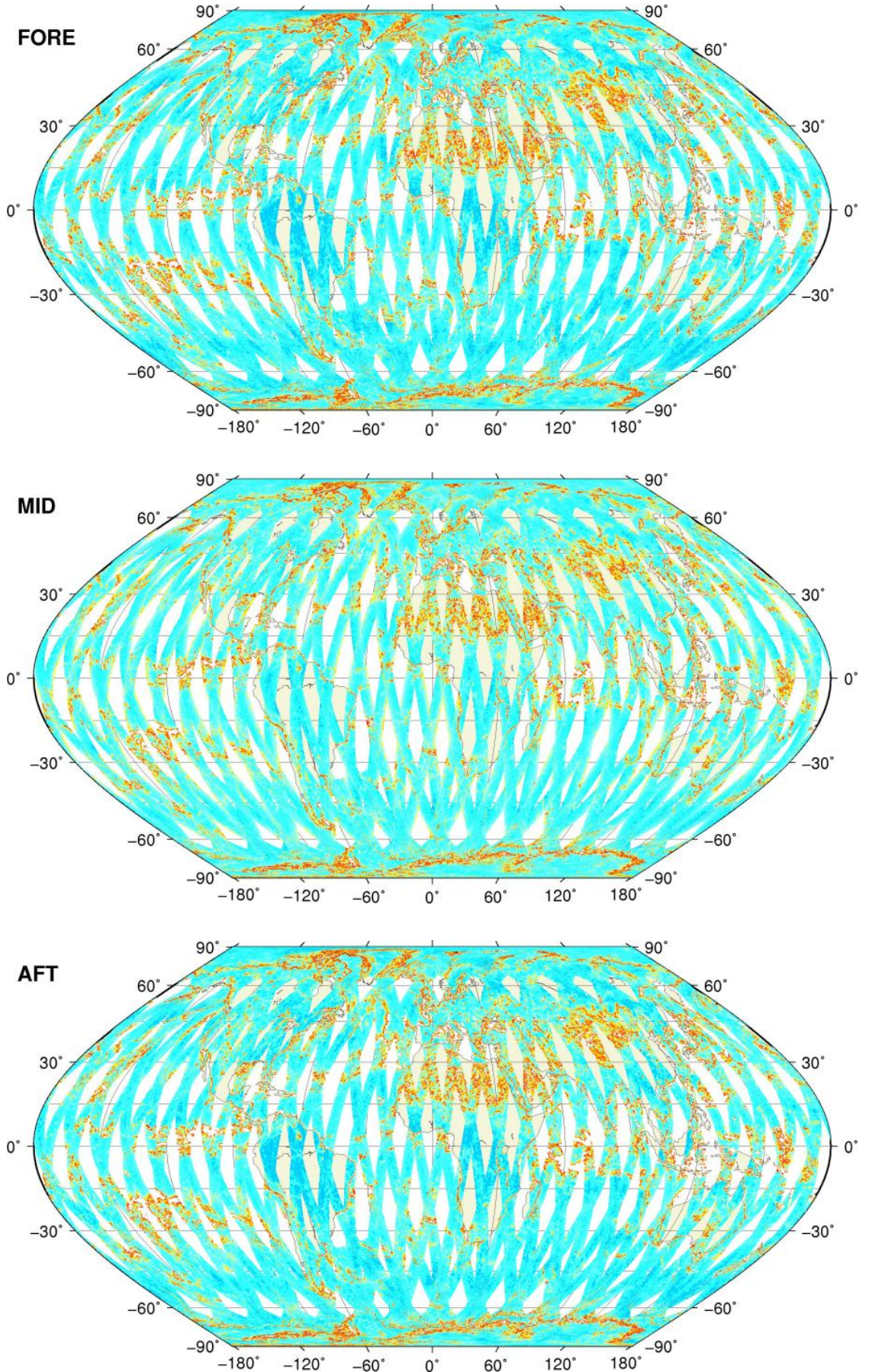


SZO Product

Kp Coverage map

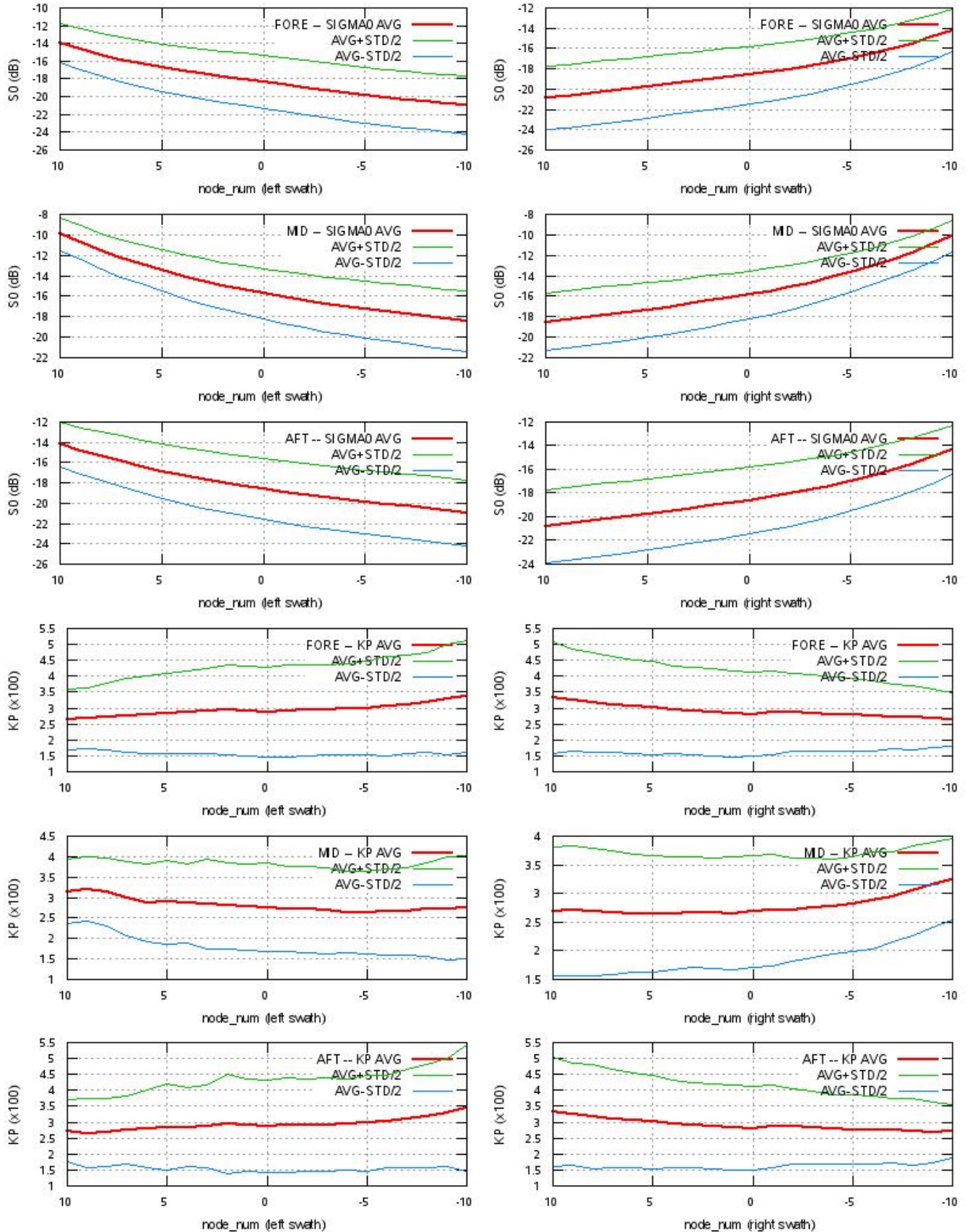
Kp Coverage

0.00 0.01 0.02 0.03 0.04 0.05 0.06



SZO Product

S0 - Kp Statistics



SZO Product

Kp Outliers on map

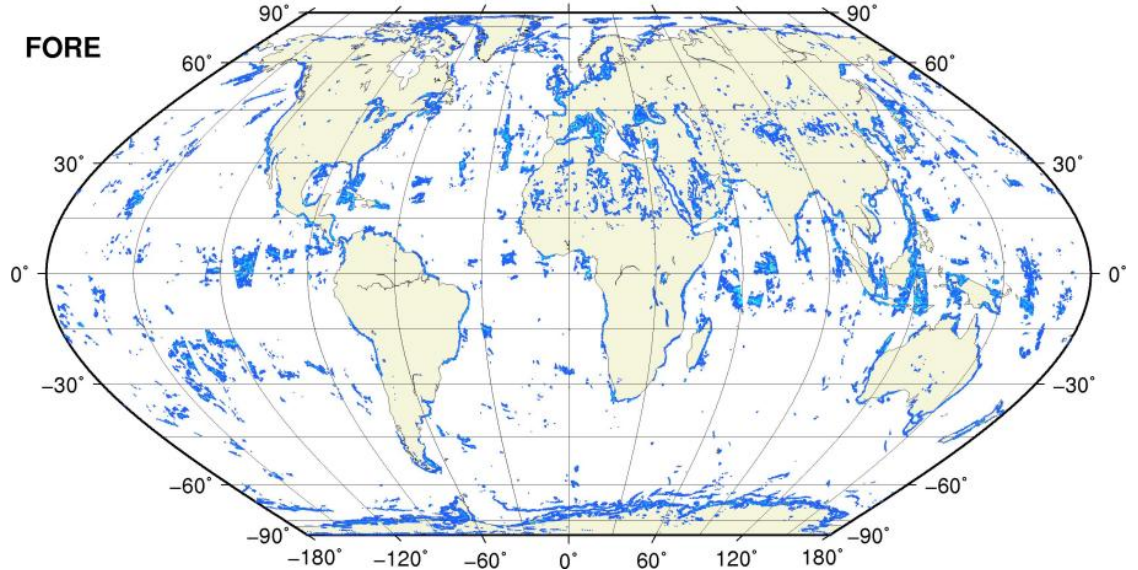
0.06 < Kp < 1.0

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0



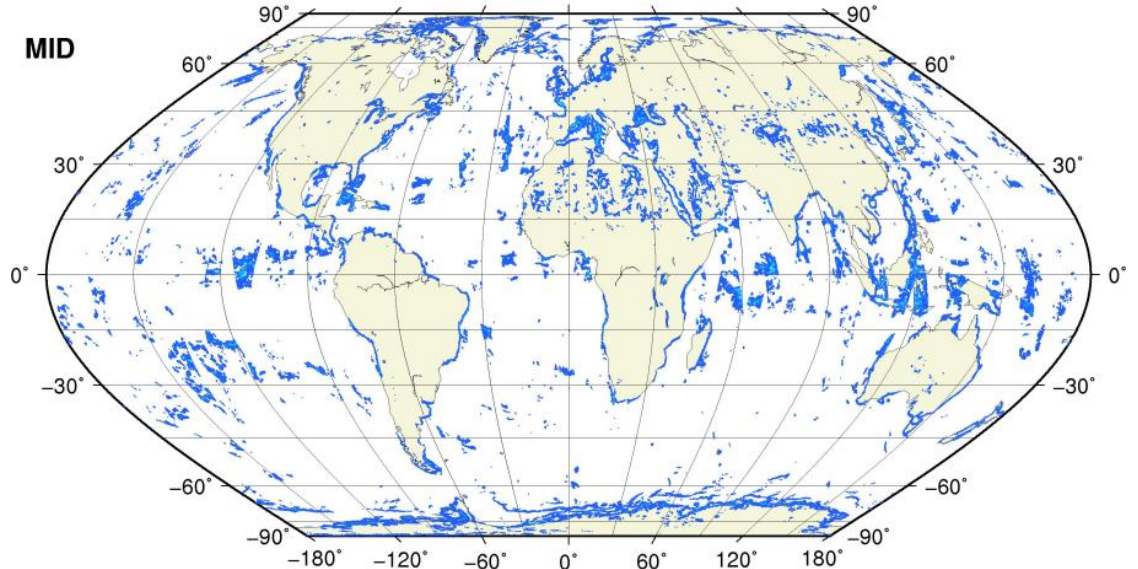
● KP = 1.0 #rec=0

FORE



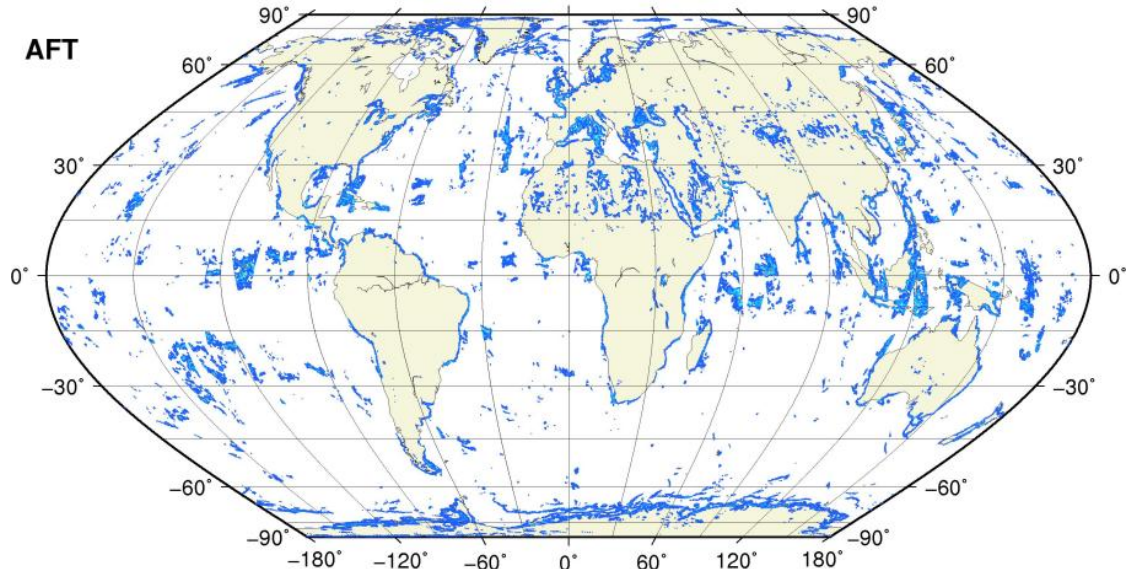
● KP = 1.0 #rec=0

MID



● KP = 1.0 #rec=0

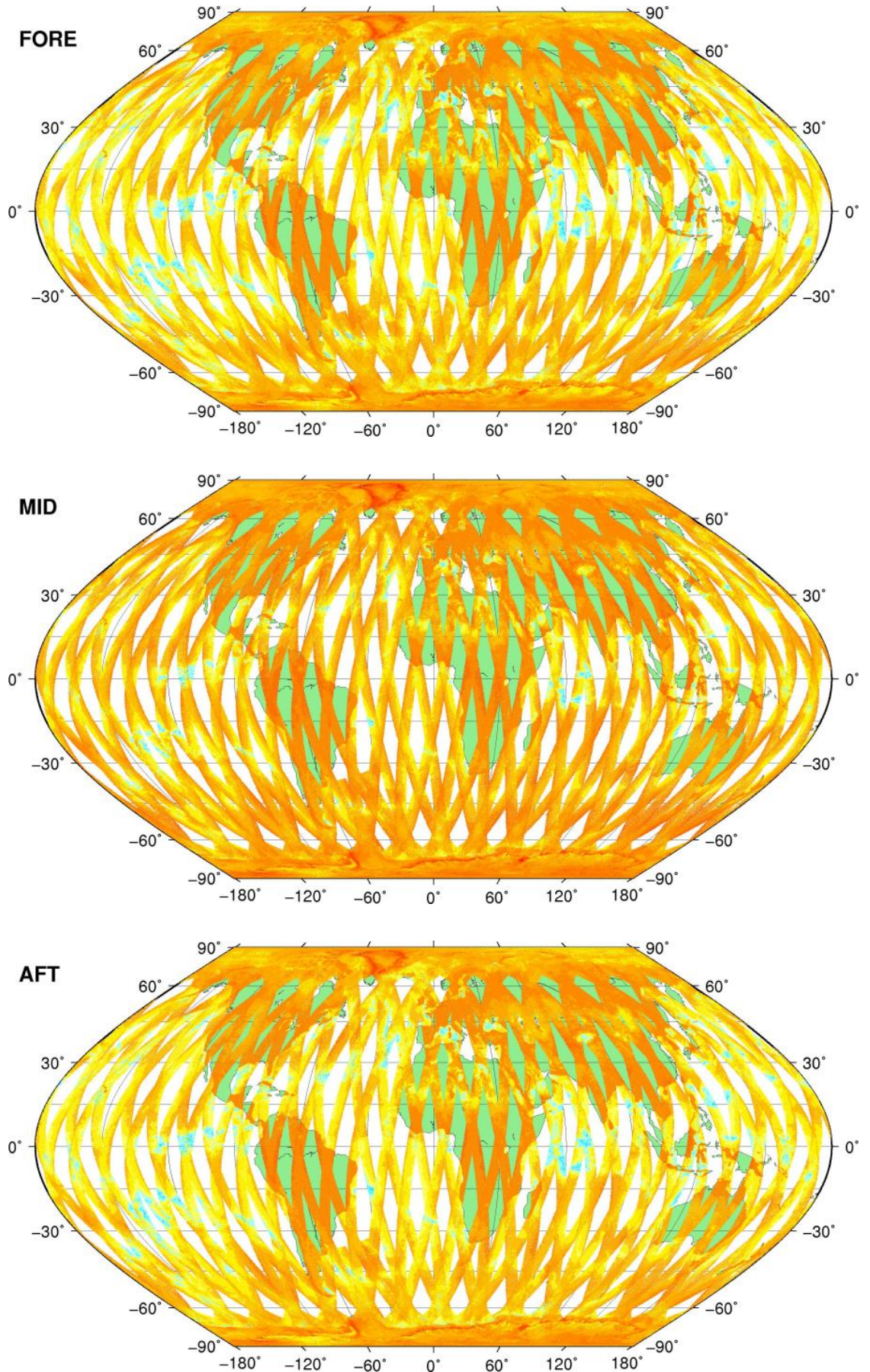
AFT



SZR Product

Sigma0_TRIP Coverage map

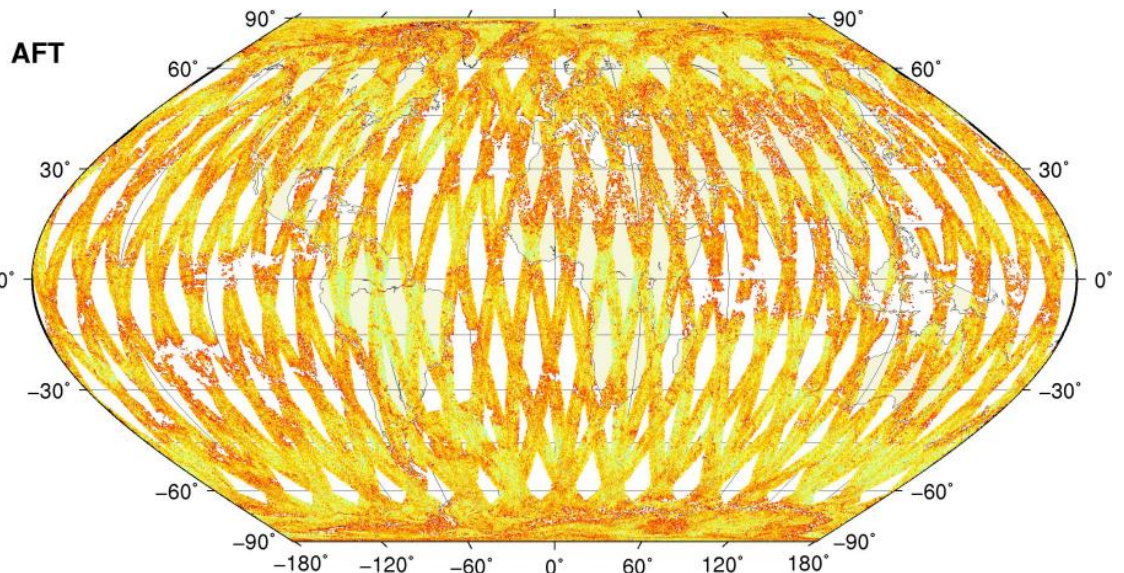
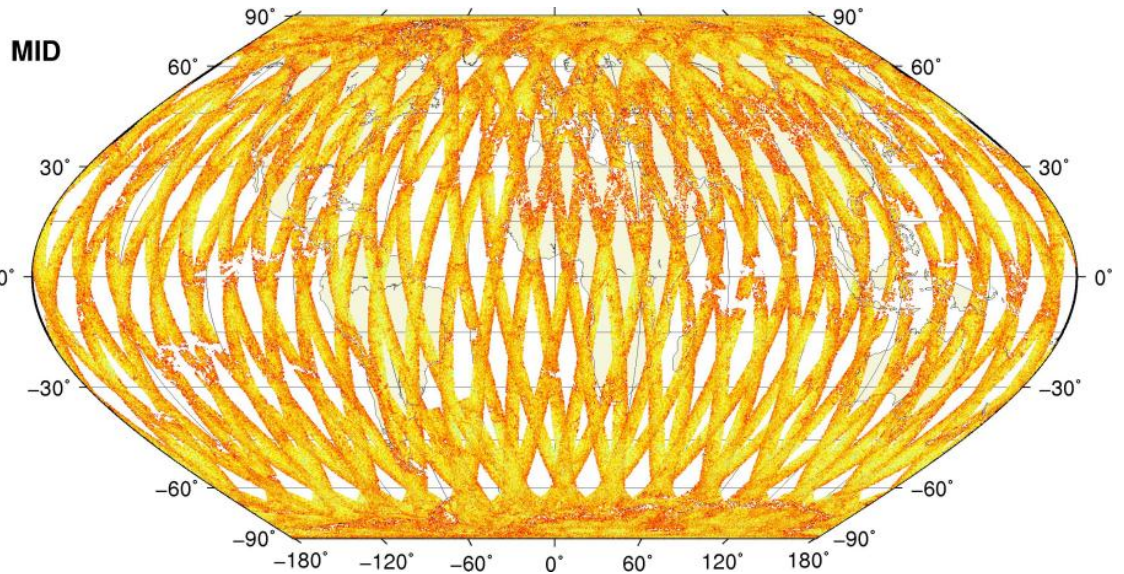
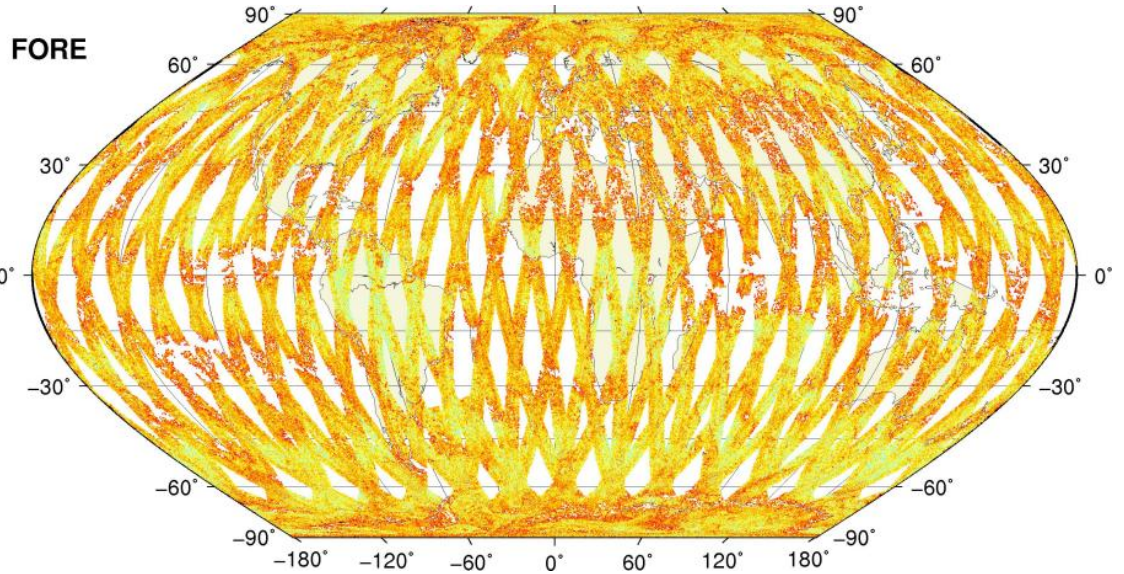
SIGMA0_TRIP Coverage



SZR Product

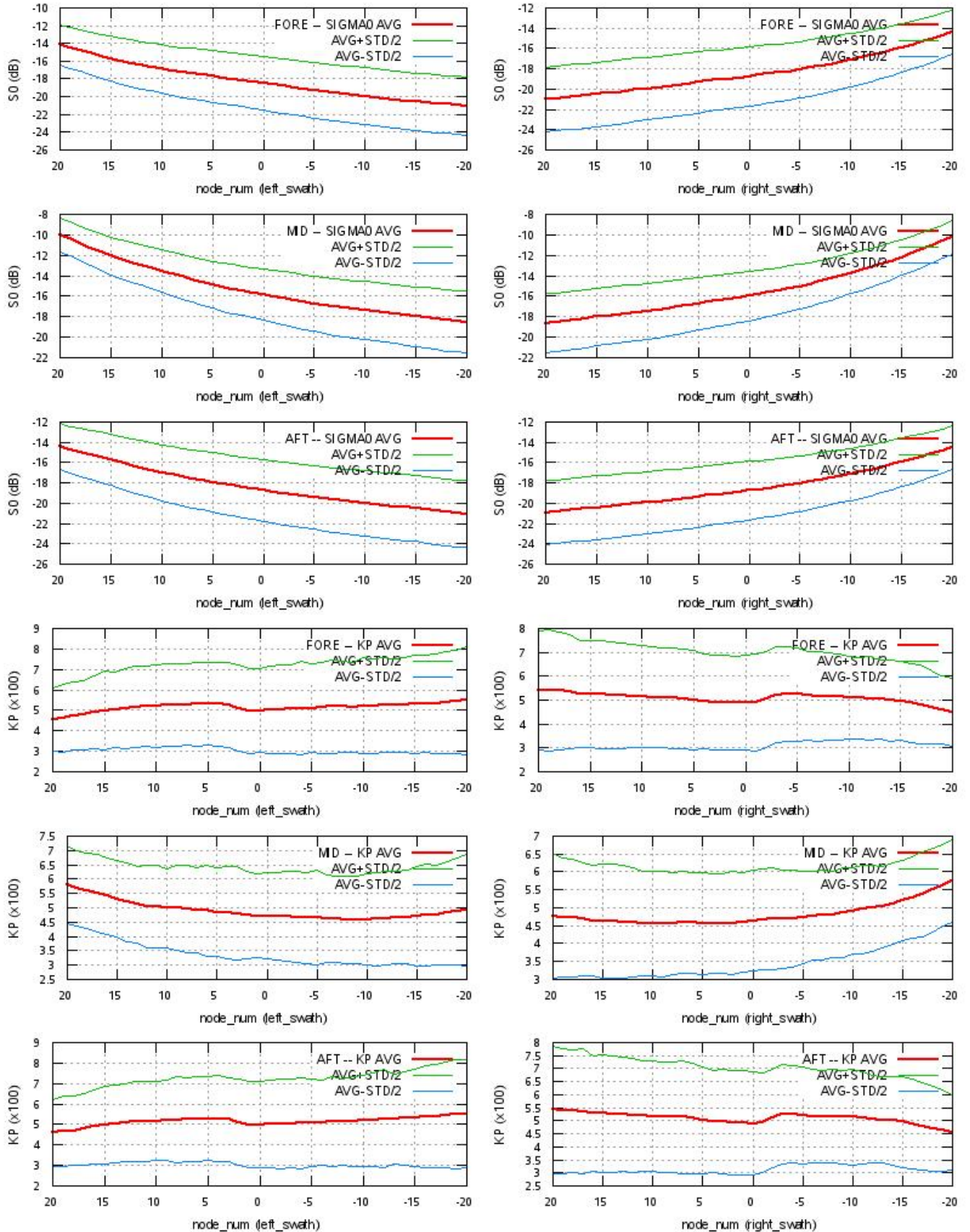
Kp Coverage map

Kp Coverage



SZR Product

S0 - Kp Statistics



SZR Product

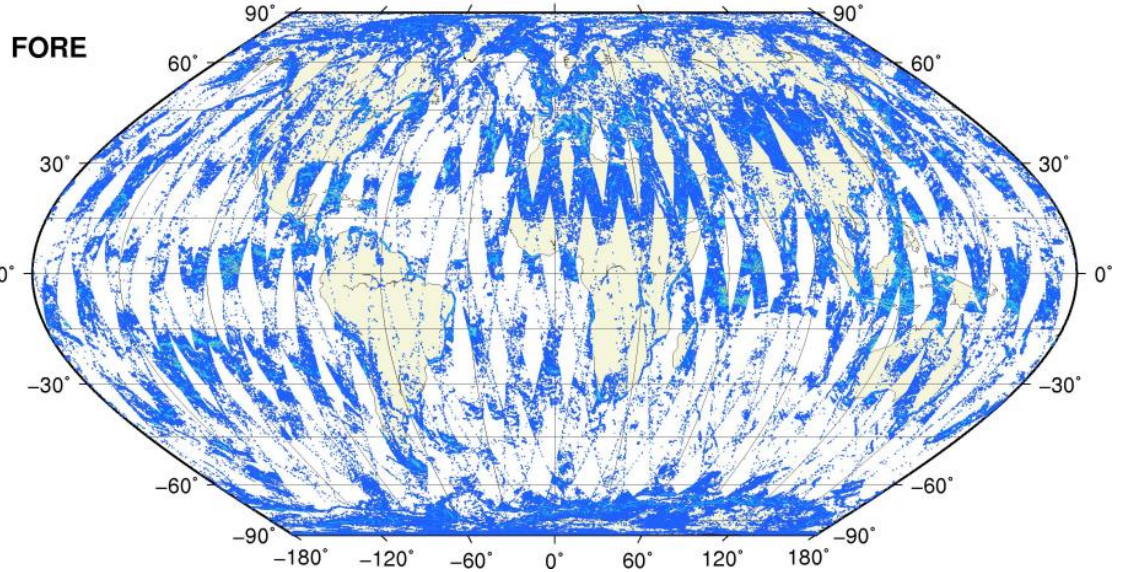
Kp Outliers on map

$0.06 < Kp < 1.0$

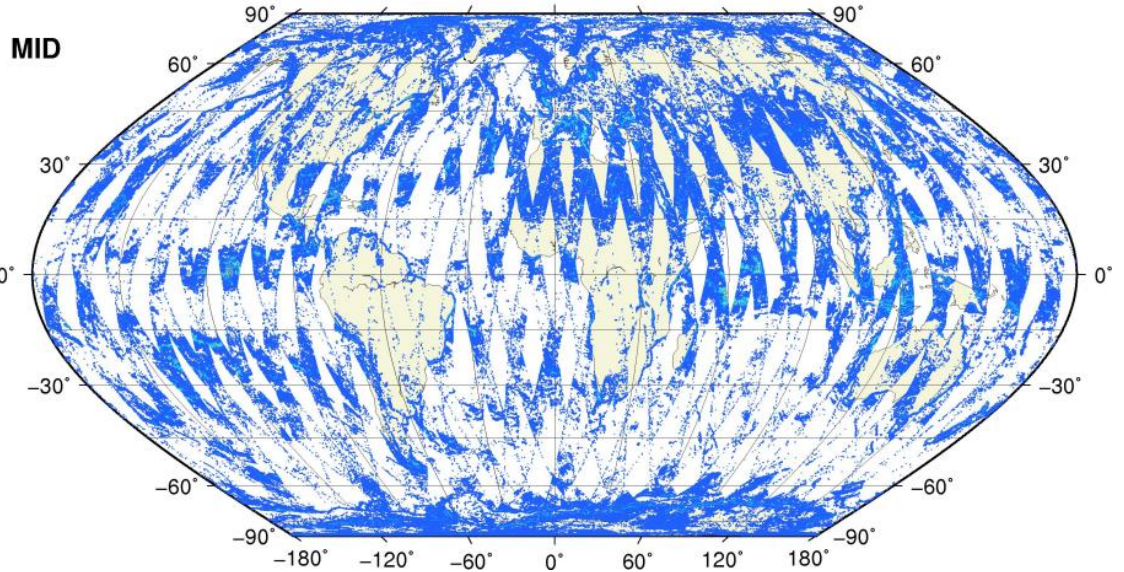
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0



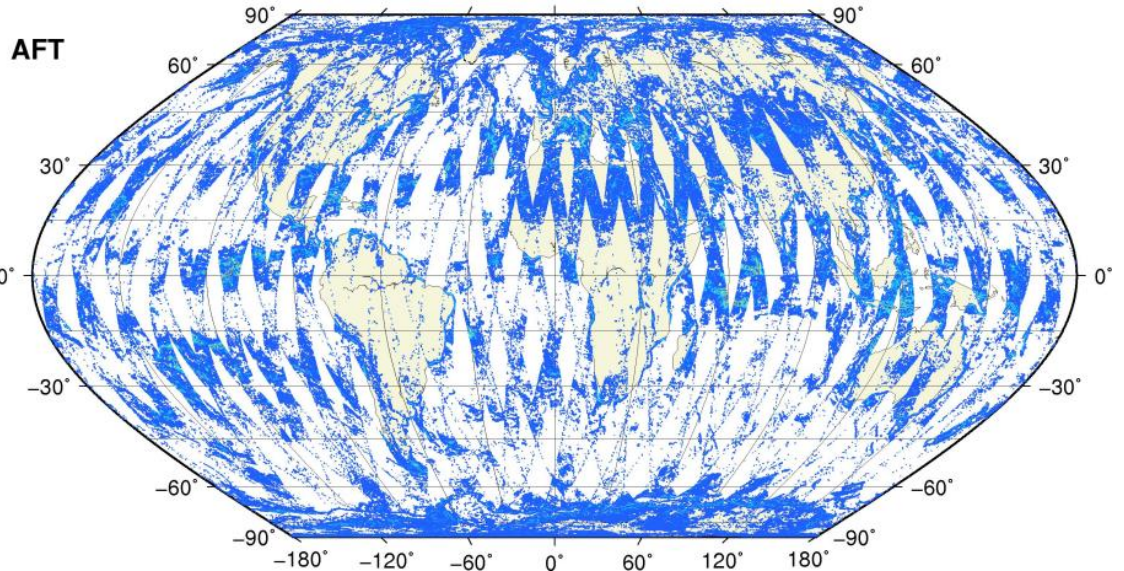
● KP = 1.0 #rec=0



● KP = 1.0 #rec=0

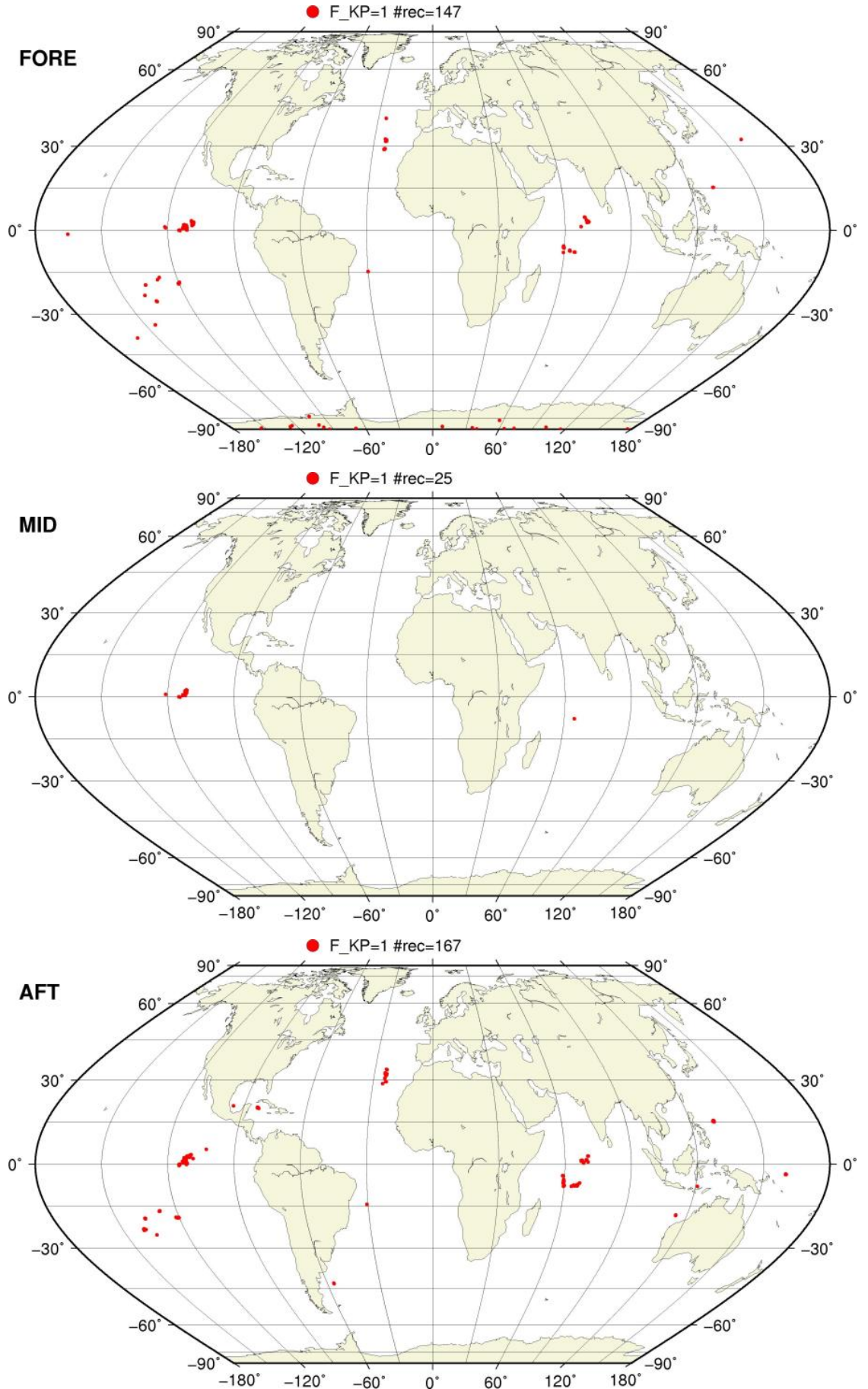


● KP = 1.0 #rec=0



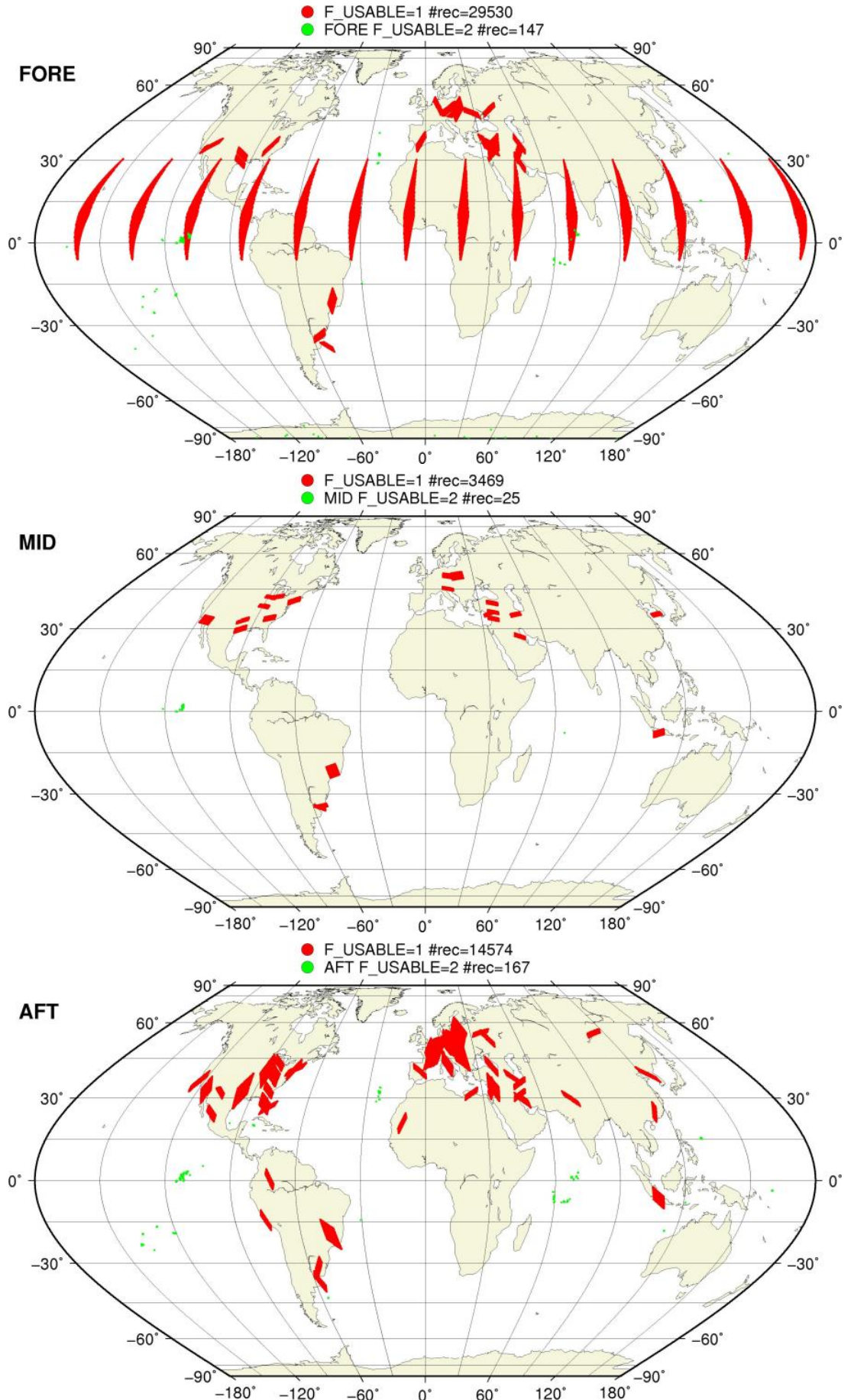
SZO Flagged Data Coverage

F_KP = 1 on map



SZO Flagged Data Coverage

F_USABLE = 1 or 2 on map



SZO Flagged Data Coverage

$0 < F_{OA} \leq 1$ on map



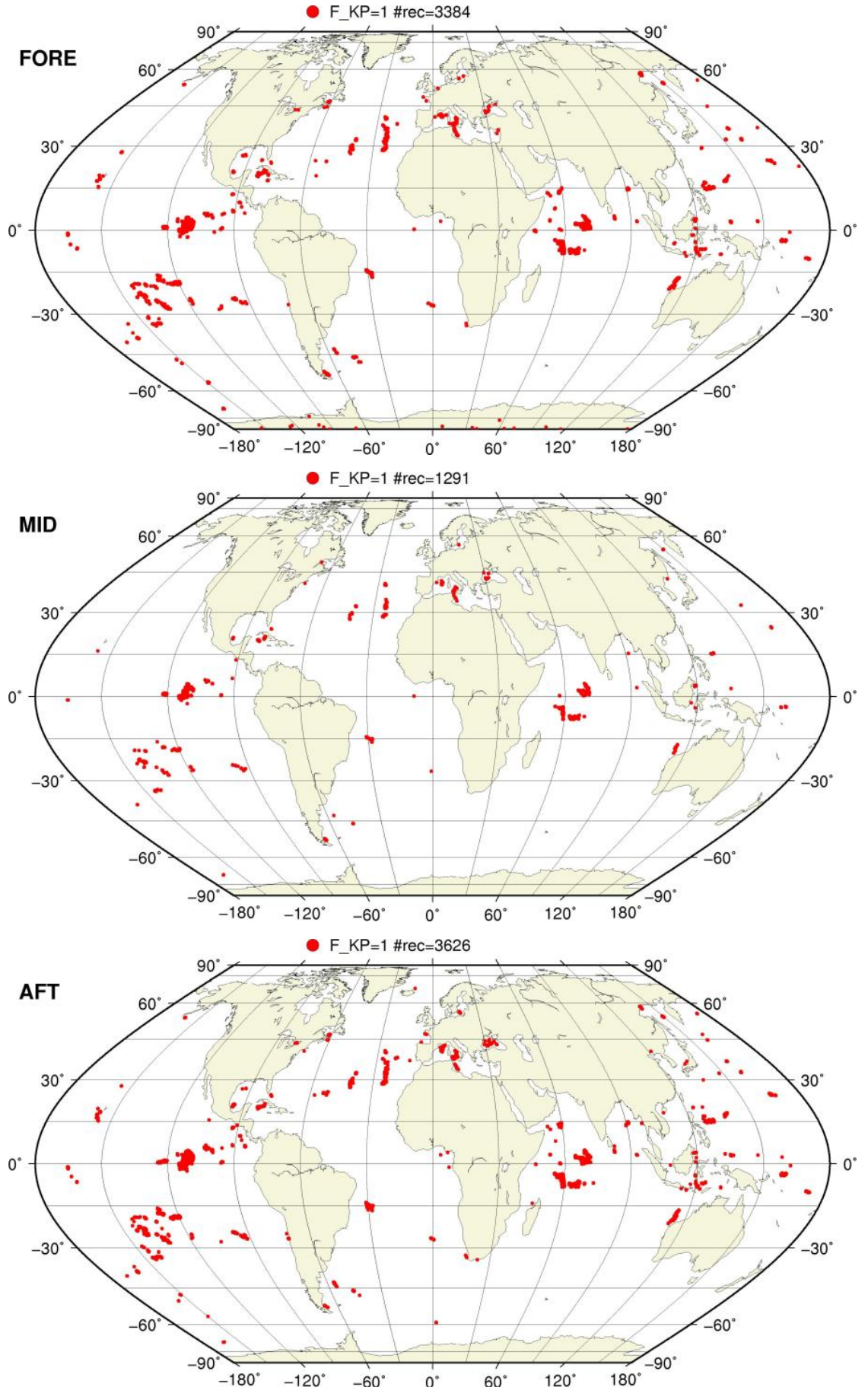
SZO Flagged Data Coverage

$0 < F_{F/V} \leq 1$ on map



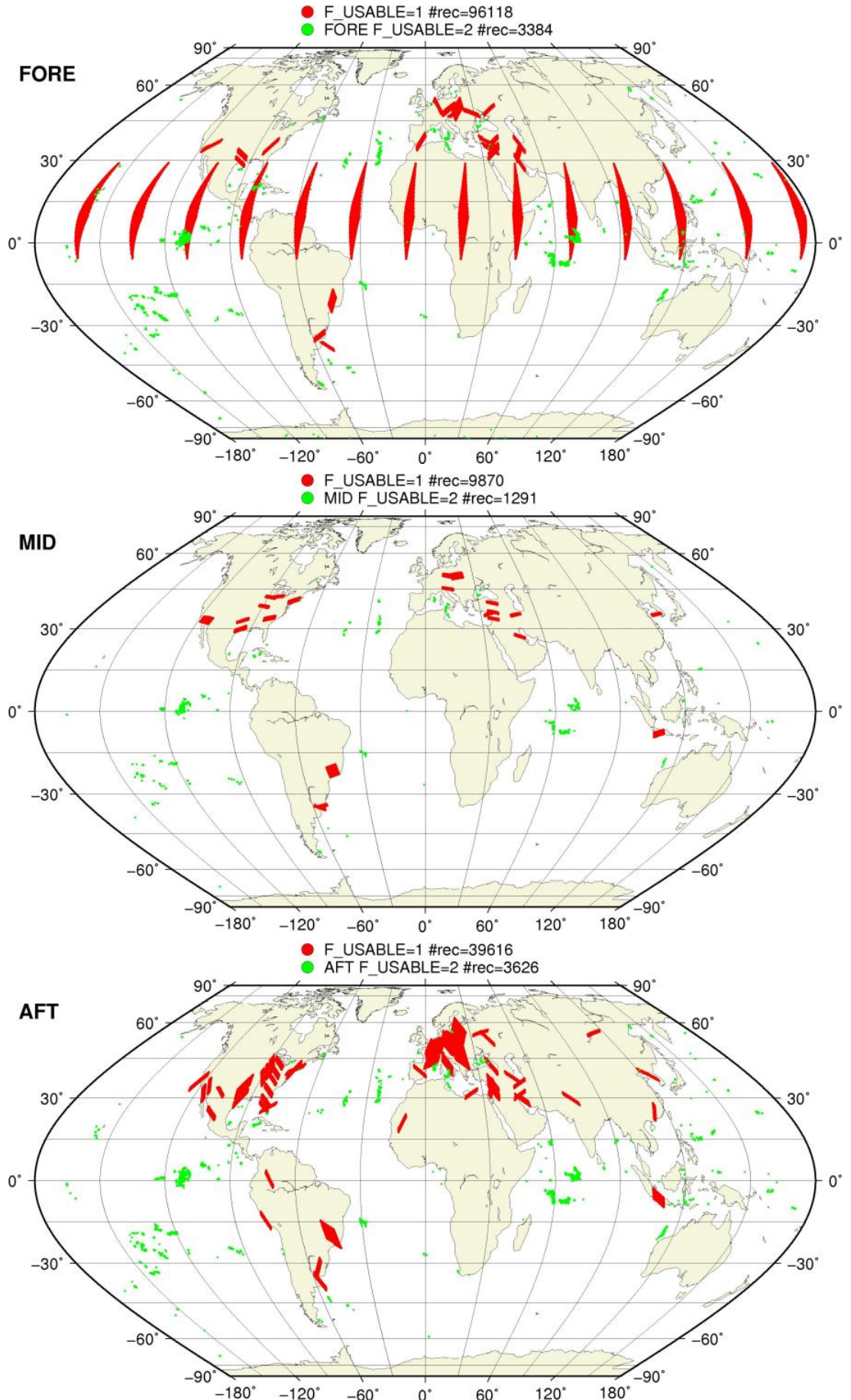
SZR Flagged Data Coverage

F_KP = 1 on map



SZR Flagged Data Coverage

F_USABLE = 1 or 2 on map



SZR Flagged Data Coverage

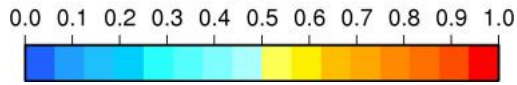
$0 < F_{OA} \leq 1$ on map



SZR Flagged Data Coverage

$0 < F_{F/V} \leq 1$ on map

$0 < F_F \leq 1$



$0 < F_V \leq 1$

