

# ASCAT DAILY Report

**Metop-A**

**OPE**

**DAY 2019\_001**

**20190101000000 - 20190101235959**

## DATA STATISTICS

BASED ON ORBITS (#14)

63310 63311 63312 63313 63314 63315 63316 63317 63318 63319 63320 63321 63322  
63323 63324

DB STATISTICS : OPE M02\_20190101

|         |      |      |      |       |
|---------|------|------|------|-------|
| SMO 480 | 1.24 | .53  | .63  | 9.07  |
| SMR 480 | 3.29 | .97  | 2.03 | 8.57  |
| SZF 479 | .38  | 1.36 | .12  | 18.48 |
| xxx 480 | 8.81 | 3.76 | 6.15 | 29.29 |

INGATE (STORE) STATISTICS : OPE M02\_20190101

|        |                                       |                                   |
|--------|---------------------------------------|-----------------------------------|
| xxx_1A | /fbf/tcdras/store/gs1/ASCA_xxx_1A_M02 | -- number of files (xxx_1A) : 480 |
| SZ0_1B | /fbf/tcdras/store/gs1/ASCA_SZ0_1B_M02 | -- number of files (SZ0_1B) : 480 |
| SZR_1B | /fbf/tcdras/store/gs1/ASCA_SZR_1B_M02 | -- number of files (SZR_1B) : 480 |
| SZF_1B | /fbf/tcdras/store/gs1/ASCA_SZF_1B_M02 | -- number of files (SZF_1B) : 480 |
| SMO_02 | /fbf/tcdras/store/gs1/ASCA_SMO_02_M02 | -- number of files (SMO_02) : 480 |
| SMR_02 | /fbf/tcdras/store/gs1/ASCA_SMR_02_M02 | -- number of files (SMR_02) : 480 |

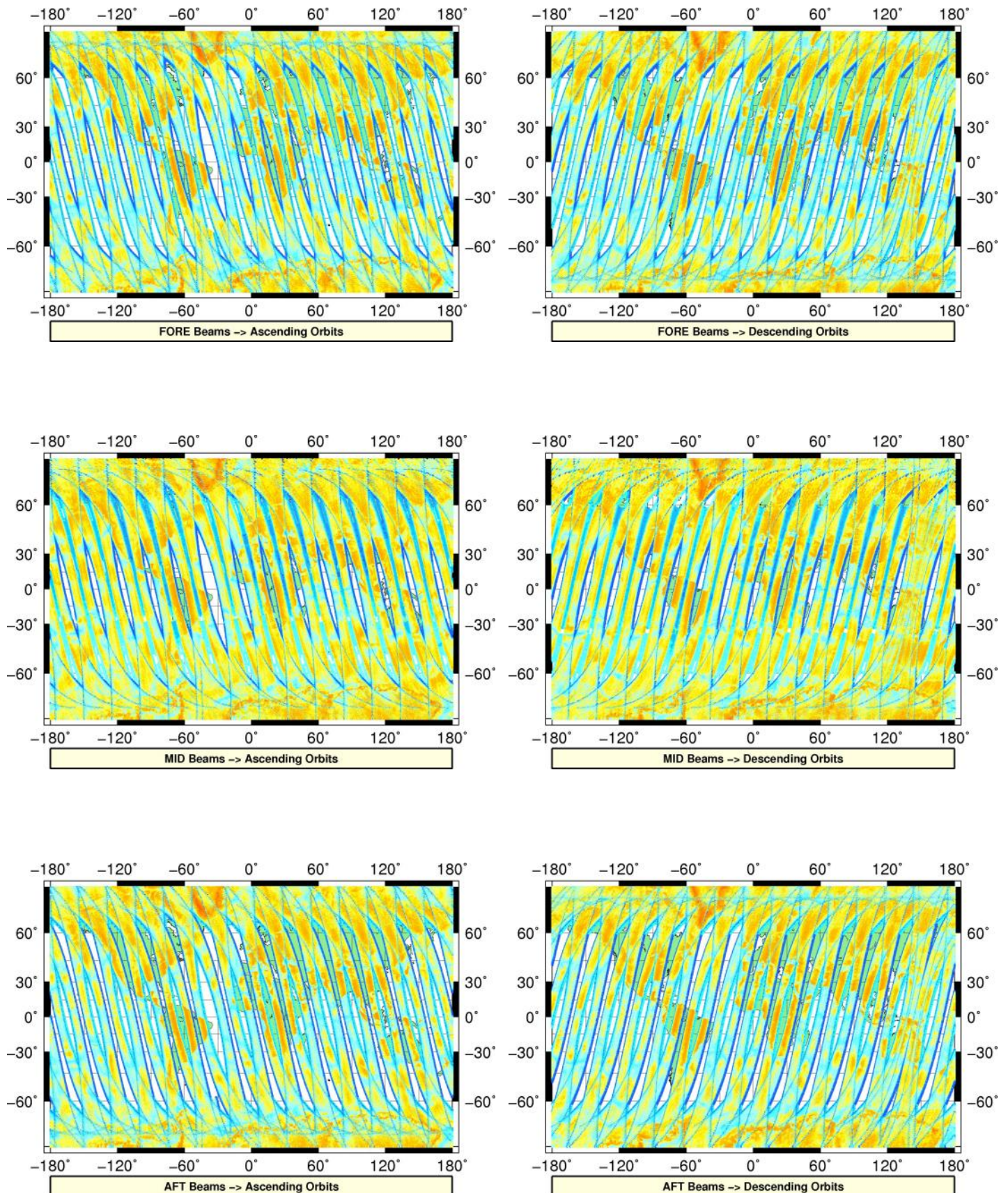
# Overview

## Configuration and SPHR content

| Parameter                | Value                                                         |
|--------------------------|---------------------------------------------------------------|
| SENSING START-STOP       | 20190101000000 - 20190101235959                               |
| 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                   | 1054554                                                       |
| N_F_LAND                 | 49527214                                                      |
| N_F_GEO                  | 3283891                                                       |
| 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                                                             |

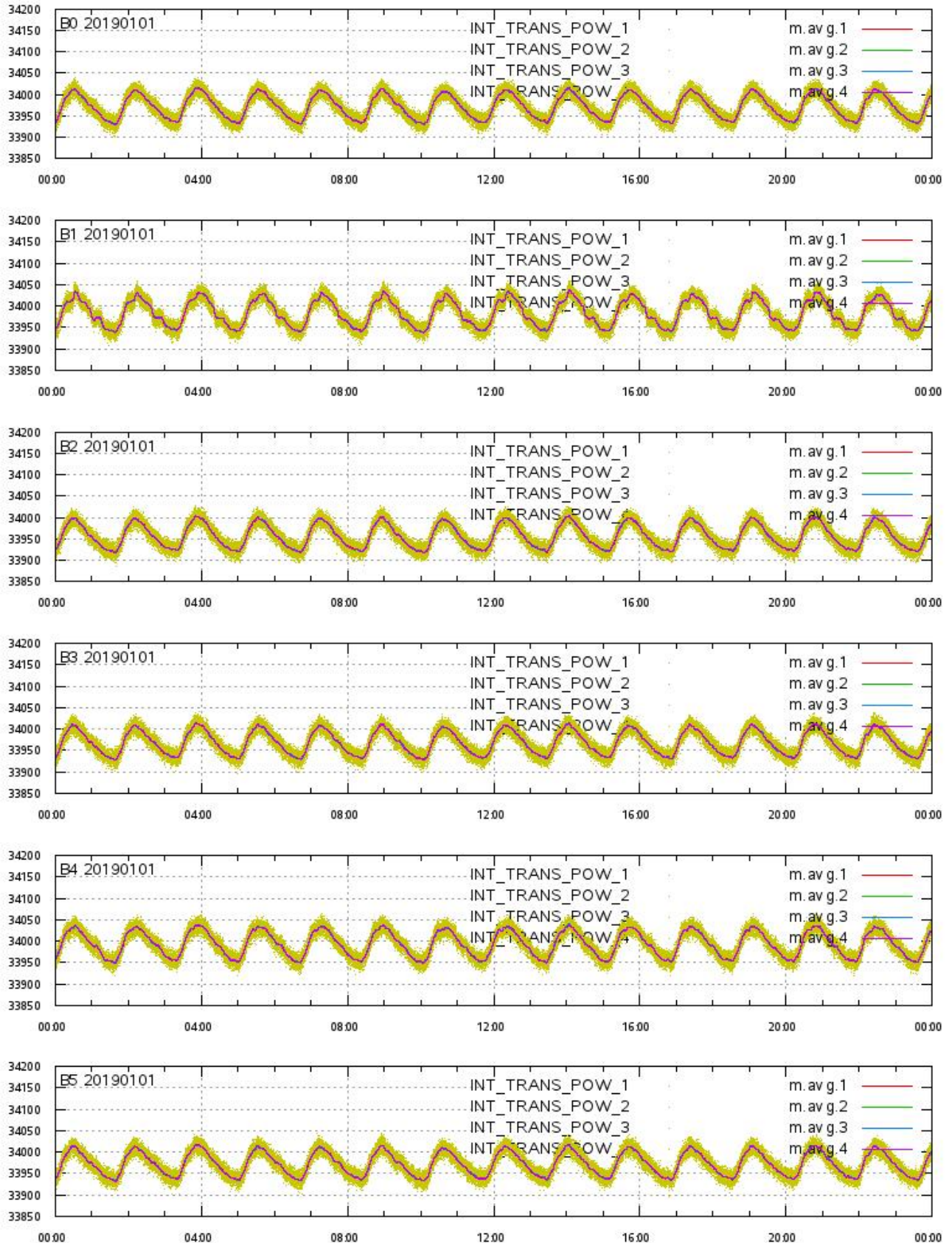
## L1A Product

### Echo Data Coverage maps



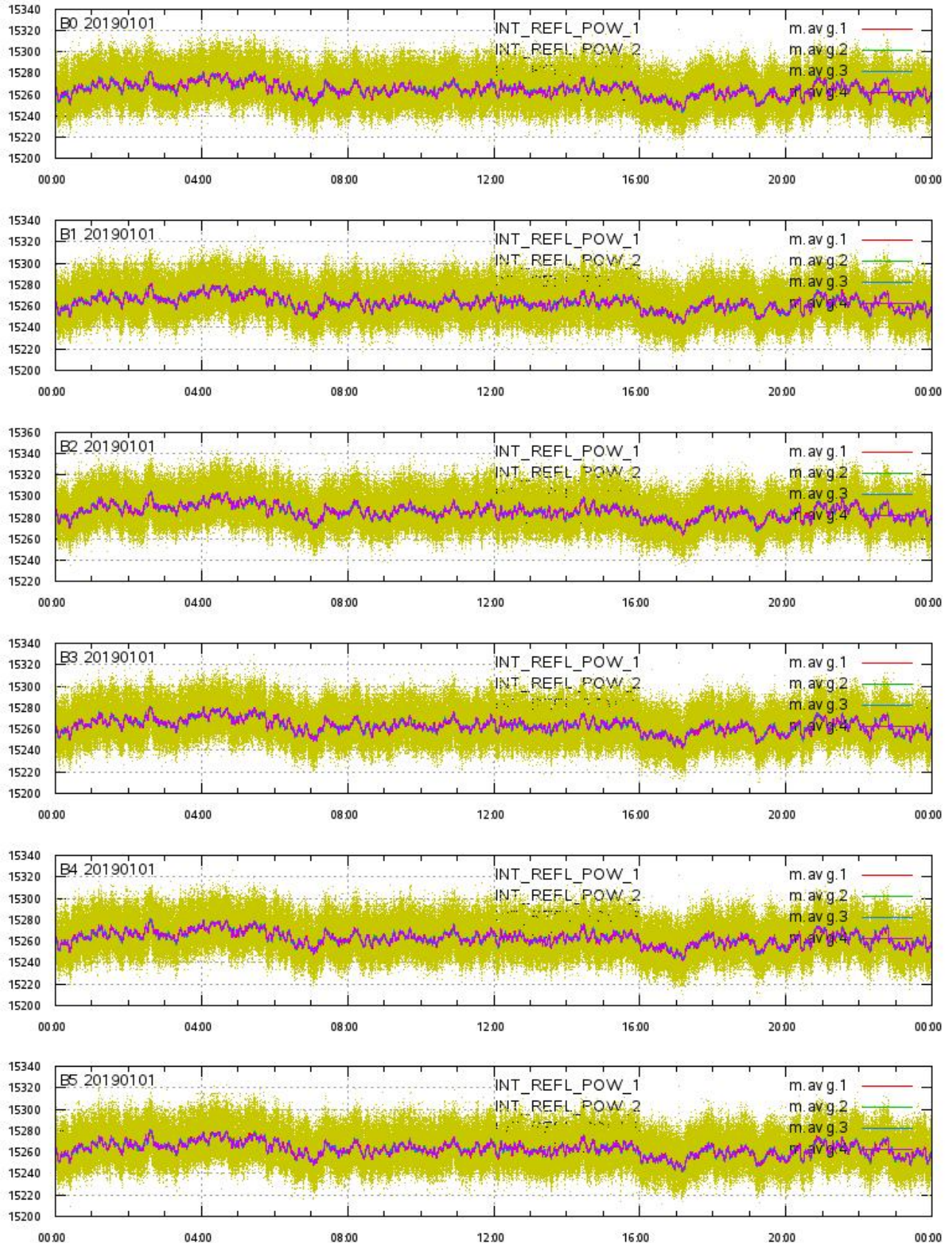
## L1A Product

Integrated Transmitted Powers 1-4 per beam 0-5 vs. UTC\_LOCALISATION



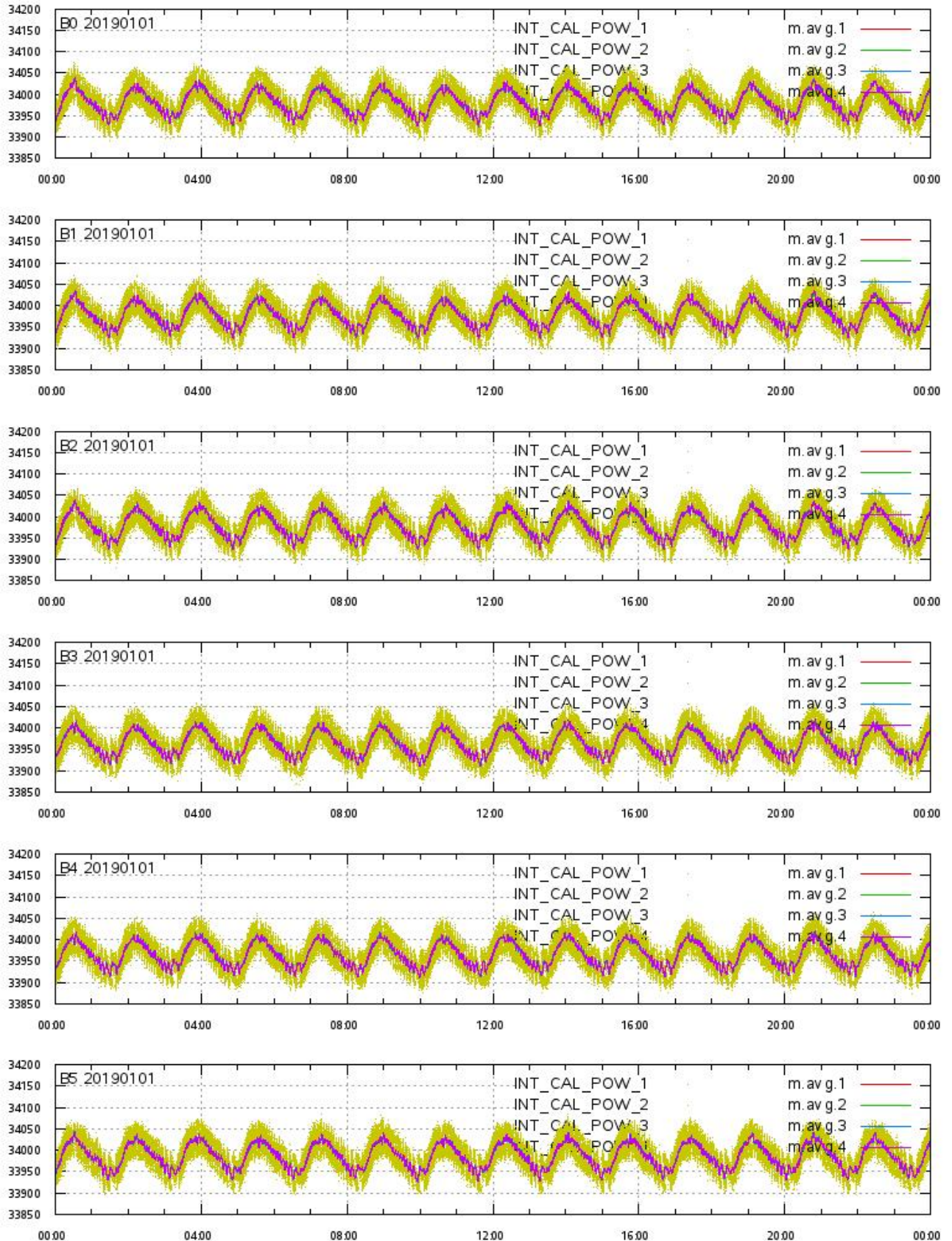
## L1A Product

Integrated Reflected Powers 1-4 per beam 0-5 vs. UTC\_LOCALISATION



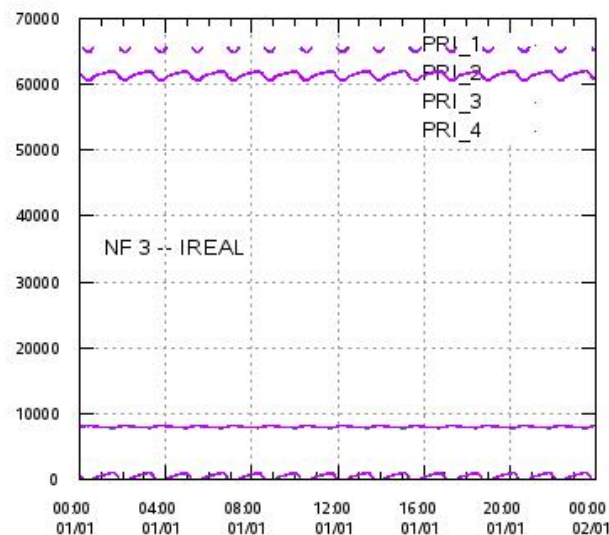
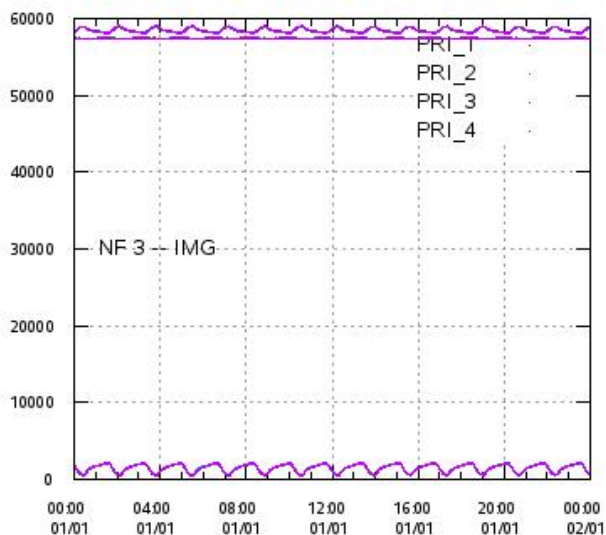
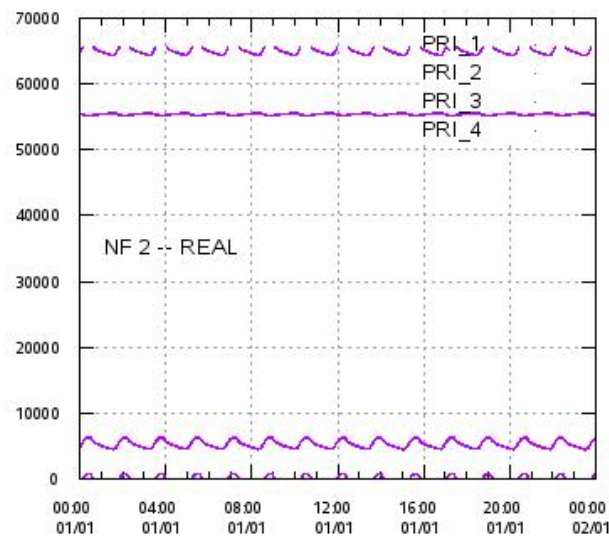
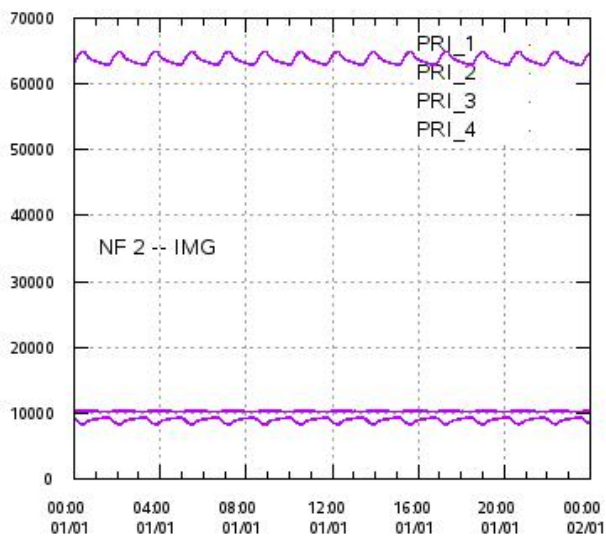
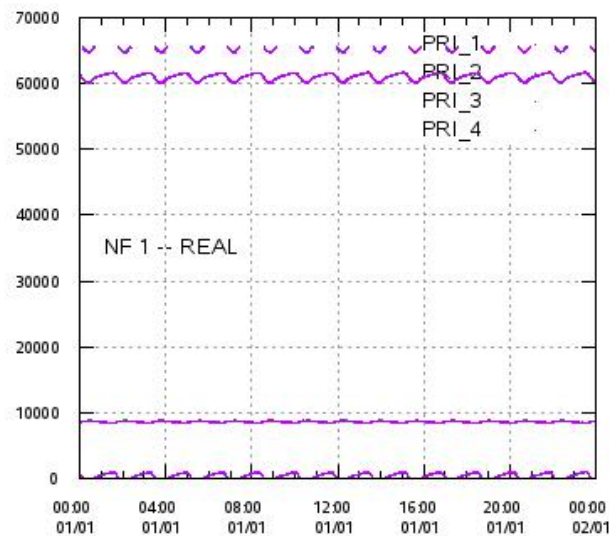
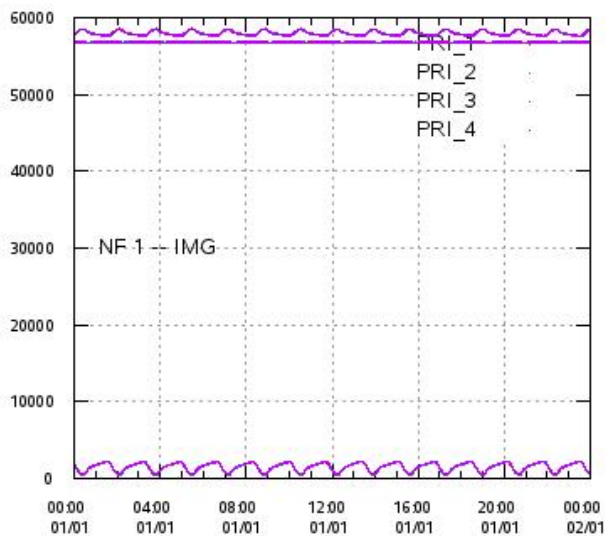
## L1A Product

### Integrated Calibration Powers 1-4 per beam 0-5 vs. UTC\_LOCALISATION



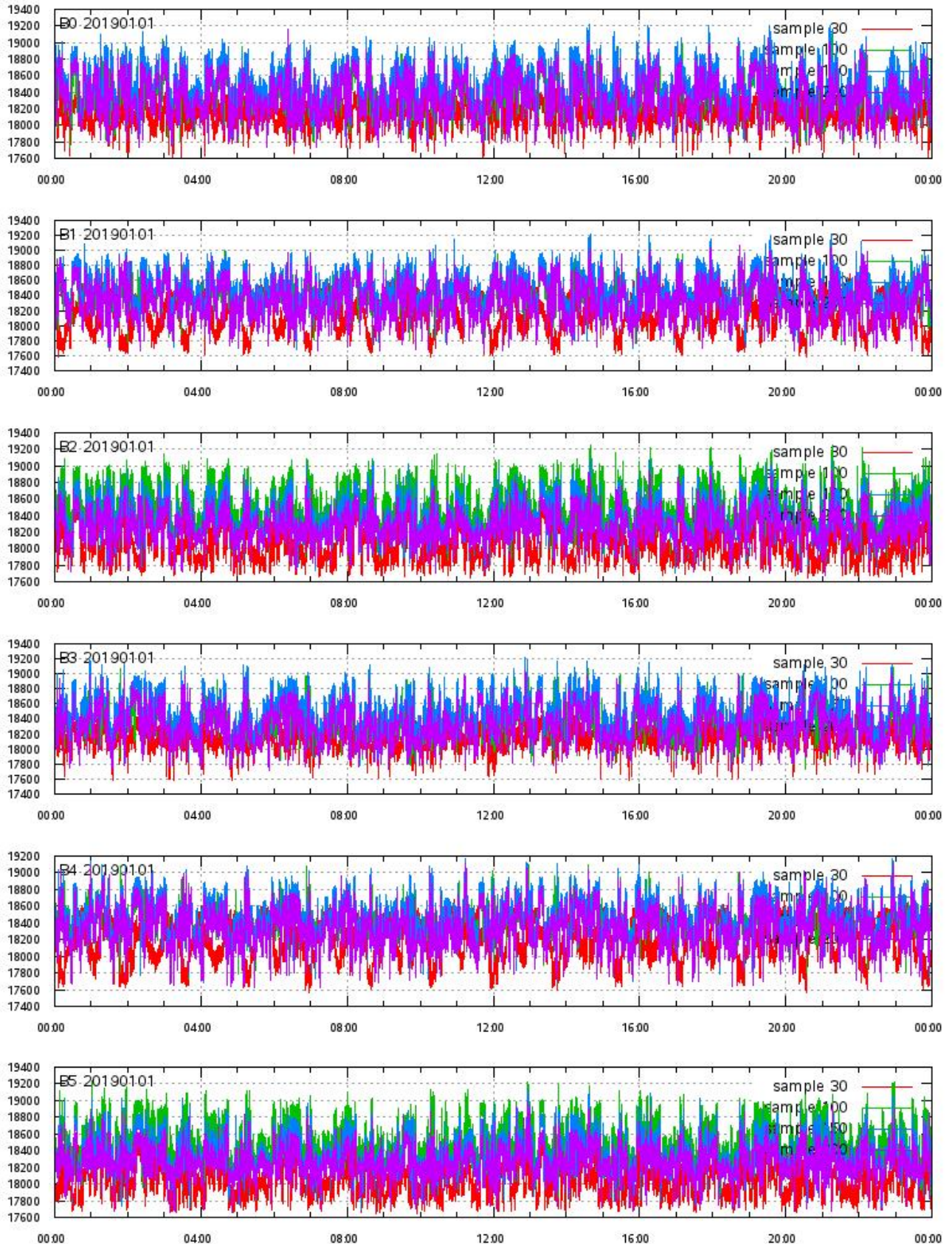
# L1A Product

## Calibration Powers vs. UTC\_LOCALISATION



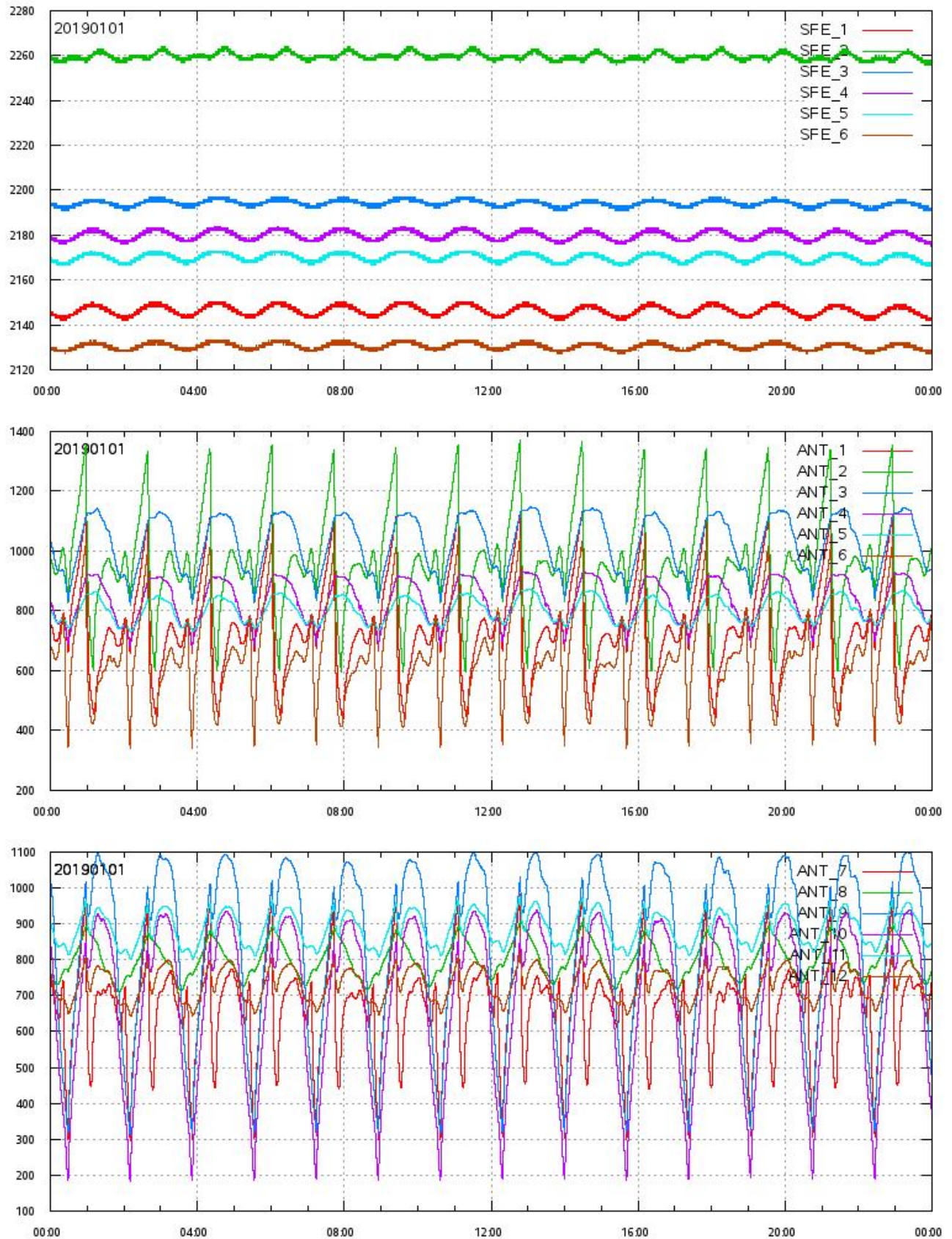
## L1A Product

ECHO DATA (raw) for samples 30, 100, 150 and 200 vs. UTC\_LOCALISATION



## L1A Product

SFE & ANT Temperatures (raw) vs. UTC\_LOCALISATION

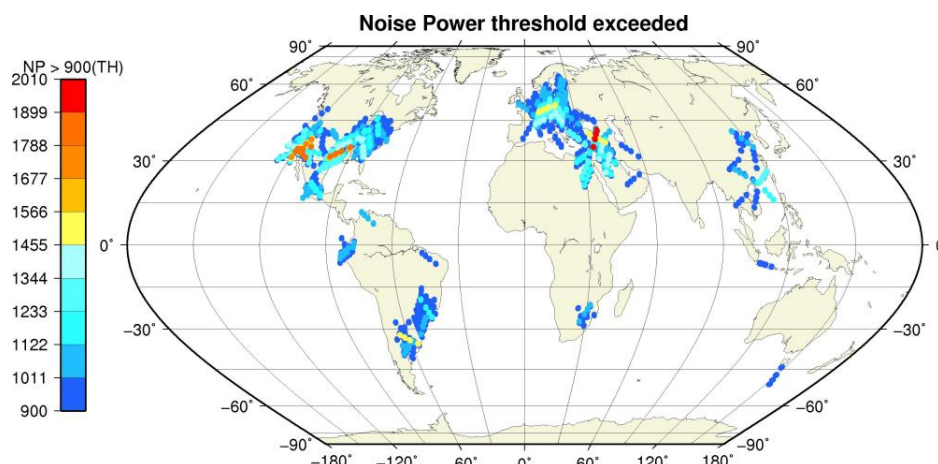
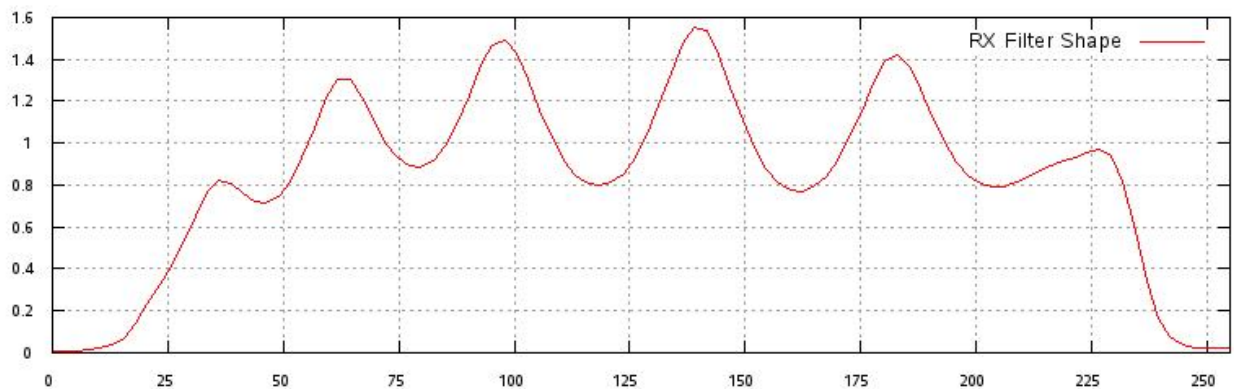
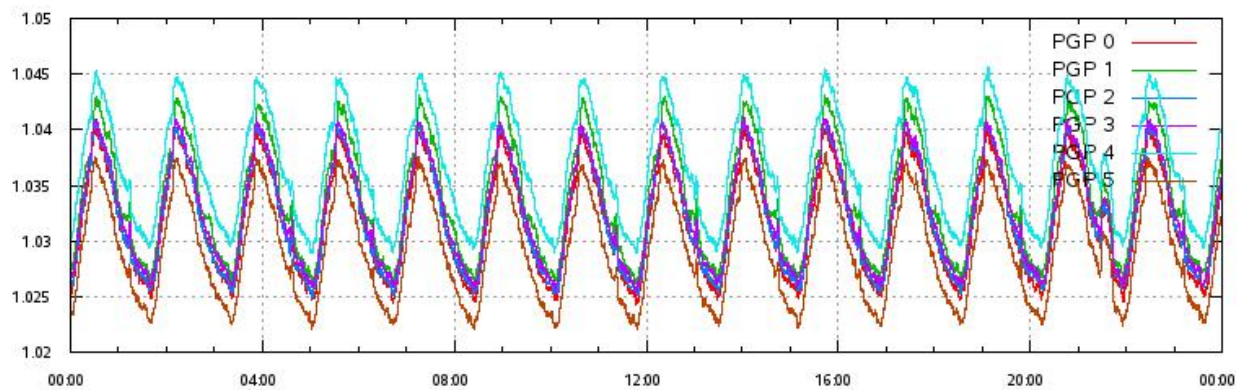
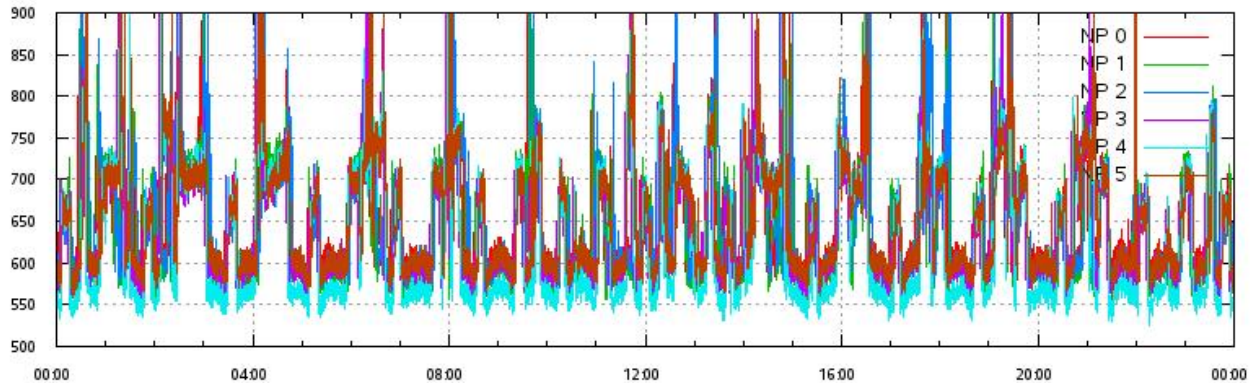


## L1A Product

Noise Power & Power Gain Product per beam 0-5 vs. UTC\_LOCALISATION

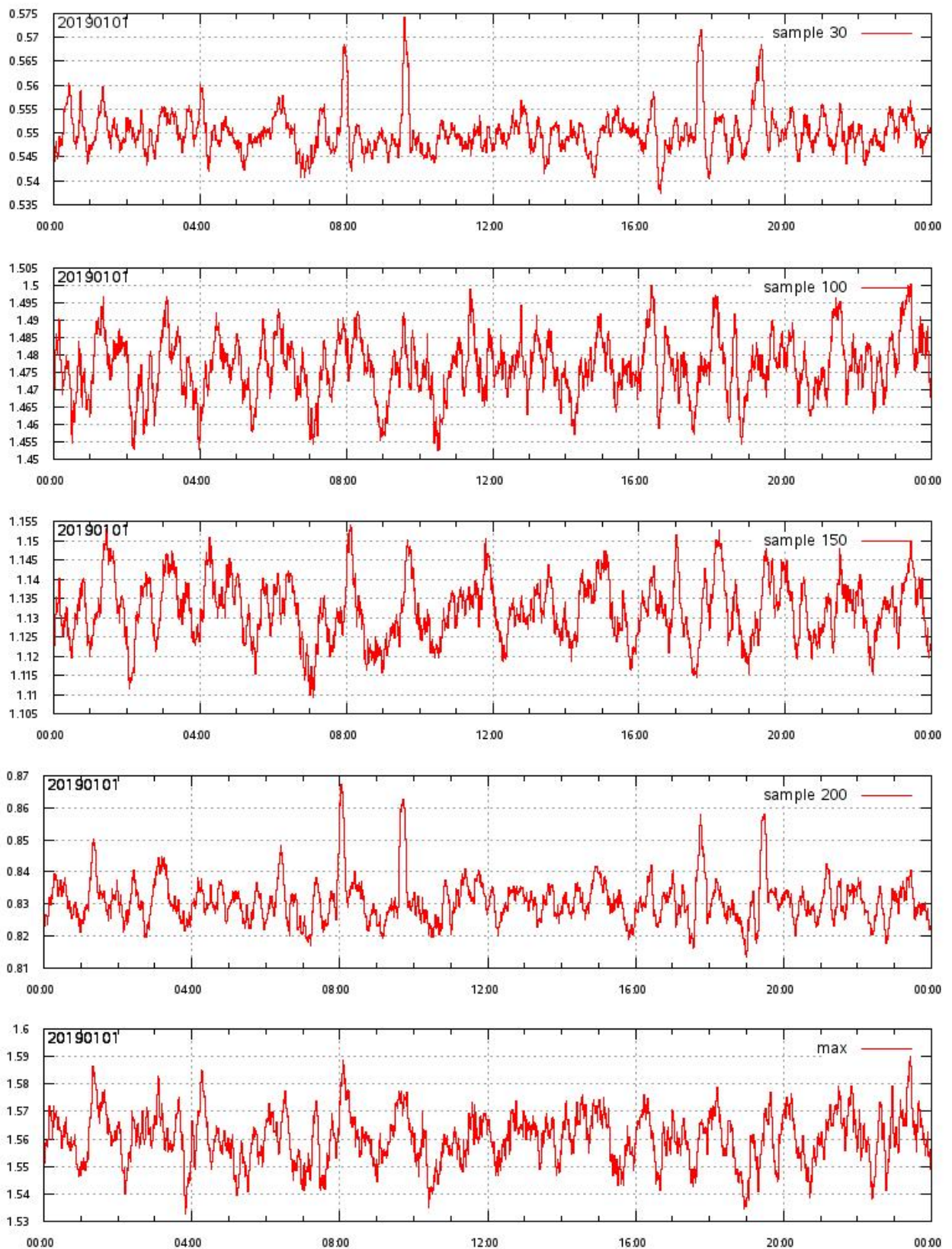
RX Filter Shape average over sample number

Noise Power threshold exceeded (TH=900) on map



## L1A Product

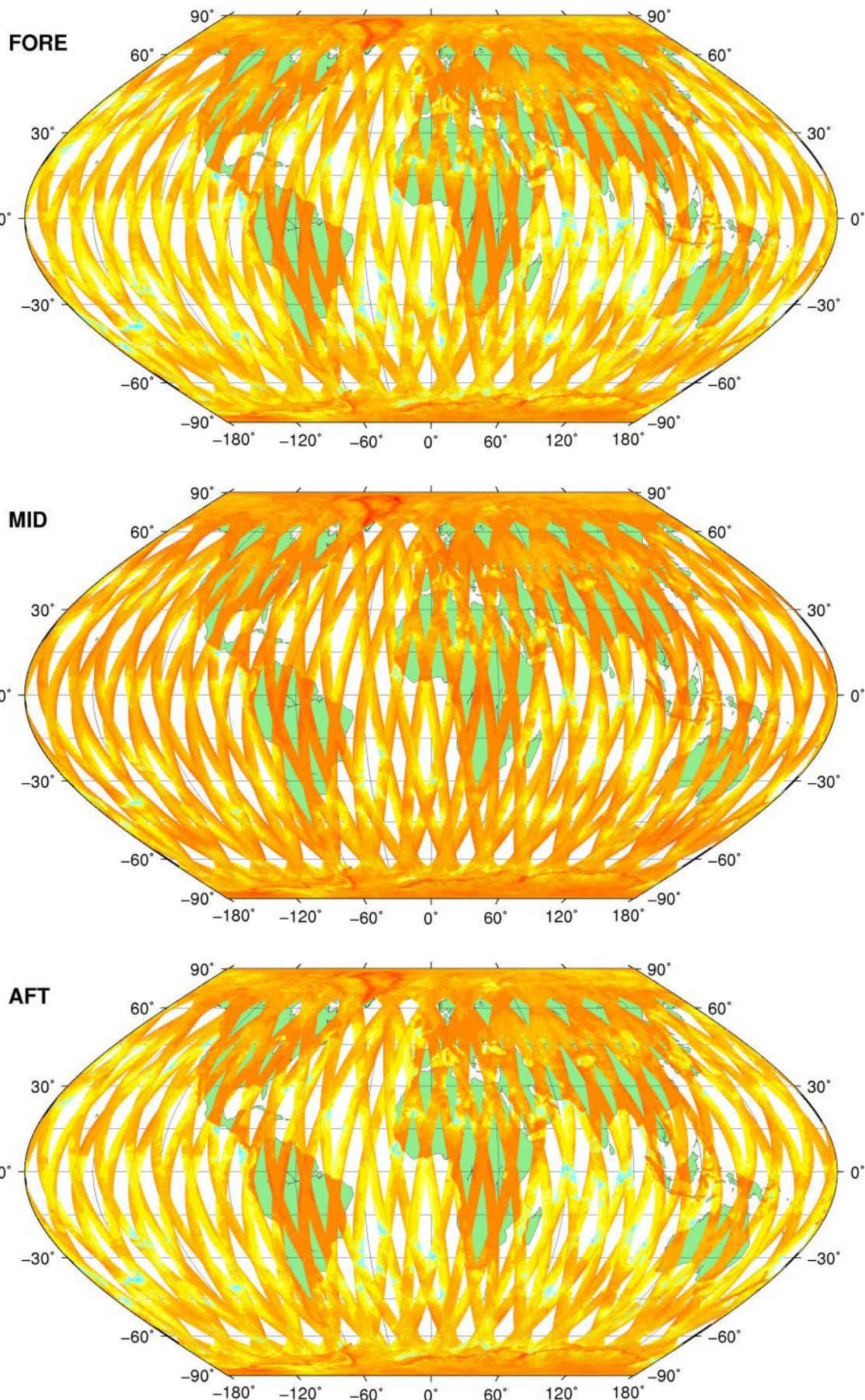
RX filter shape in detail for sample 30,100,150, 200 & max vs. UTC\_LOCALISATION



## SZO Product

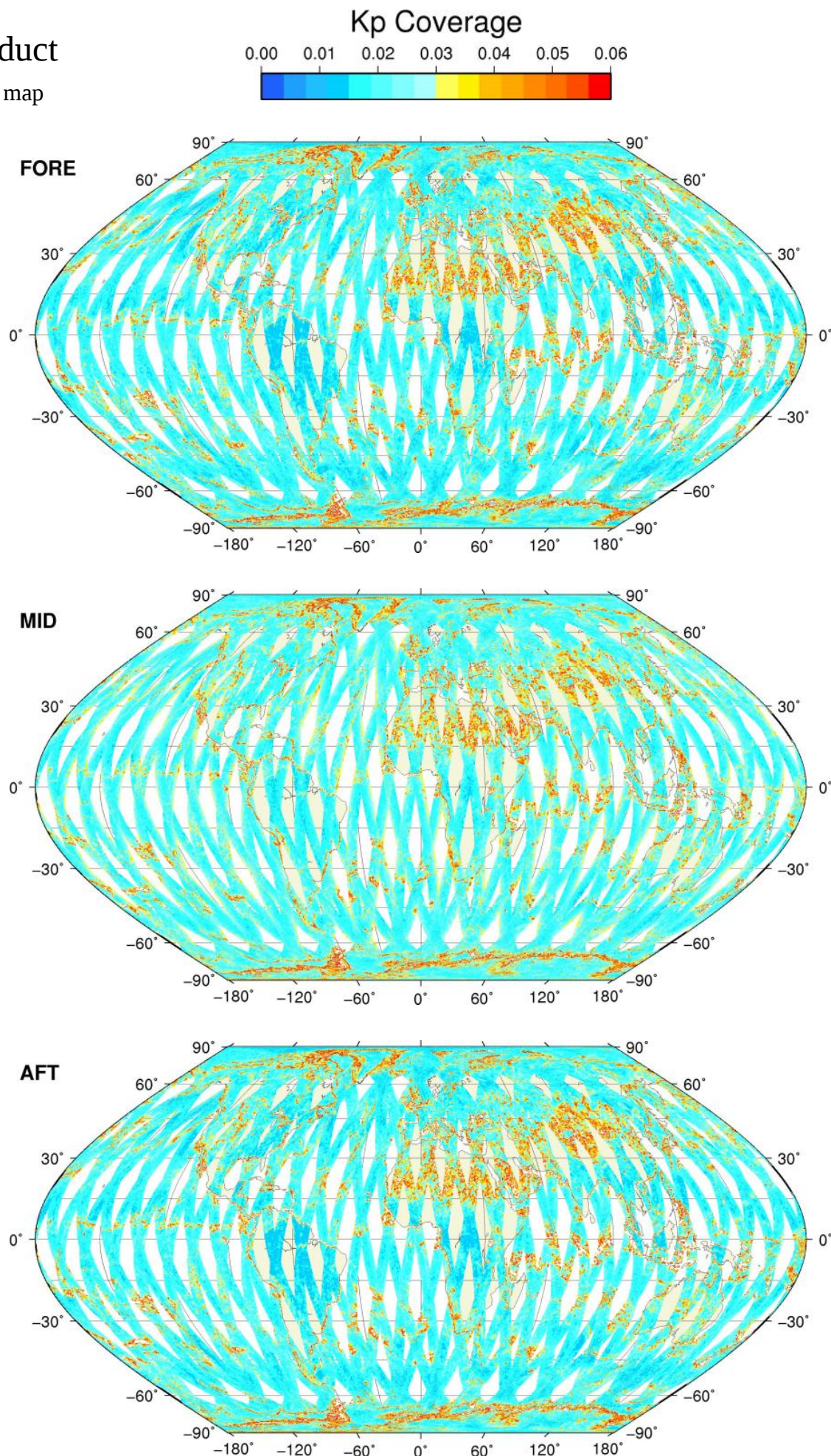
Sigma0\_TRIP Coverage map

SIGMA0\_TRIP Coverage



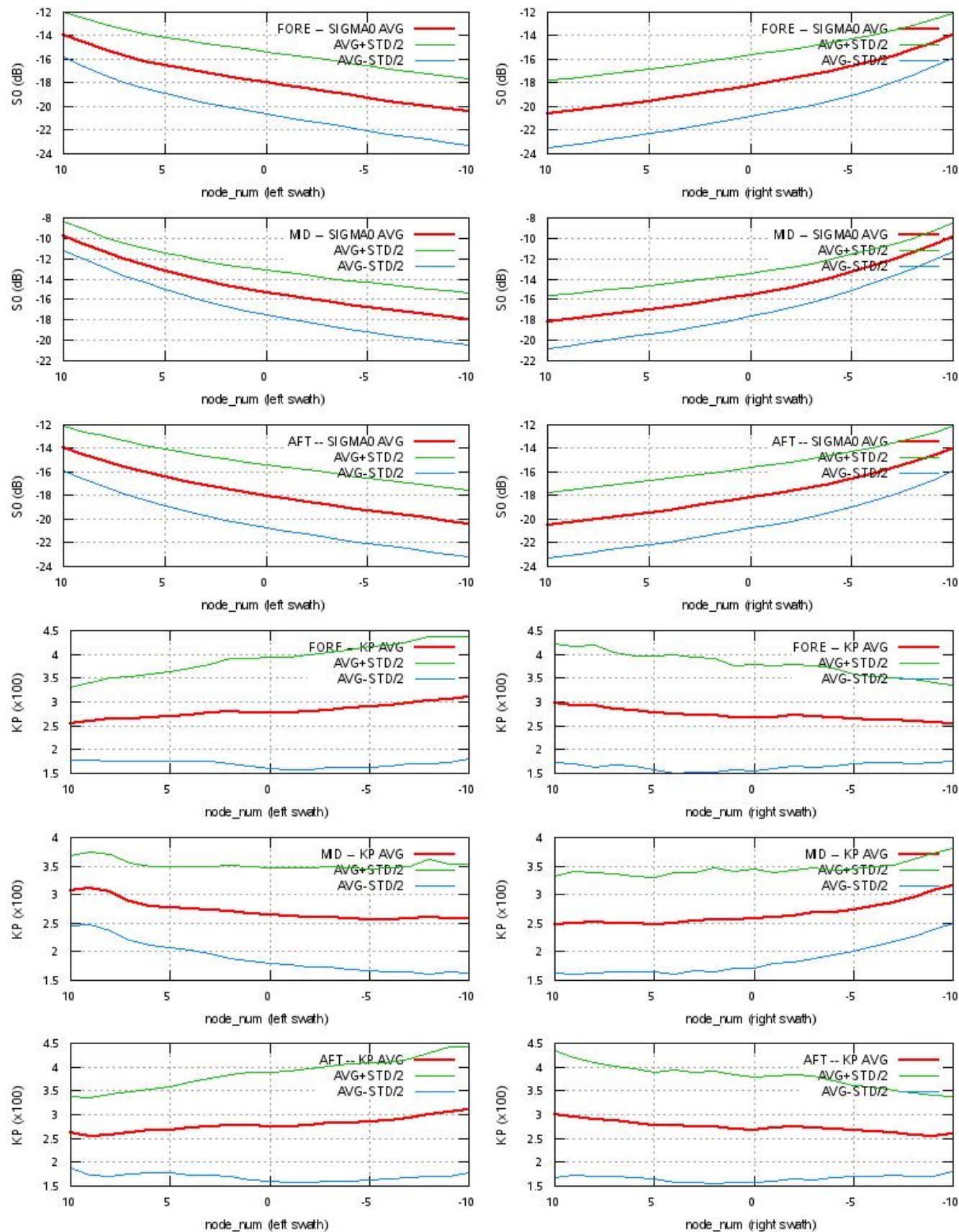
## SZO Product

Kp Coverage map



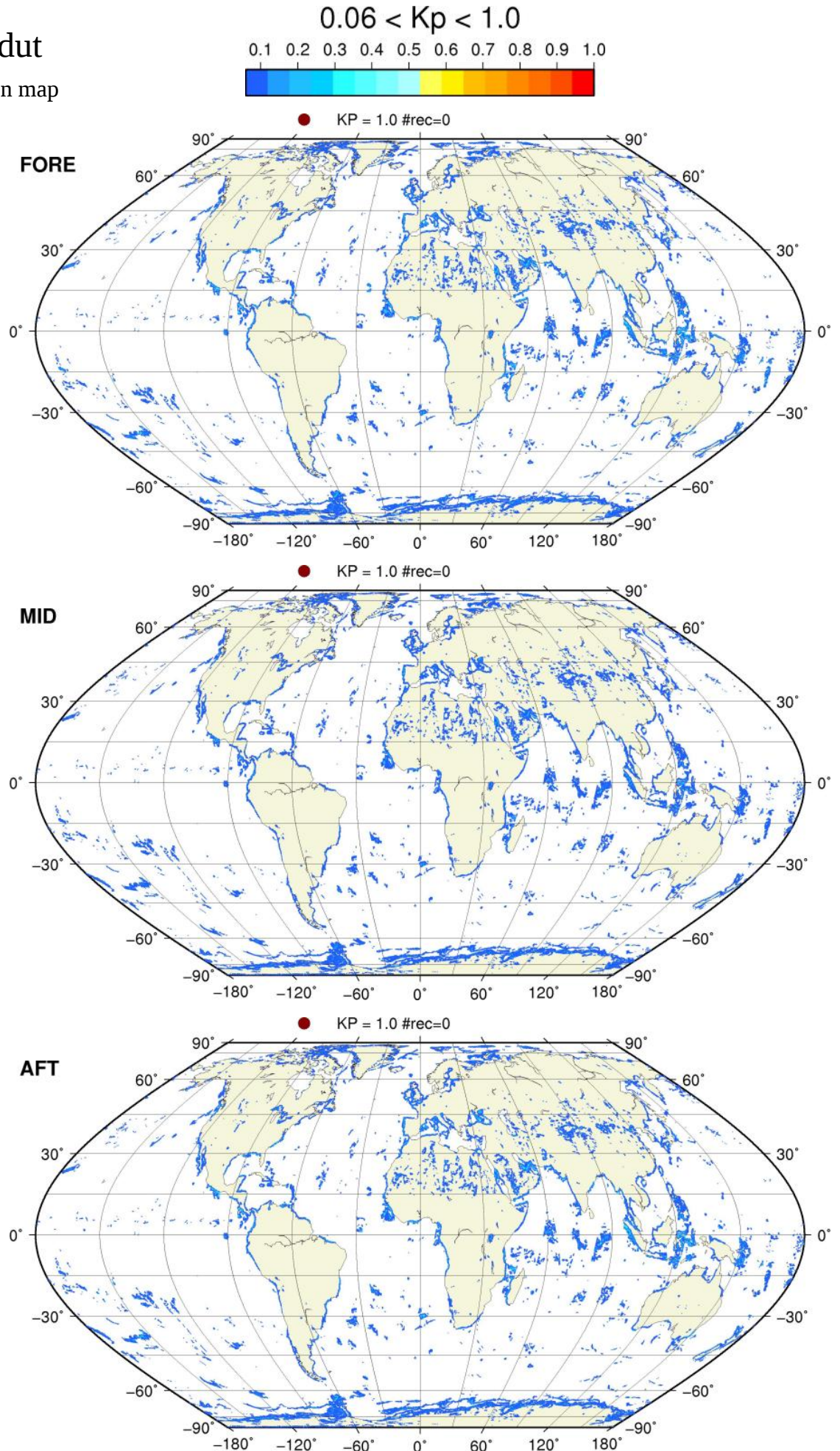
# SZO Product

## S0 - Kp Statistics



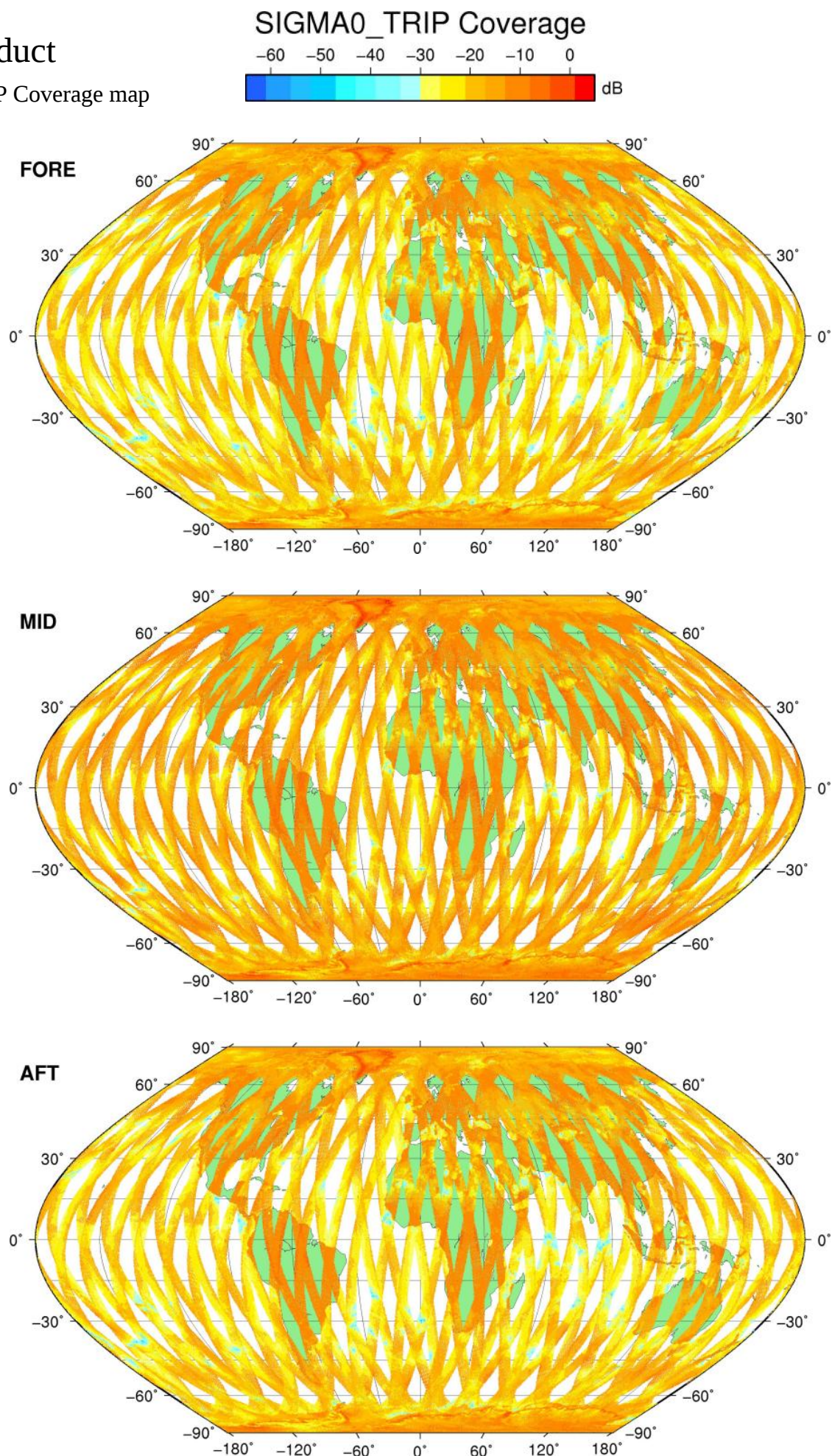
## SZO Product

Kp Outliers on map



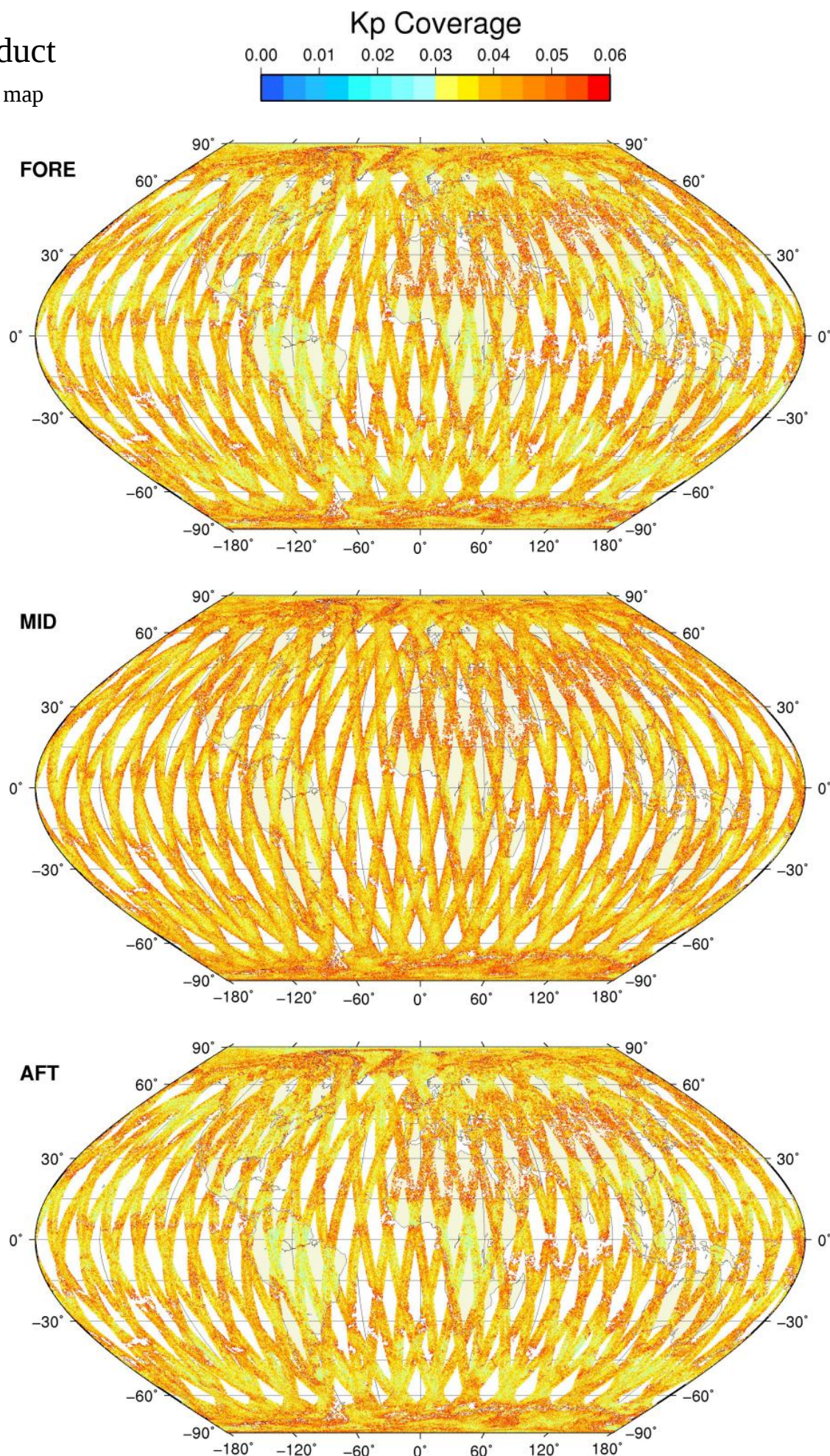
## SZR Product

Sigma0\_TRIP Coverage map



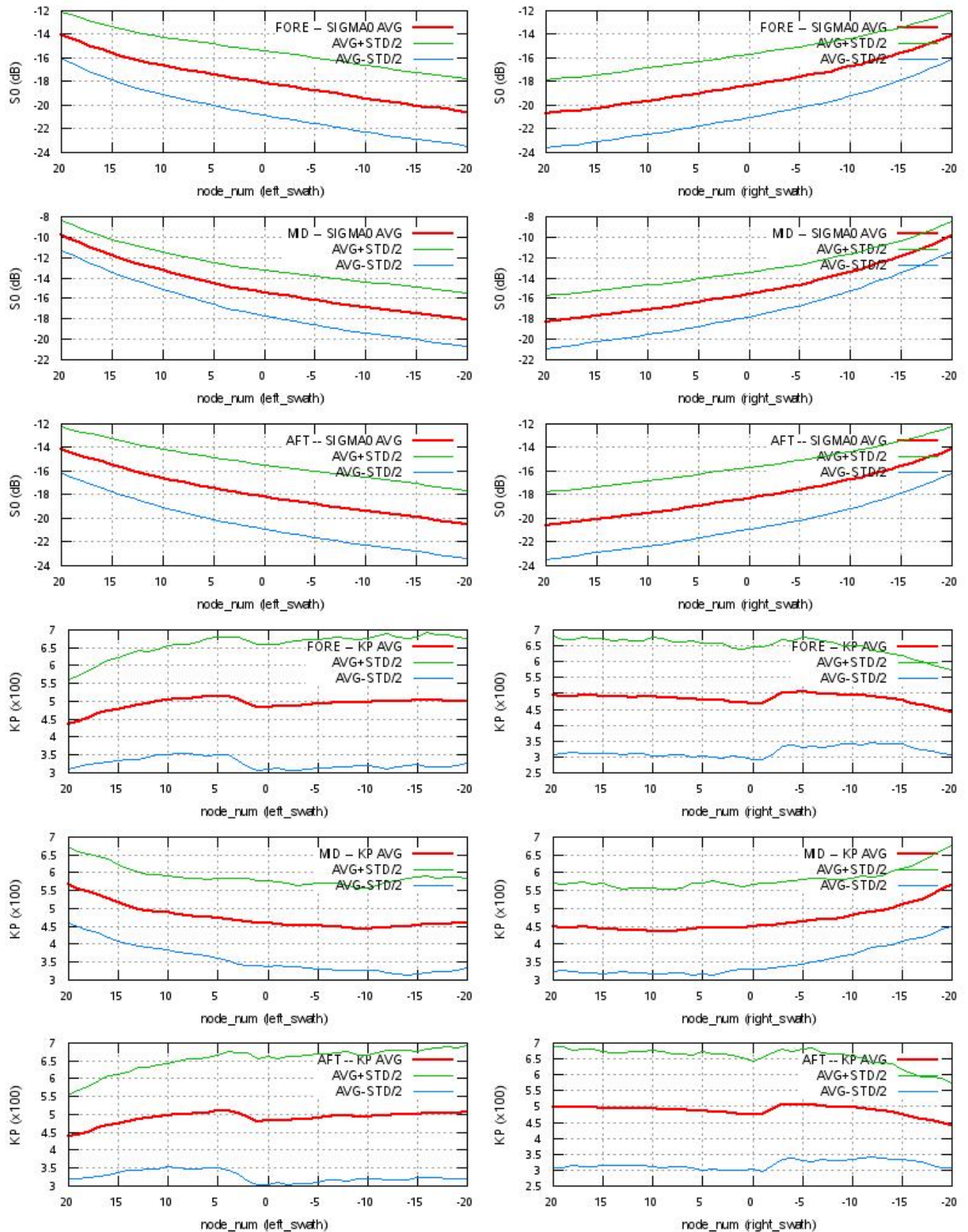
## SZR Product

Kp Coverage map



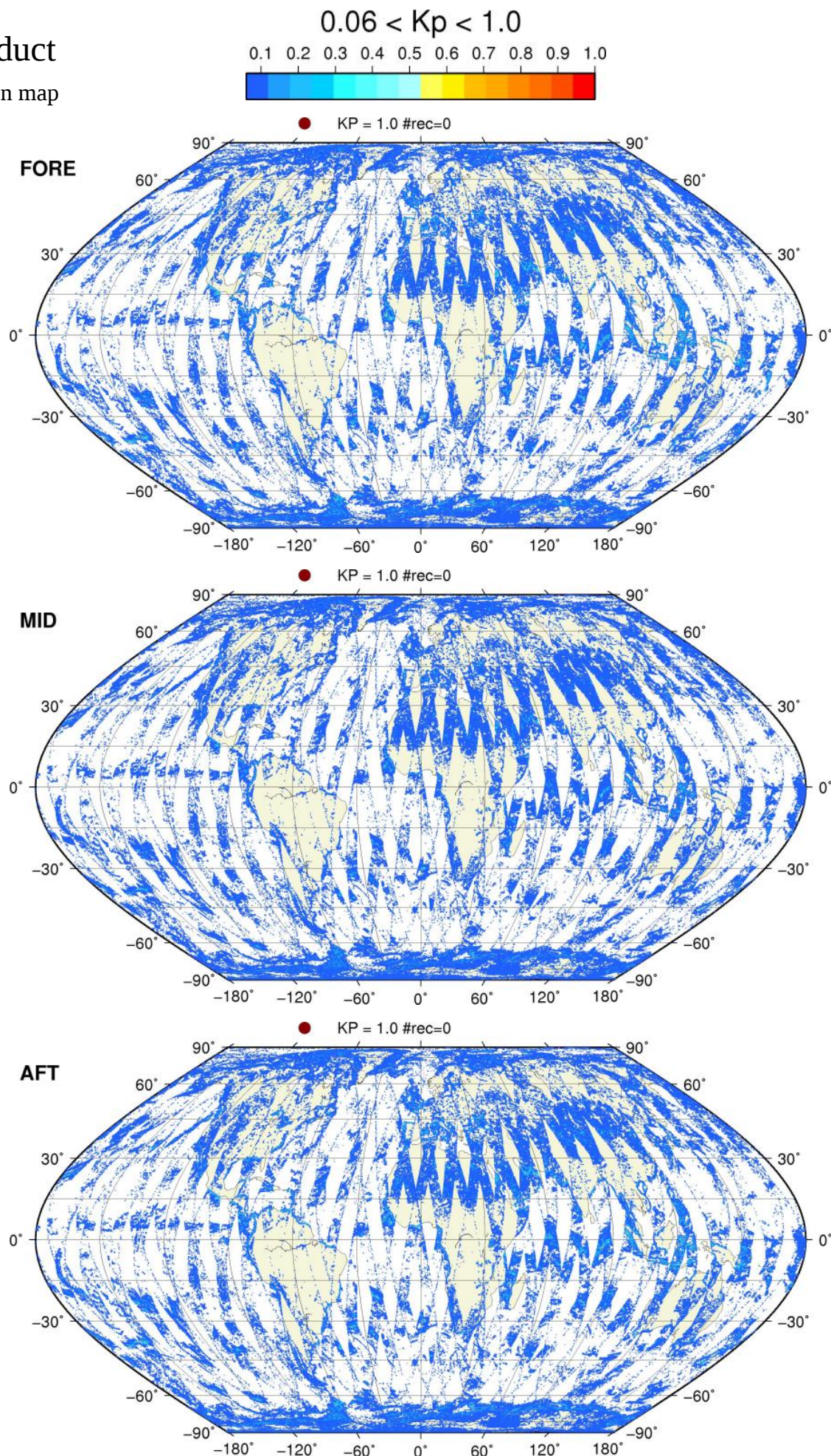
# SZR Product

## S0 - Kp Statistics



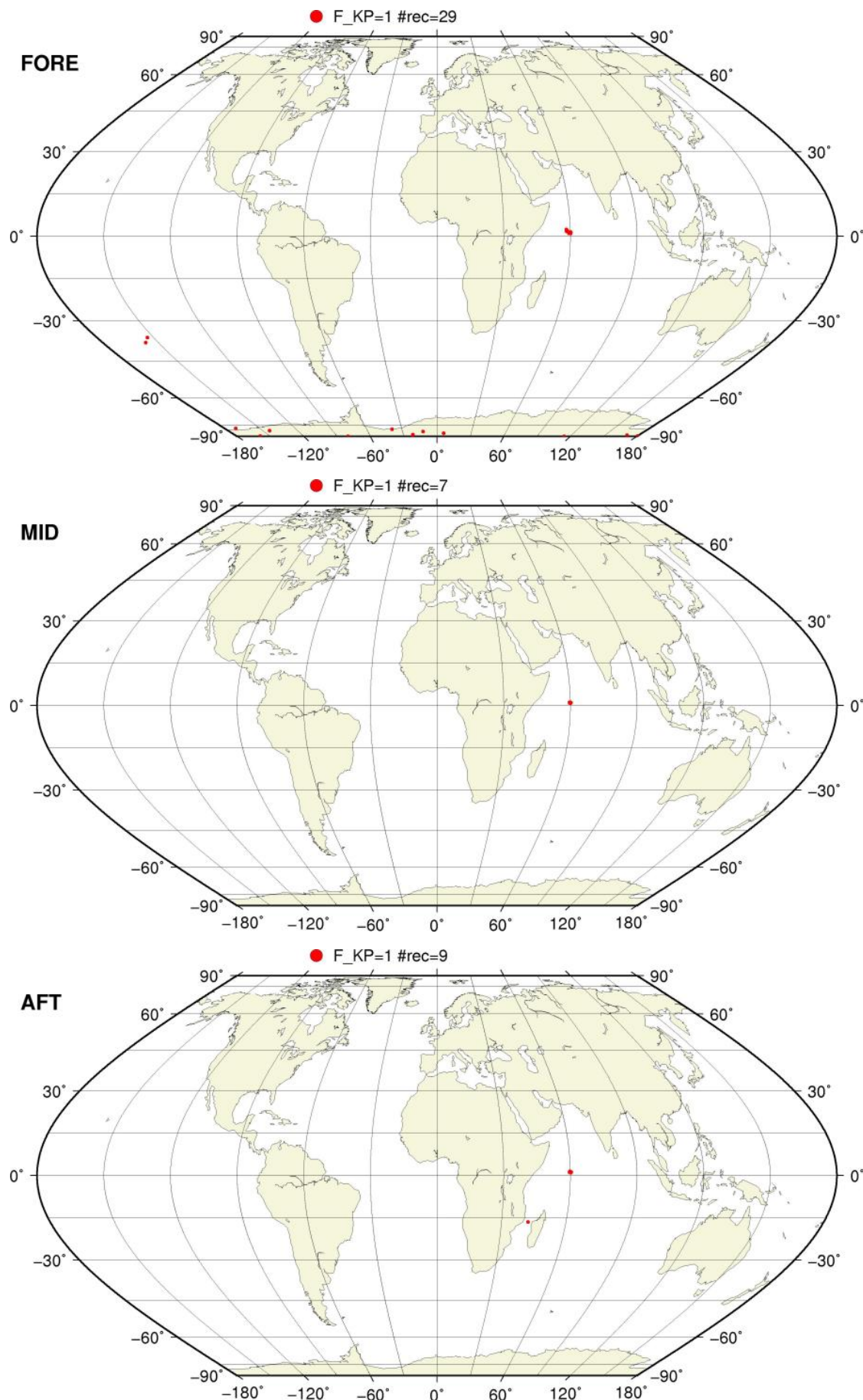
# SZR Product

Kp Outliers on map



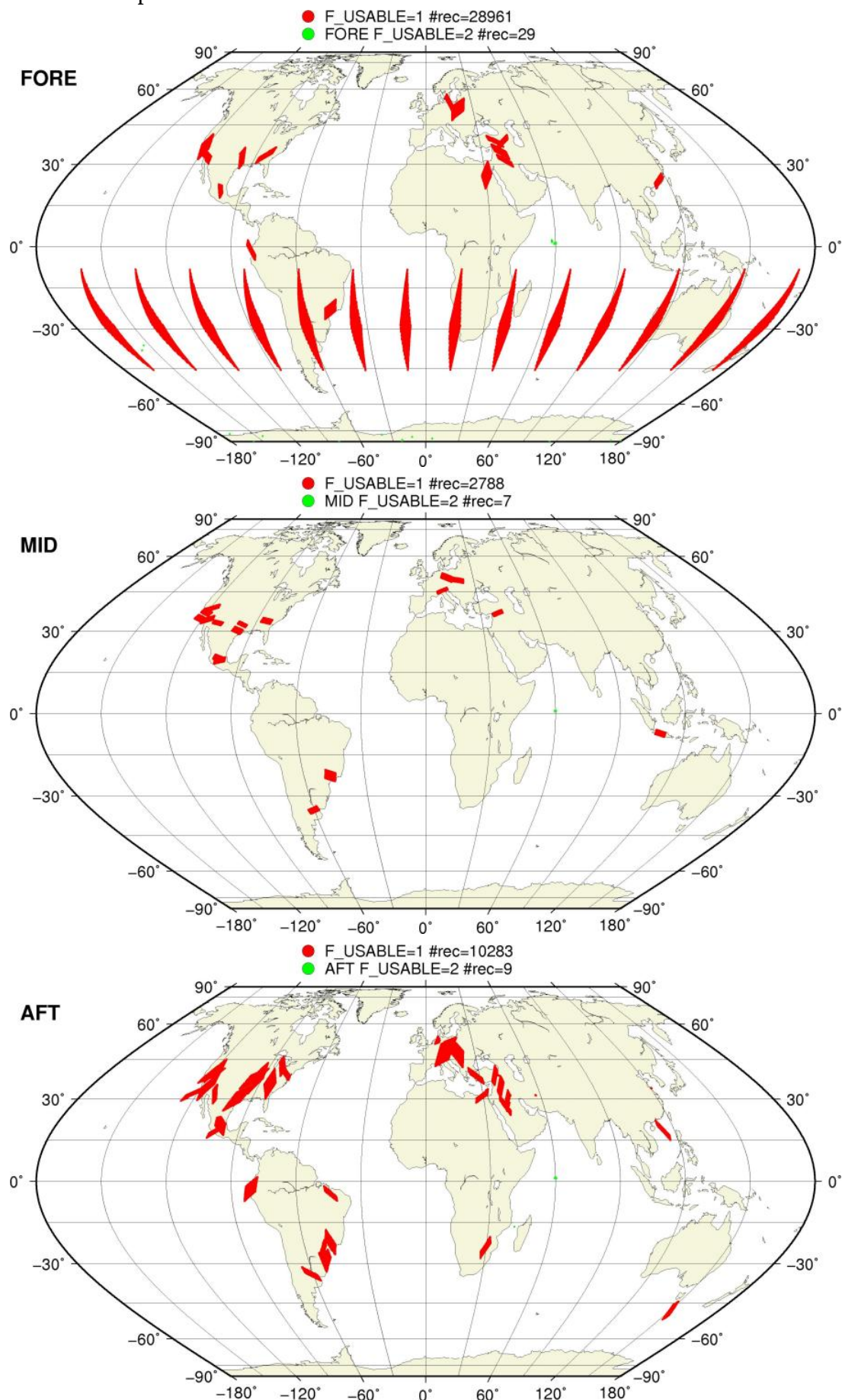
## SZO Flagged Data Coverage

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

$0 < F_F \leq 1$

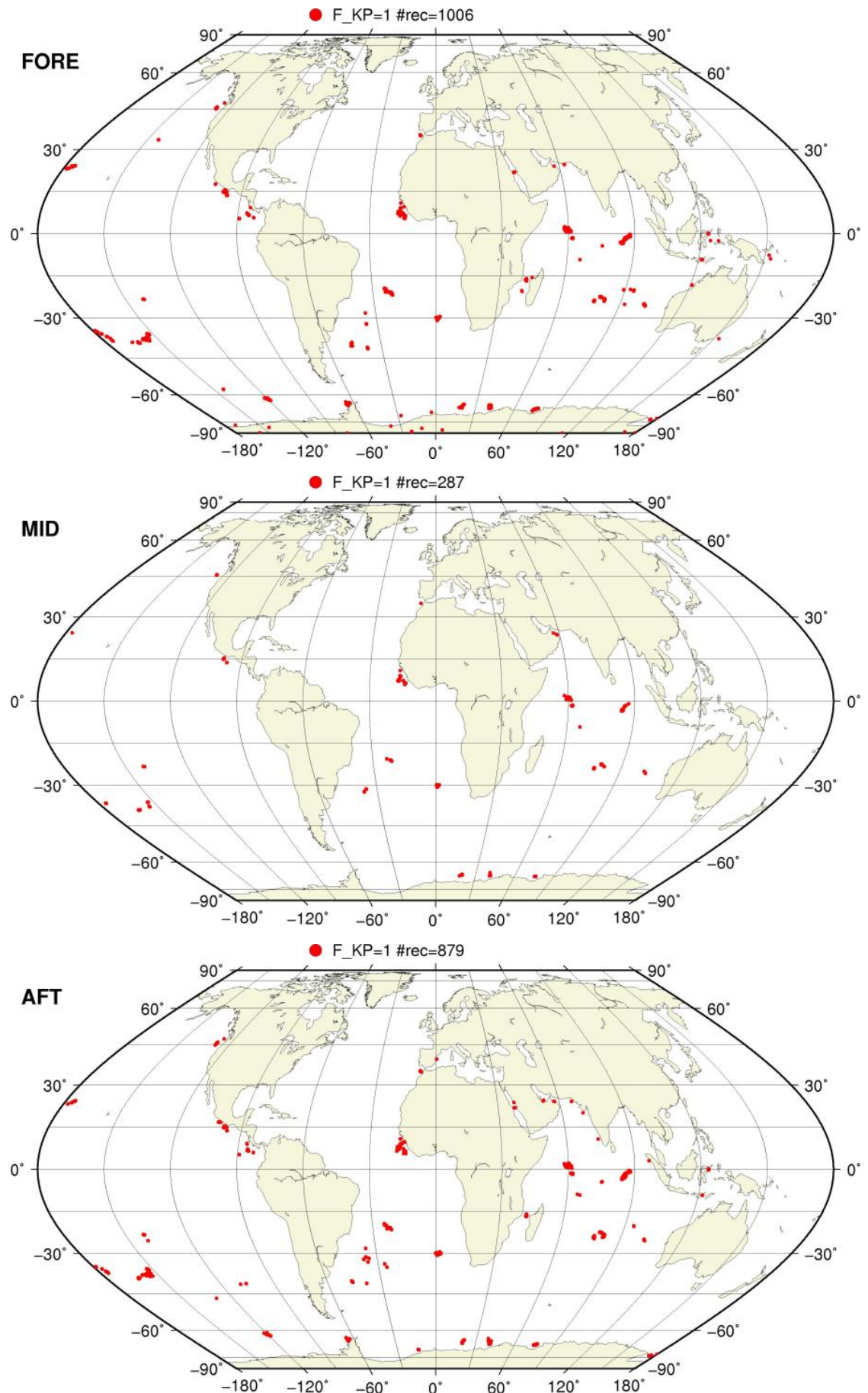


$0 < F_V \leq 1$



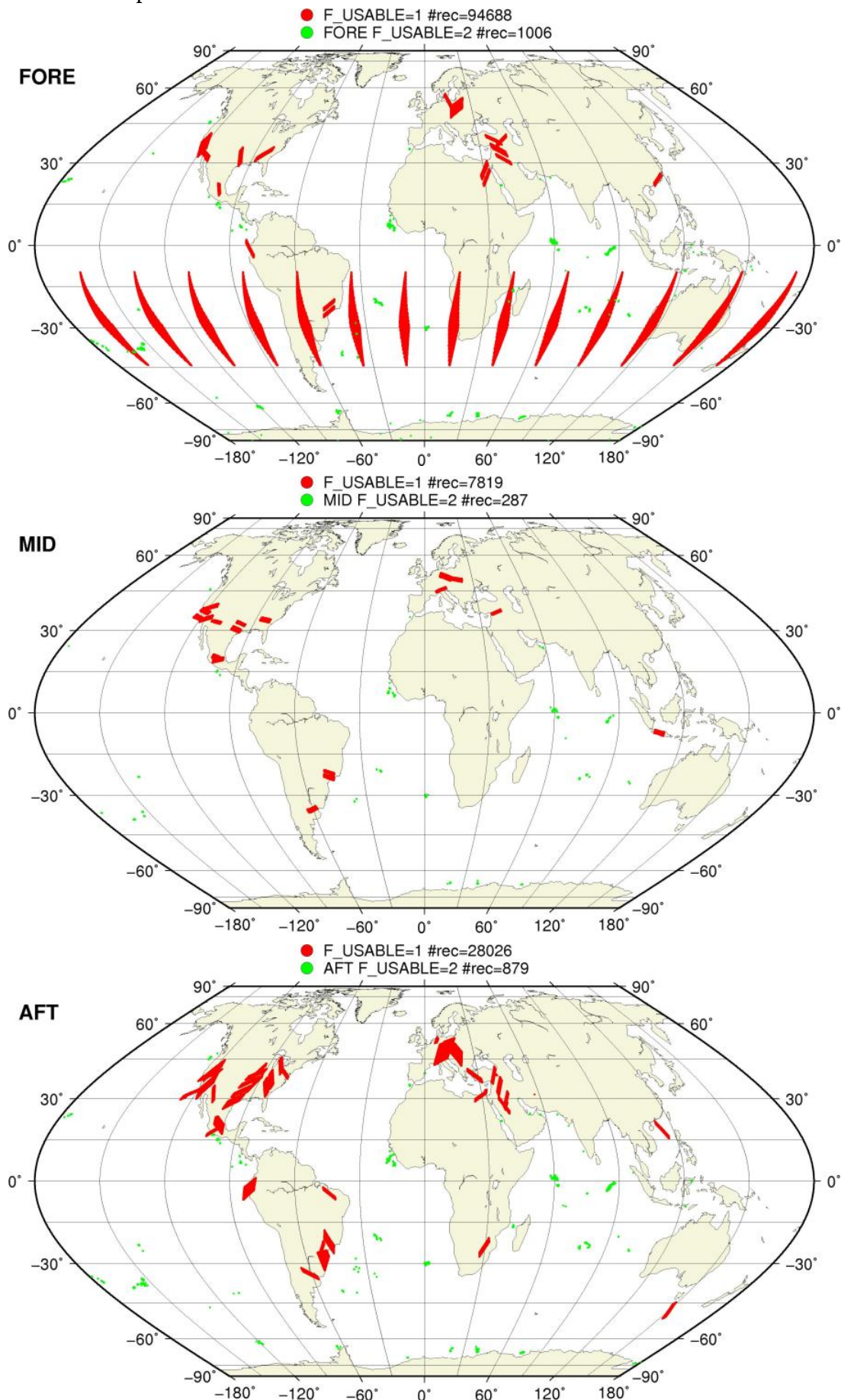
## SZR Flagged Data Coverage

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

$0 < F_F \leq 1$



$0 < F_V \leq 1$

