

# ASCAT DAILY Report

**Metop-A**

**OPE**

**DAY 2021\_235**

**20210823000000 - 20210823235959**

## DATA STATISTICS

BASED ON ORBITS (#14)

77020 77021 77022 77023 77024 77025 77026 77027 77028 77029 77030 77031 77032  
77033 77034

DB STATISTICS : OPE M02\_20210823

|         |       |      |      |       |
|---------|-------|------|------|-------|
| SMO 477 | 2.35  | .64  | 1.08 | 5.15  |
| SMR 476 | 5.73  | 1.21 | 3.32 | 11.26 |
| SZF 463 | 1.35  | 1.90 | .37  | 30.13 |
| xxx 475 | 30.97 | 6.20 | 1.29 | 46.70 |

INGATE (STORE) STATISTICS : OPE M02\_20210823

|        |                                       |                                   |
|--------|---------------------------------------|-----------------------------------|
| xxx_1A | /fbf/tcdras/store/gs1/ASCA_xxx_1A_M02 | -- number of files (xxx_1A) : 478 |
| SZ0_1B | /fbf/tcdras/store/gs1/ASCA_SZ0_1B_M02 | -- number of files (SZ0_1B) : 478 |
| SZR_1B | /fbf/tcdras/store/gs1/ASCA_SZR_1B_M02 | -- number of files (SZR_1B) : 478 |
| SZF_1B | /fbf/tcdras/store/gs1/ASCA_SZF_1B_M02 | -- number of files (SZF_1B) : 478 |
| SMO_02 | /fbf/tcdras/store/gs1/ASCA_SMO_02_M02 | -- number of files (SMO_02) : 478 |
| SMR_02 | /fbf/tcdras/store/gs1/ASCA_SMR_02_M02 | -- number of files (SMR_02) : 478 |

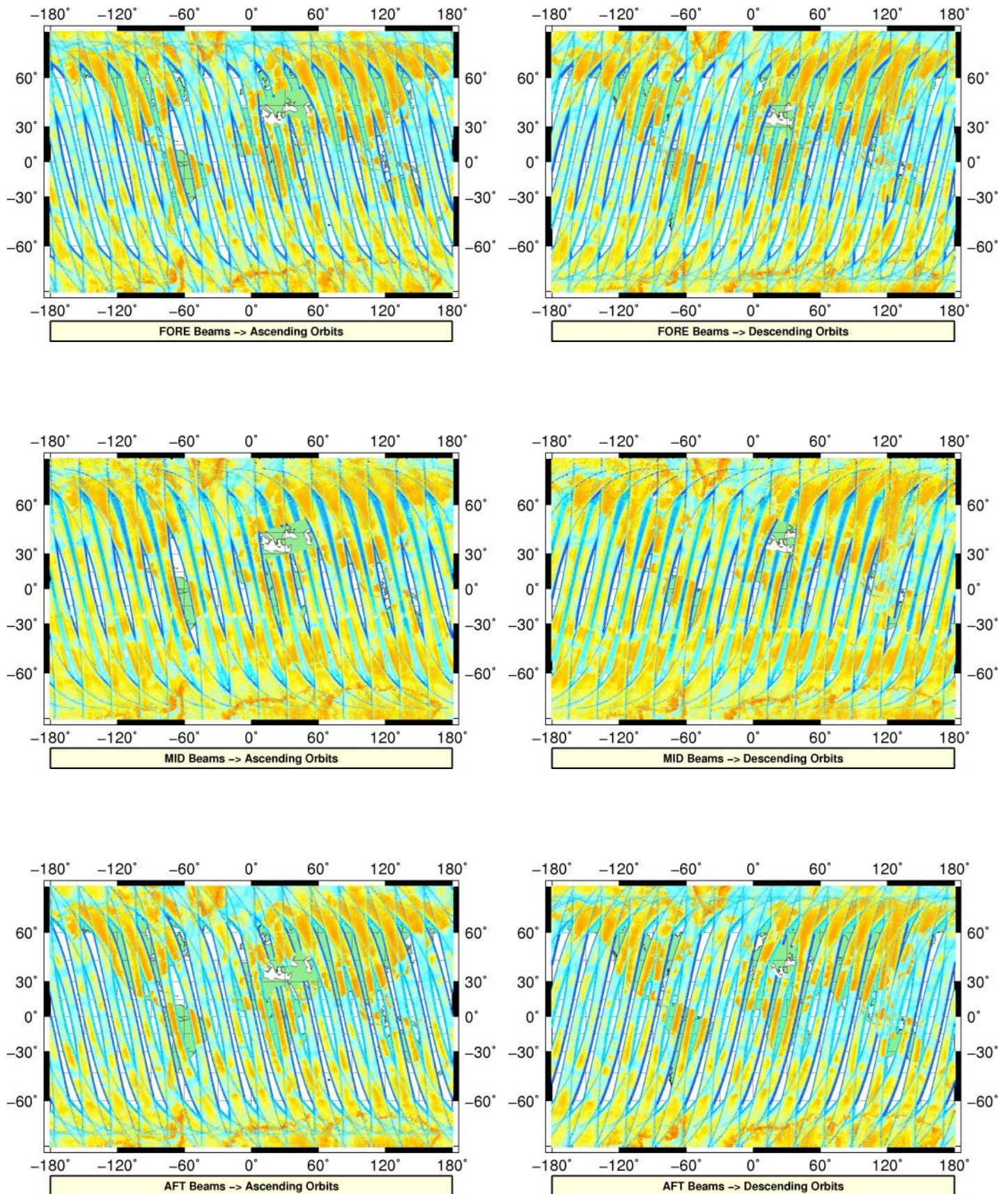
# Overview

## Configuration and SPHR content

| Parameter                | Value                                                         |
|--------------------------|---------------------------------------------------------------|
| SENSING START-STOP       | 20210823000000 - 20210823235959                               |
| 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                | 599182                                                        |
| N_L1A_MDR_B0             | 99865                                                         |
| N_L1A_MDR_B1             | 99866                                                         |
| N_L1A_MDR_B2             | 99863                                                         |
| N_L1A_MDR_B3             | 99863                                                         |
| N_L1A_MDR_B4             | 99863                                                         |
| N_L1A_MDR_B5             | 99862                                                         |
| N_GAPS                   | 66                                                            |
| TOTAL_GAPS_SIZE          | 23129919                                                      |
| N_HKTM_PACKETS_RECEIVED  | 15992                                                         |
| 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                   | 1087771                                                       |
| N_F_LAND                 | 47246401                                                      |
| N_F_GEO                  | 3221332                                                       |
| 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

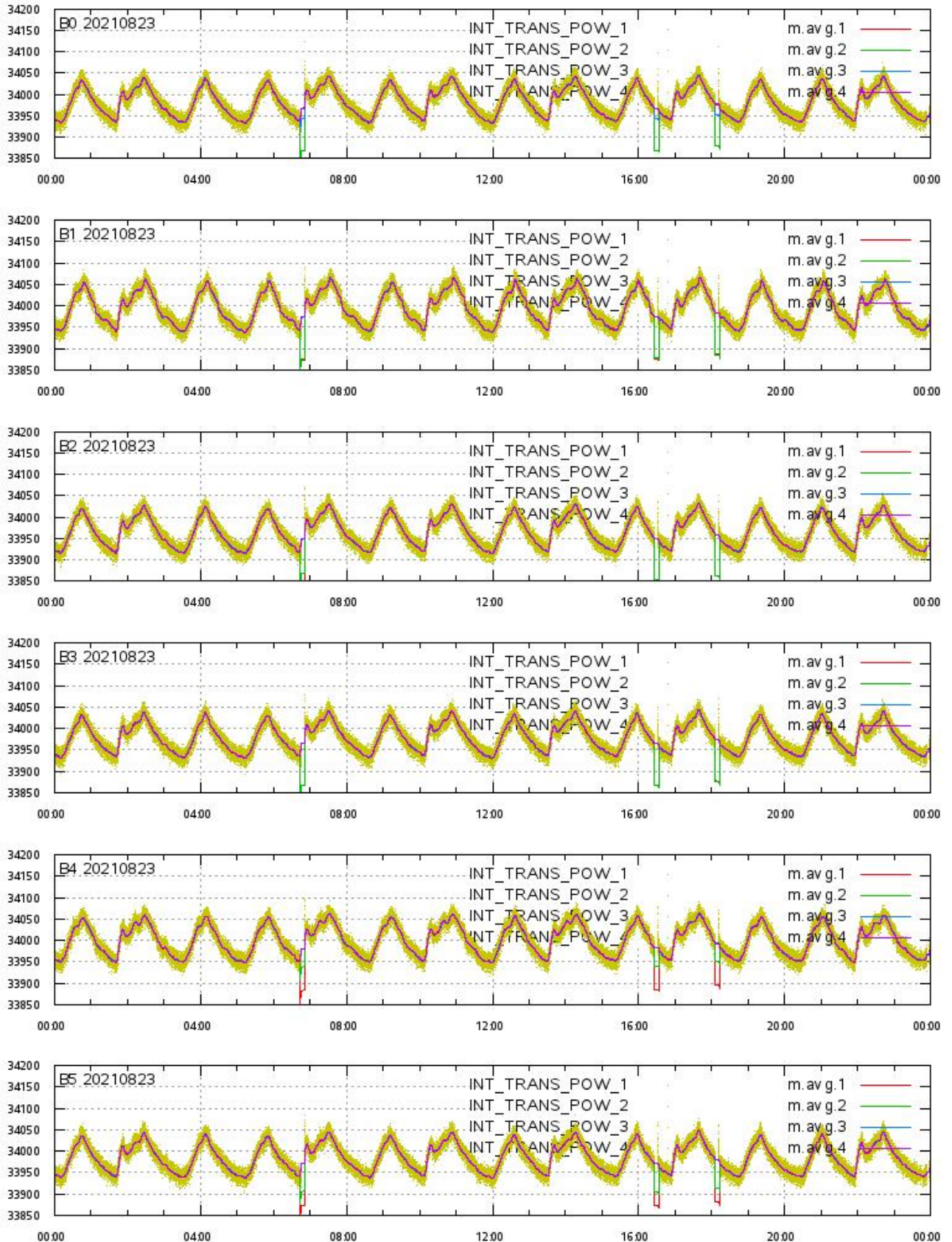
### Echo Data Coverage maps





## L1A Product

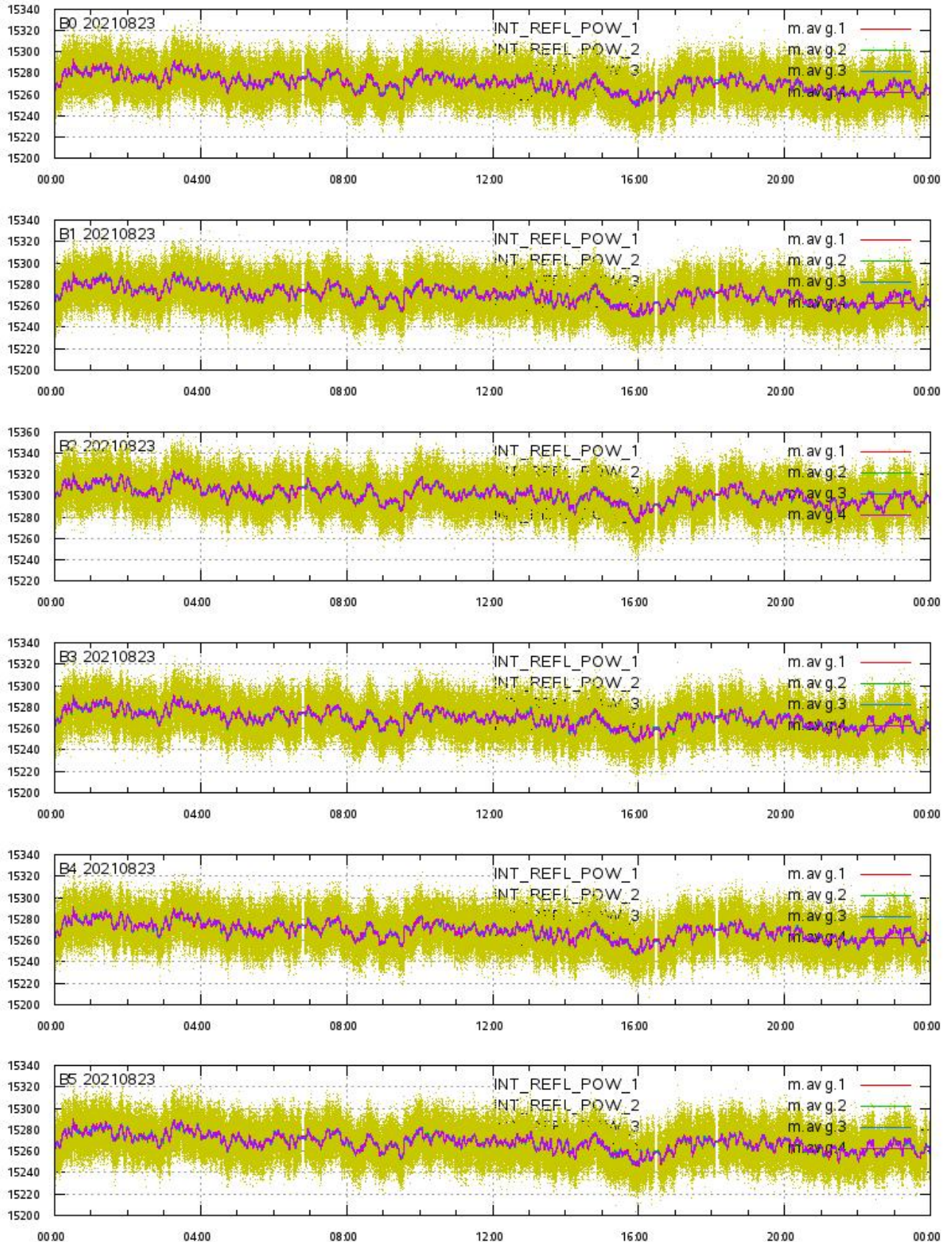
Integrated Transmitted Powers 1-4 per beam 0-5 vs. UTC\_LOCALISATION





## L1A Product

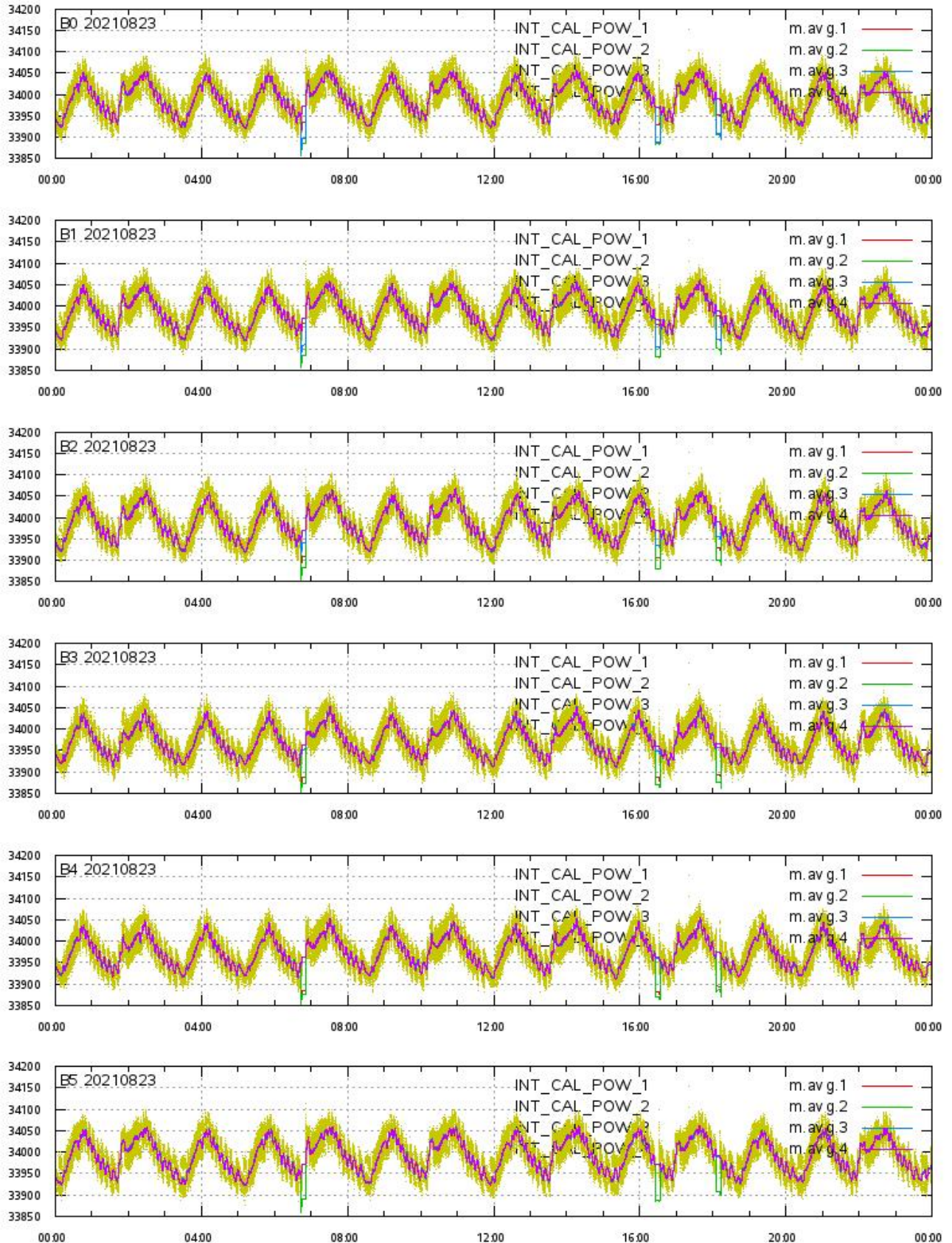
Integrated Reflected Powers 1-4 per beam 0-5 vs. UTC\_LOCALISATION





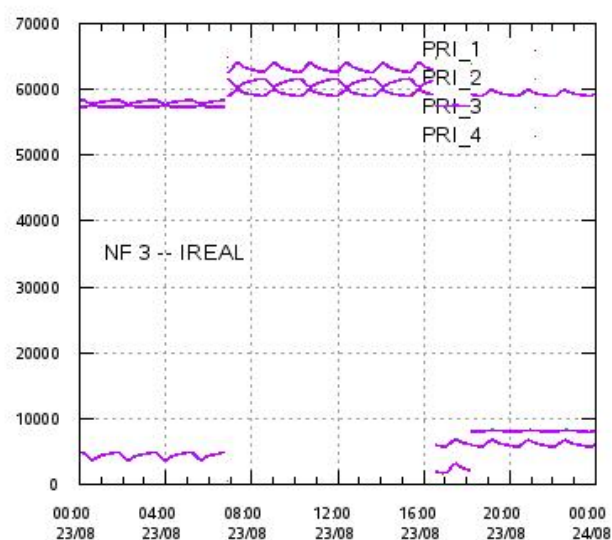
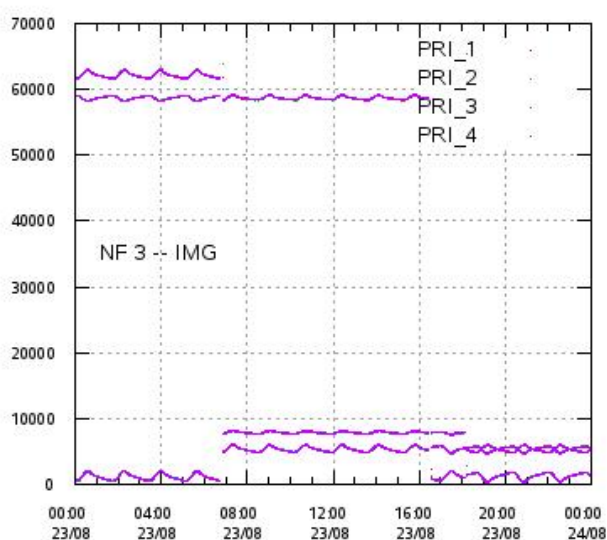
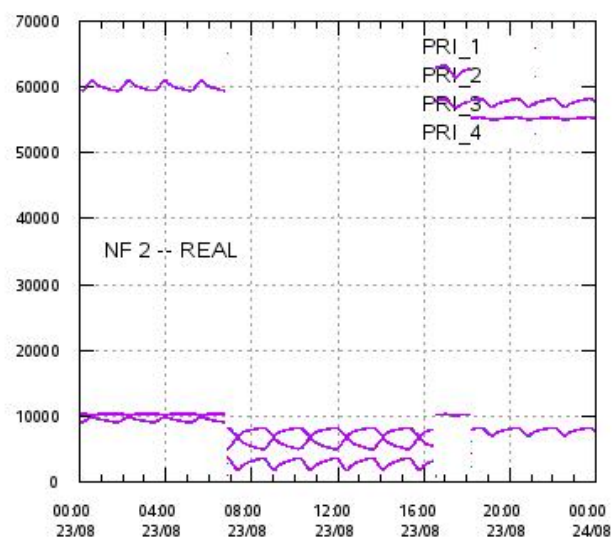
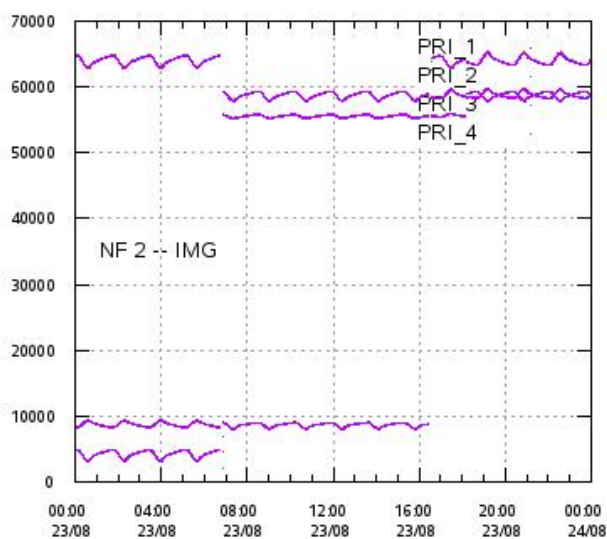
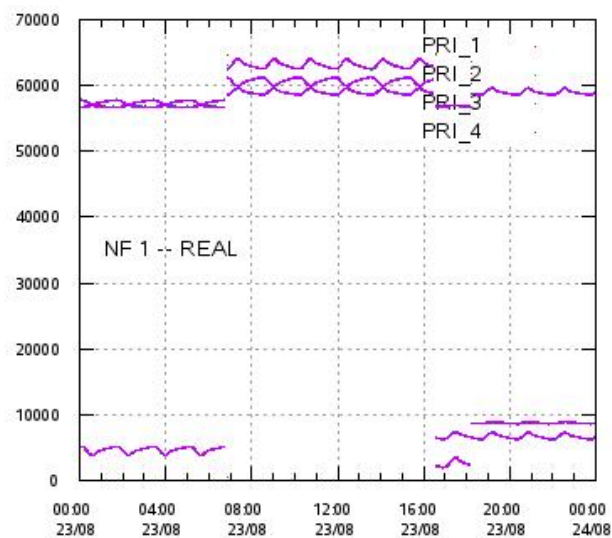
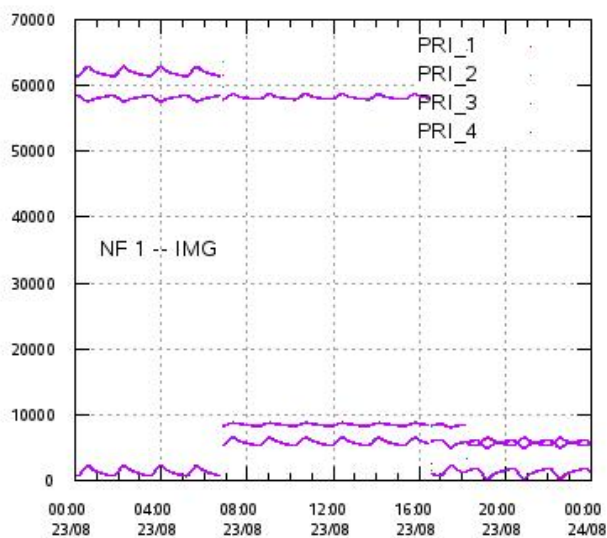
## L1A Product

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



# L1A Product

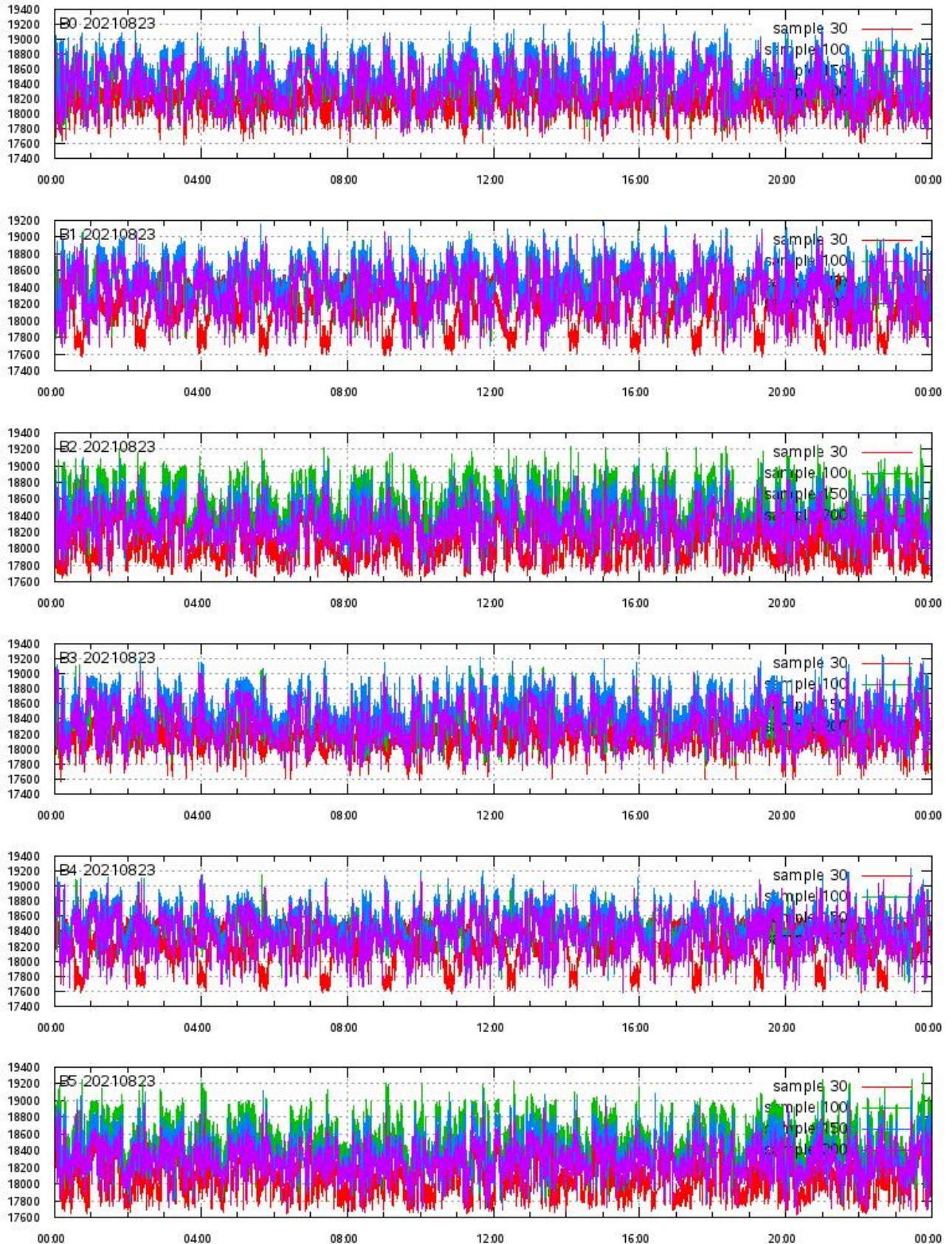
## Calibration Powers vs. UTC\_LOCALISATION





## L1A Product

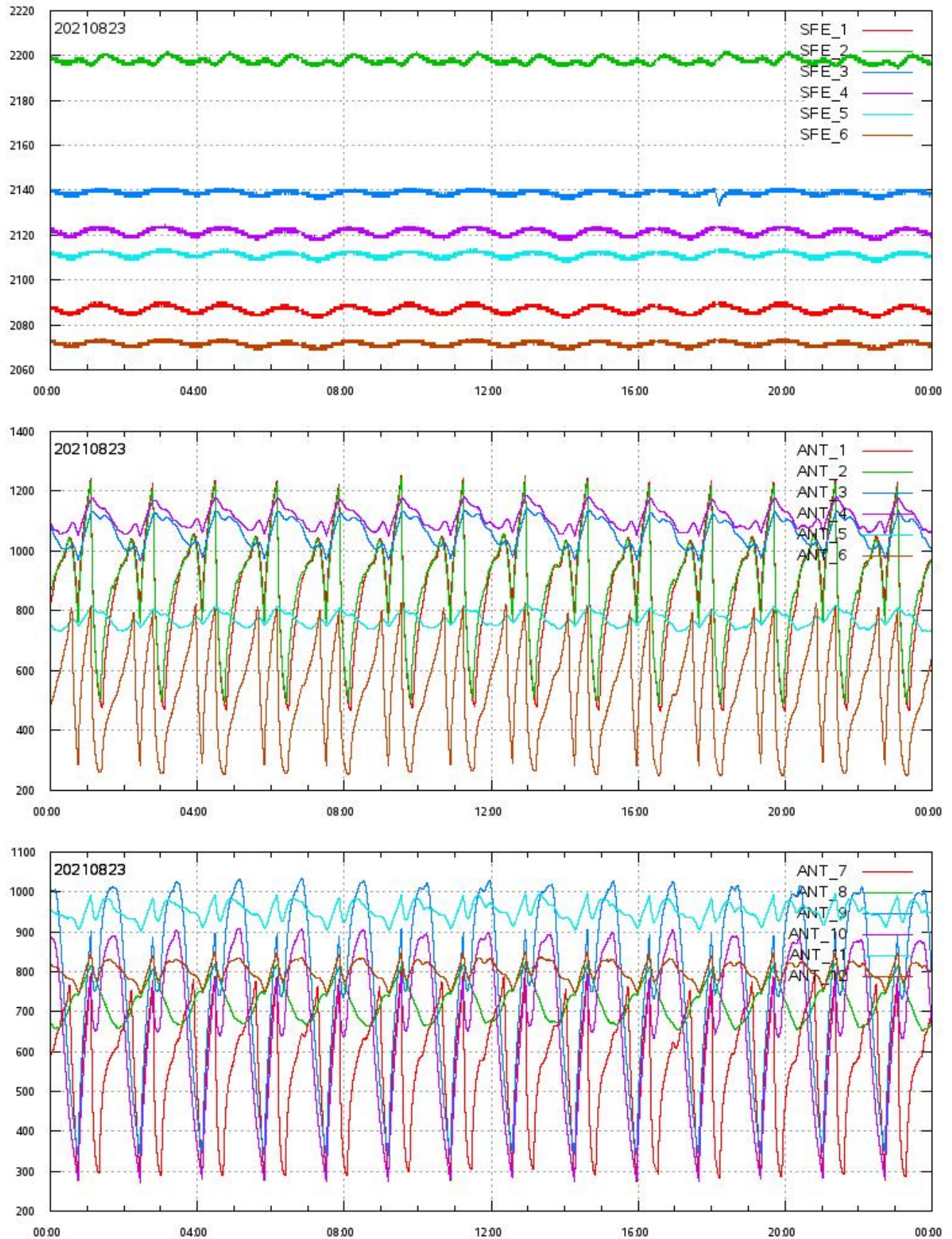
ECHO DATA (raw) for samples 30, 100, 150 and 200 vs. UTC\_LOCALISATION





## L1A Product

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

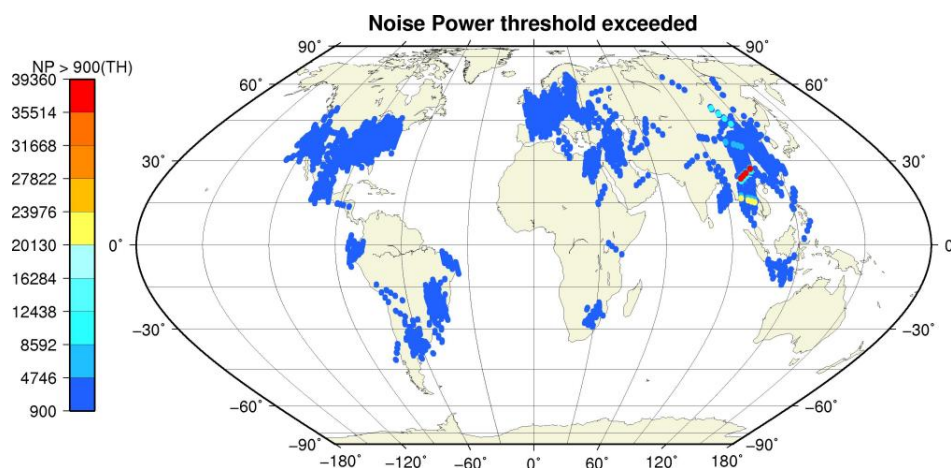
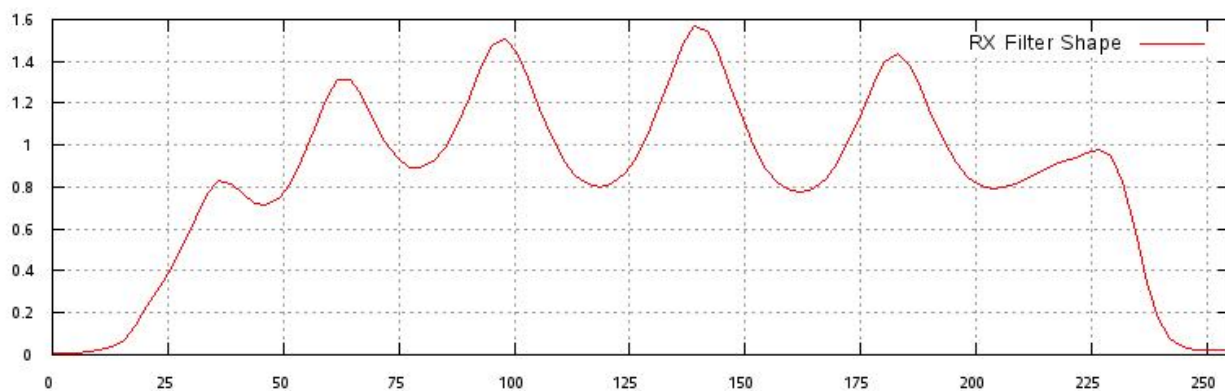
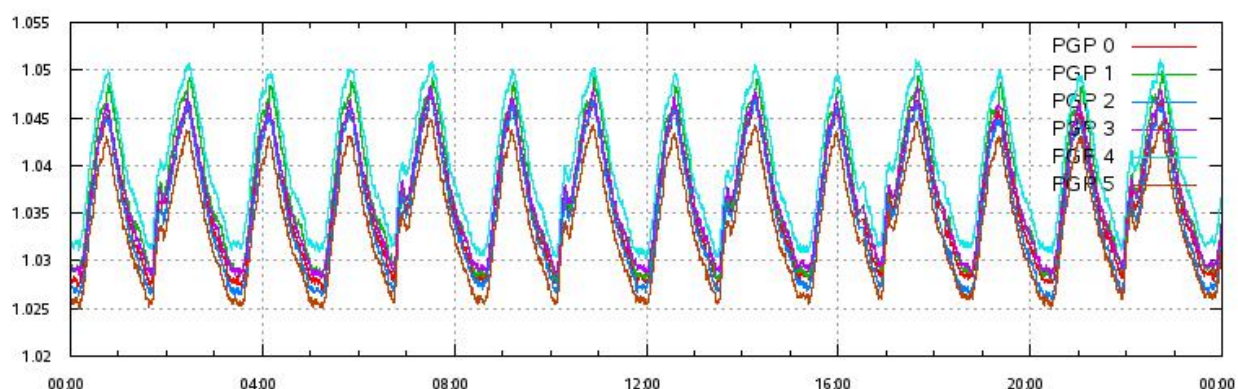
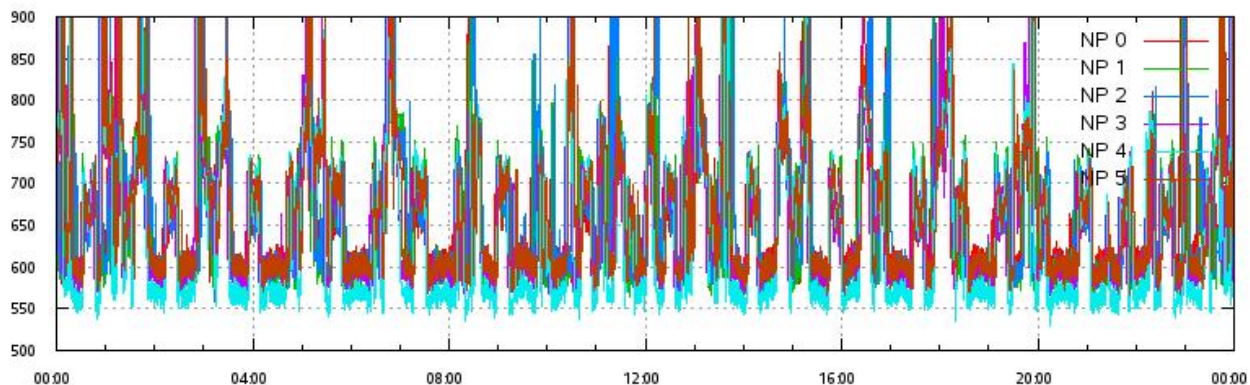


## L1A Product

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

RX Filter Shape average over sample number

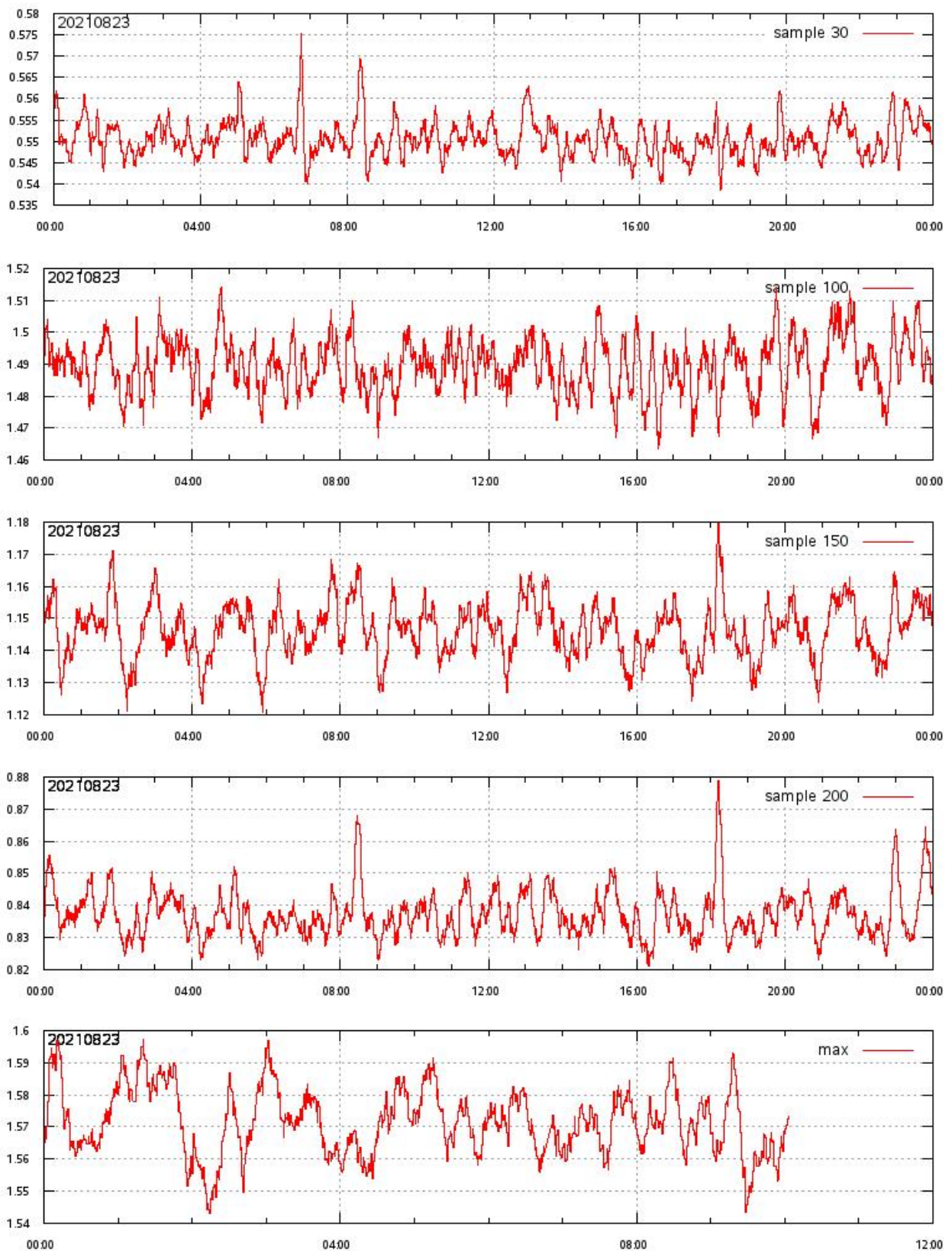
Noise Power threshold exceeded (TH=900) on map





## L1A Product

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

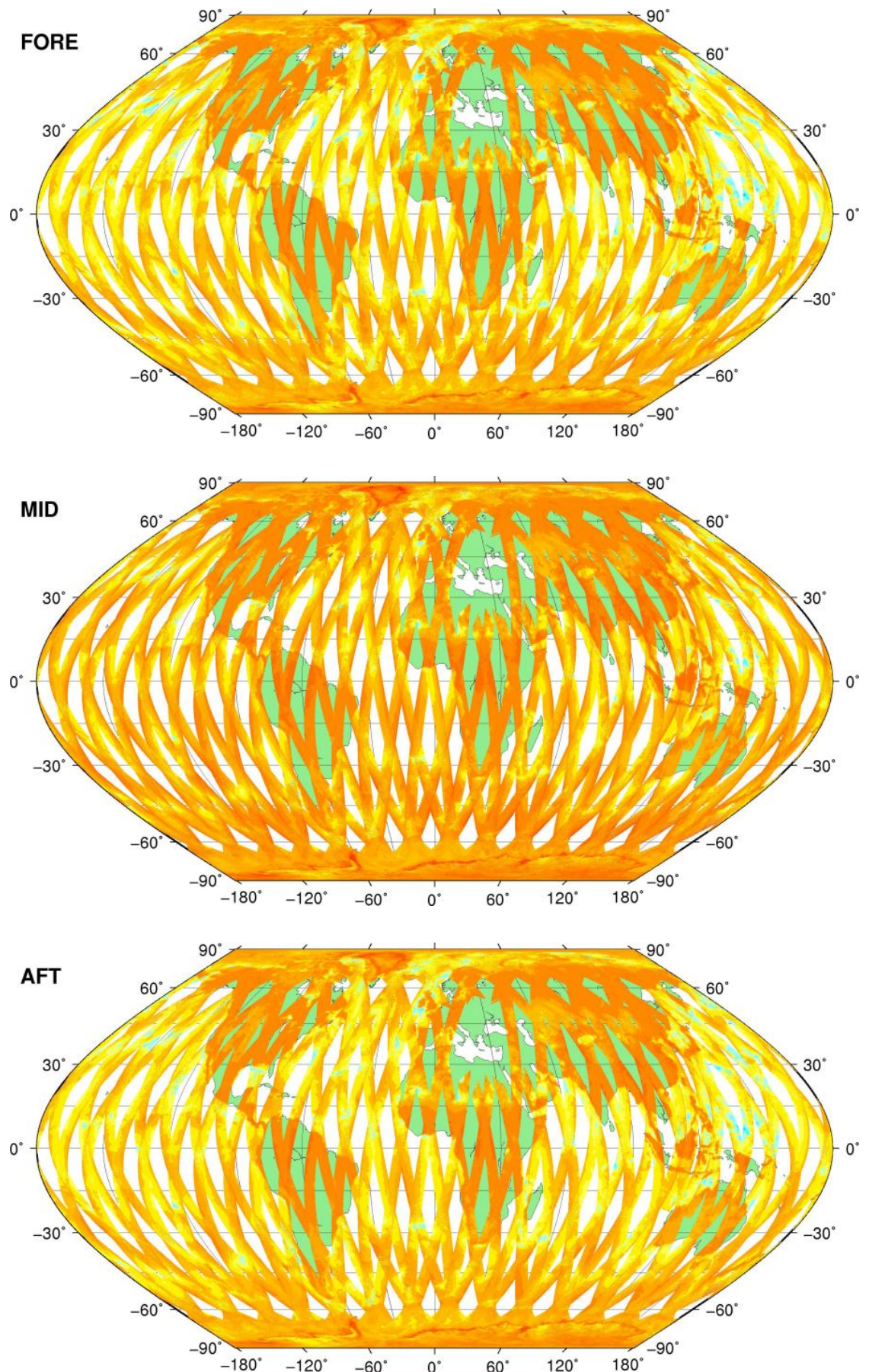
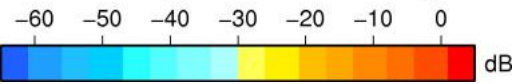




## SZO Product

Sigma0\_TRIP Coverage map

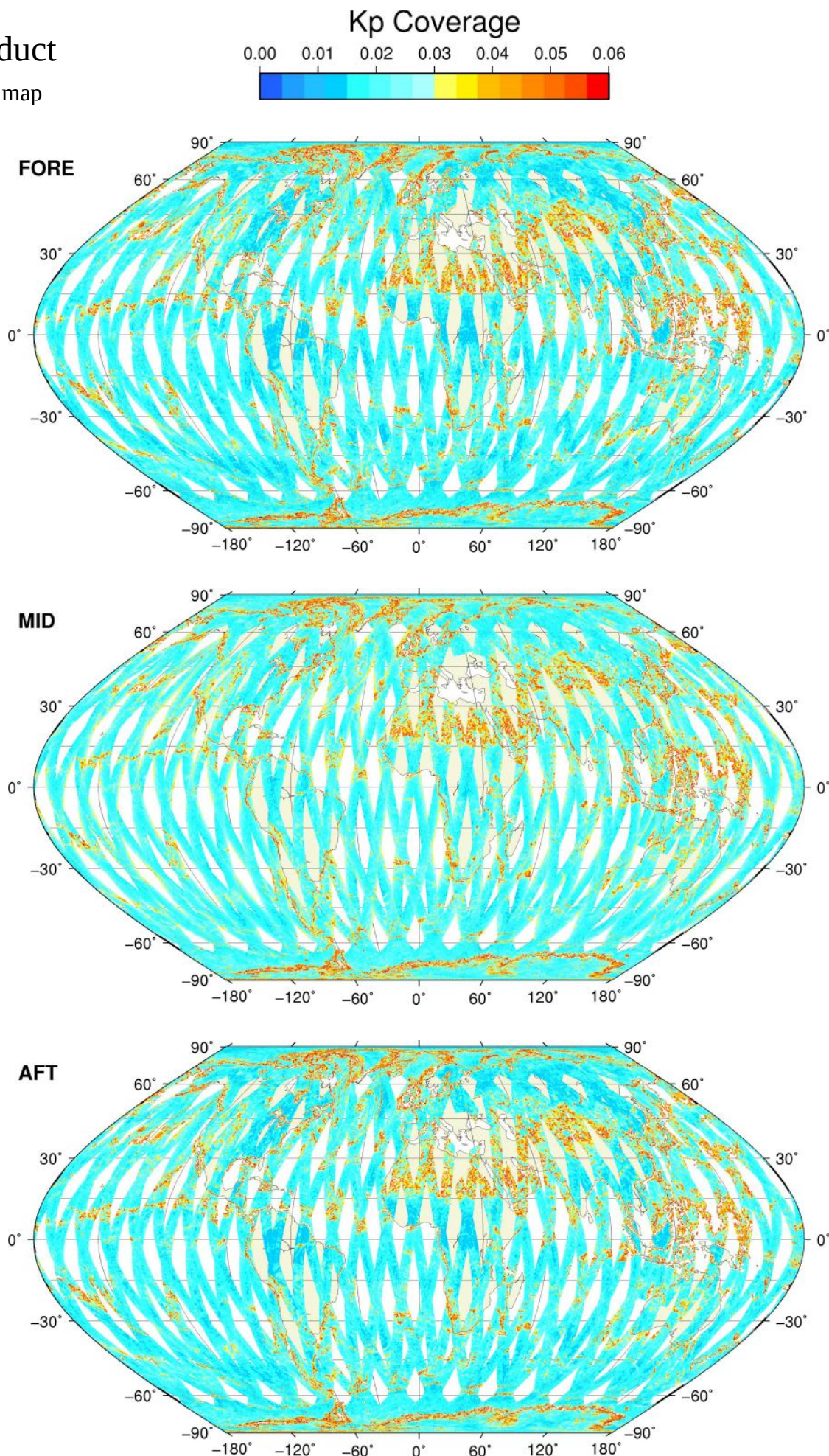
### SIGMA0\_TRIP Coverage





## SZO Product

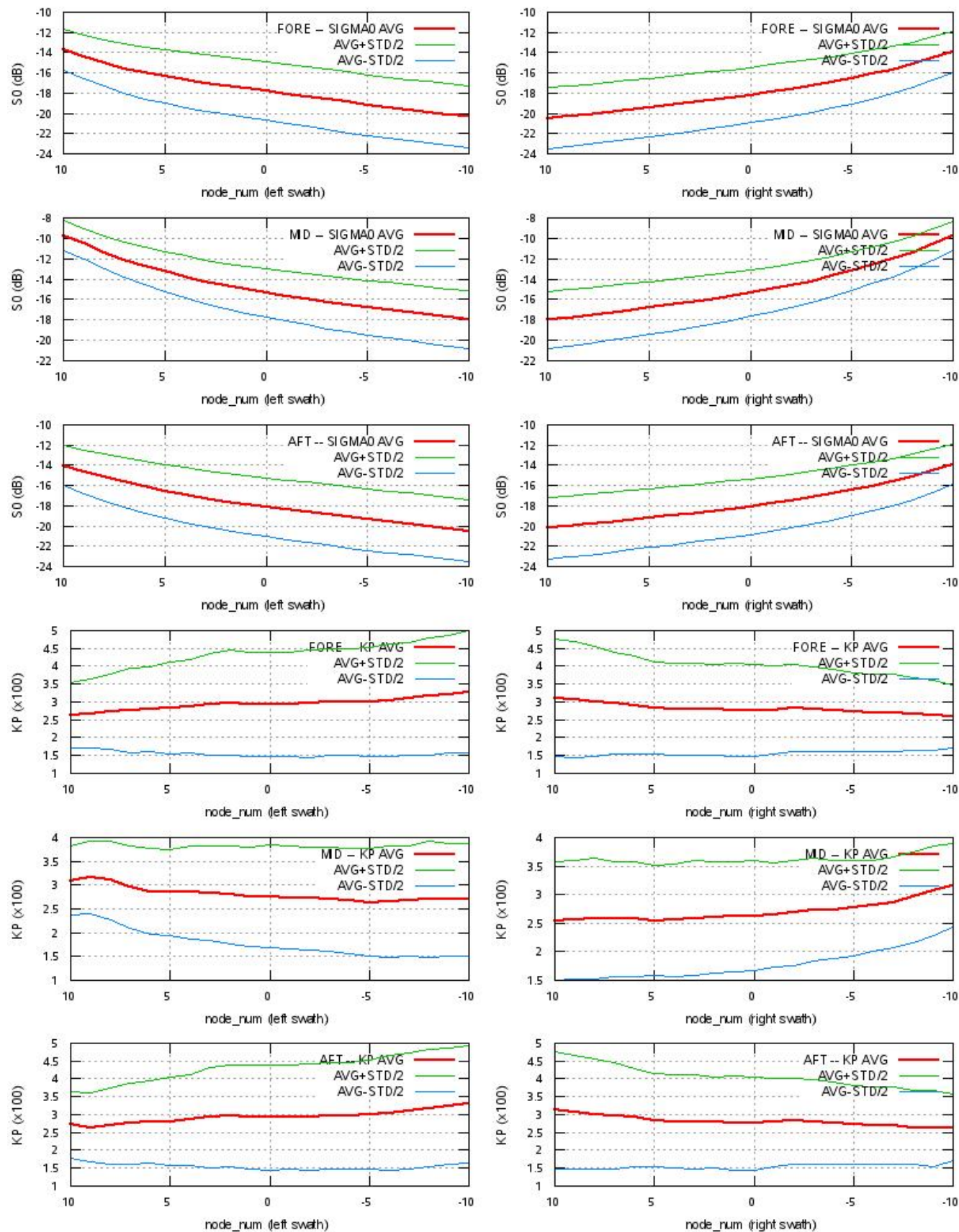
Kp Coverage map





# SZO Product

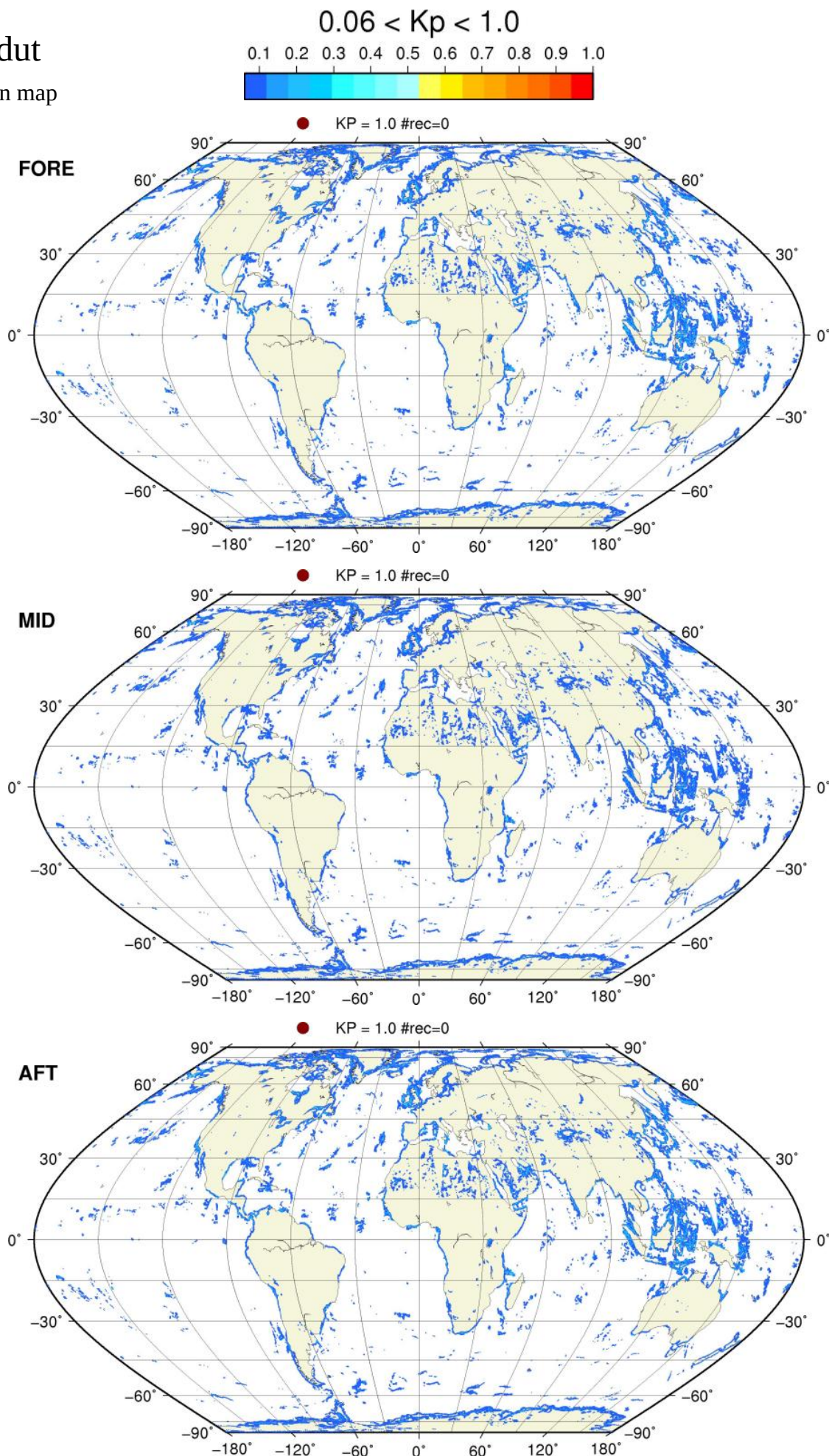
## S0 - Kp Statistics





# SZO Product

Kp Outliers on map

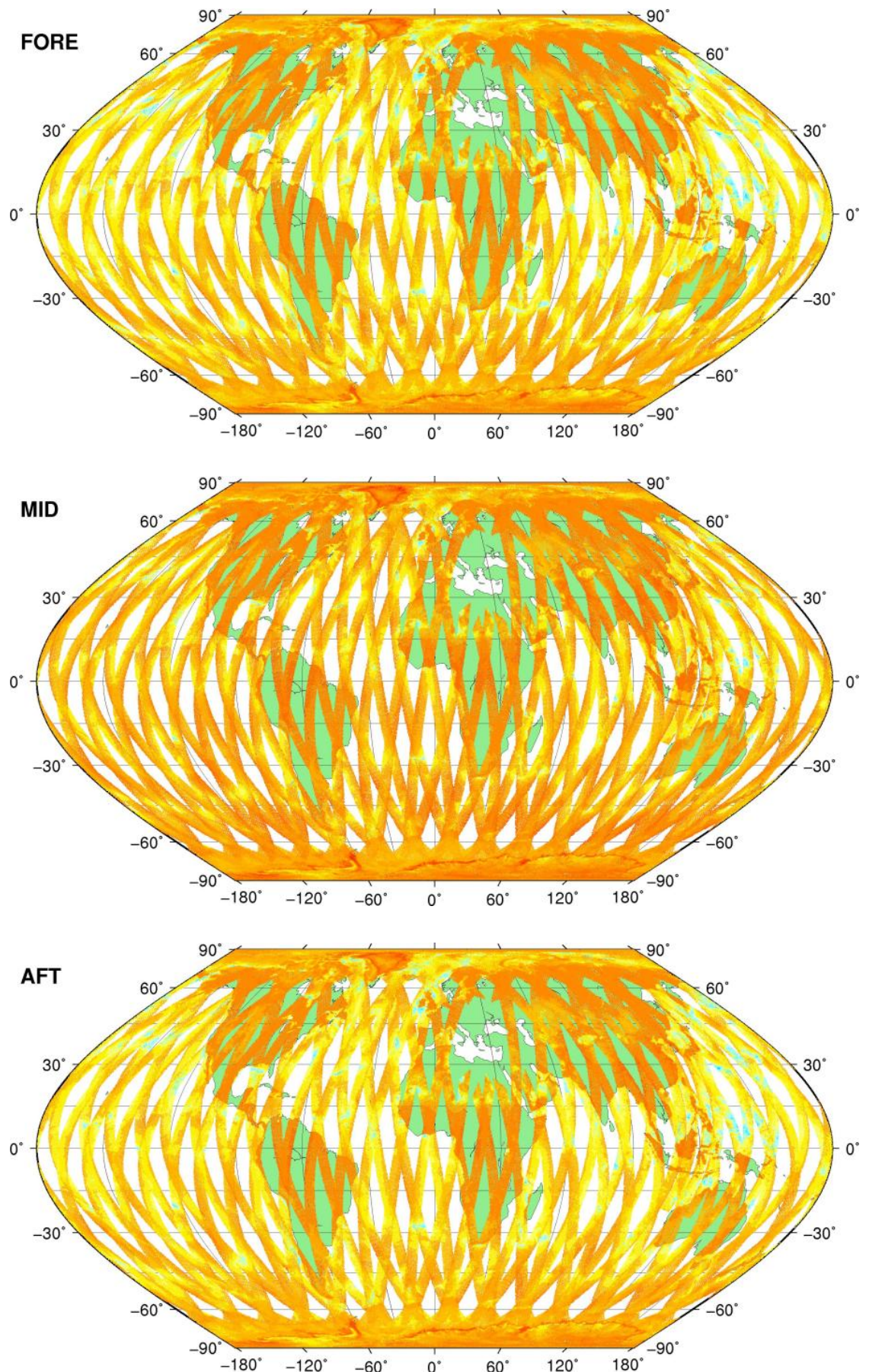
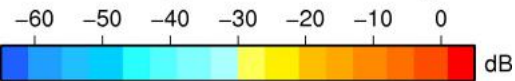




## SZR Product

Sigma0\_TRIP Coverage map

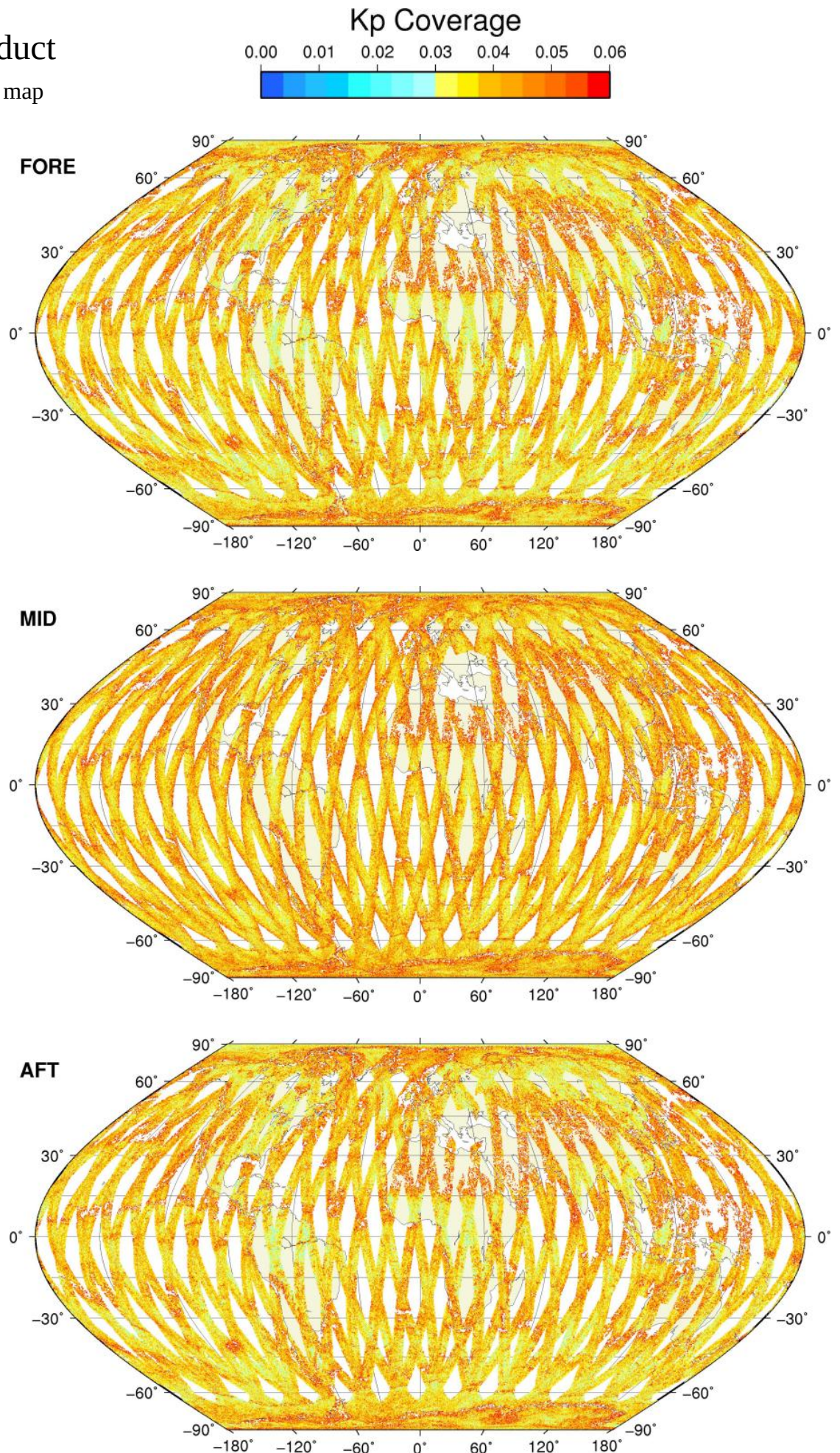
### SIGMA0\_TRIP Coverage





## SZR Product

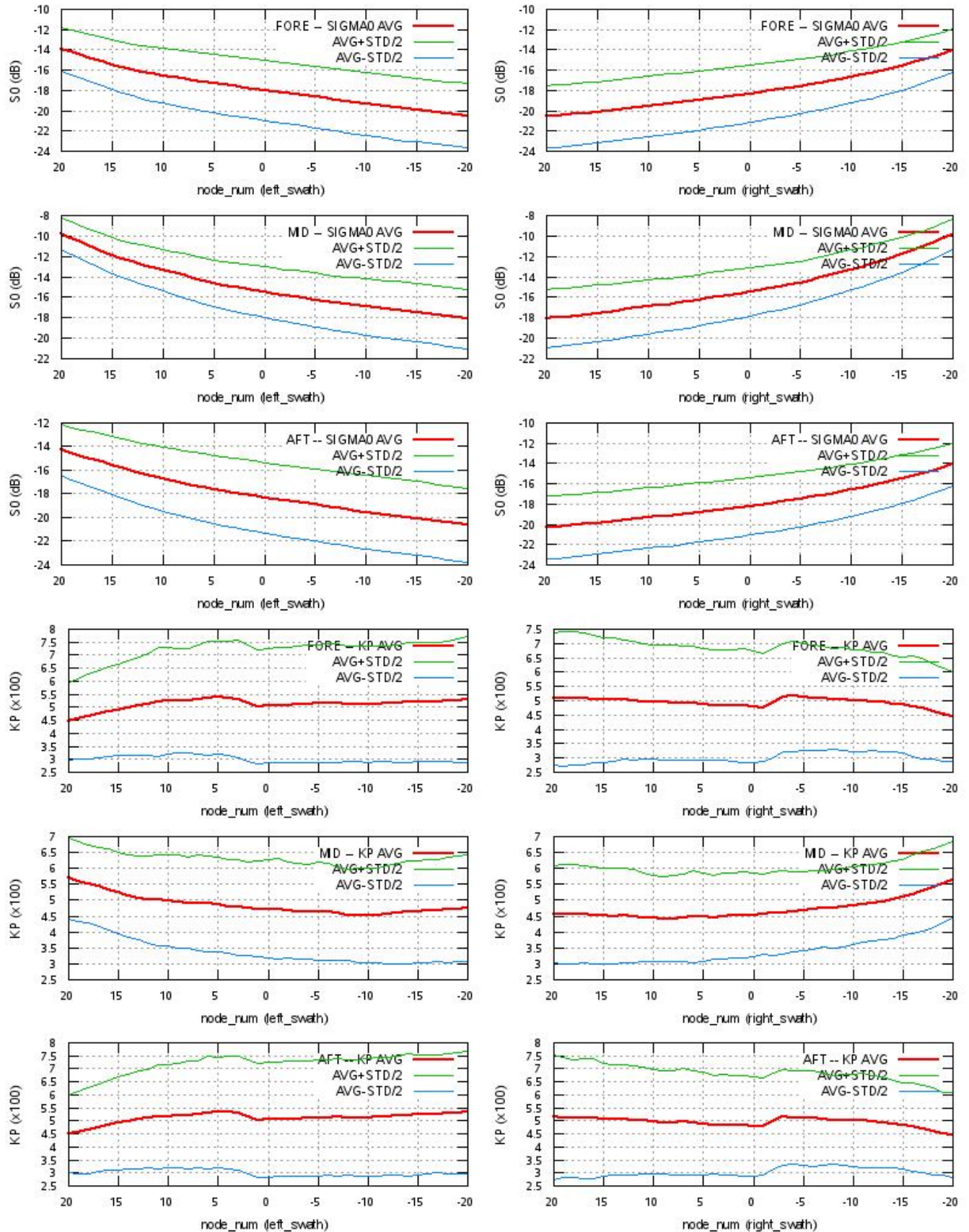
Kp Coverage map





# SZR Product

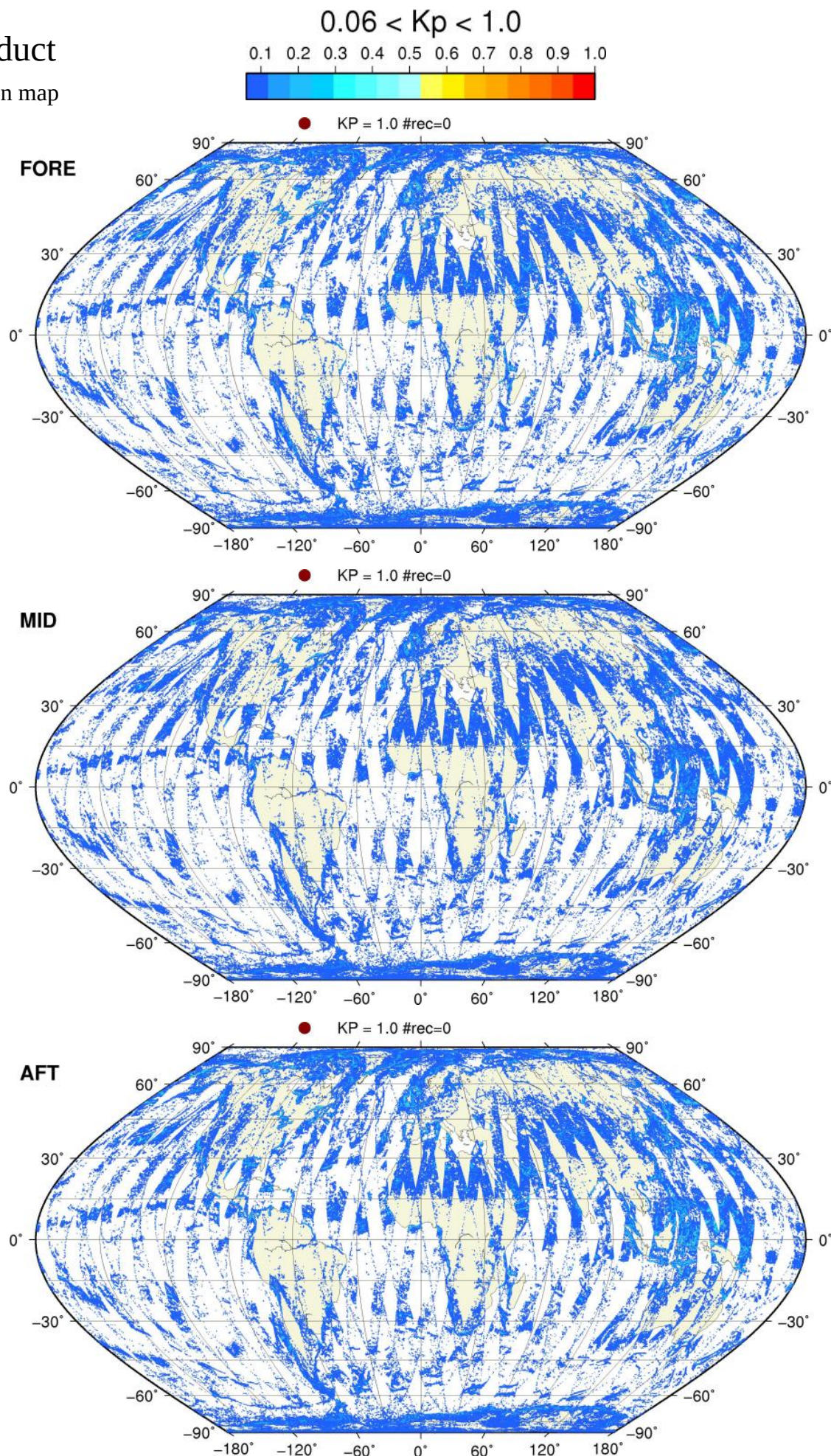
## S0 - Kp Statistics





## SZR Product

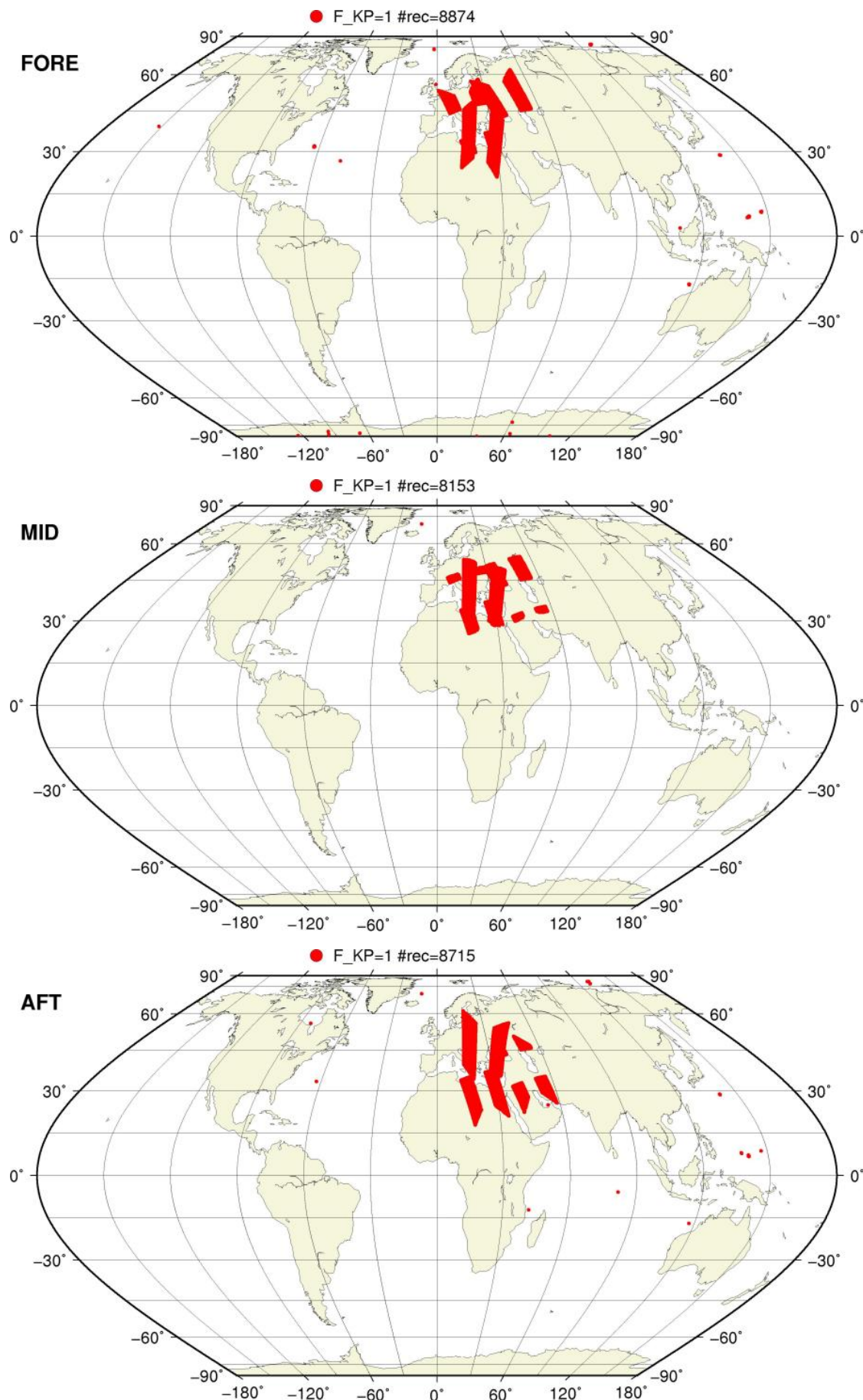
Kp Outliers on map





## SZO Flagged Data Coverage

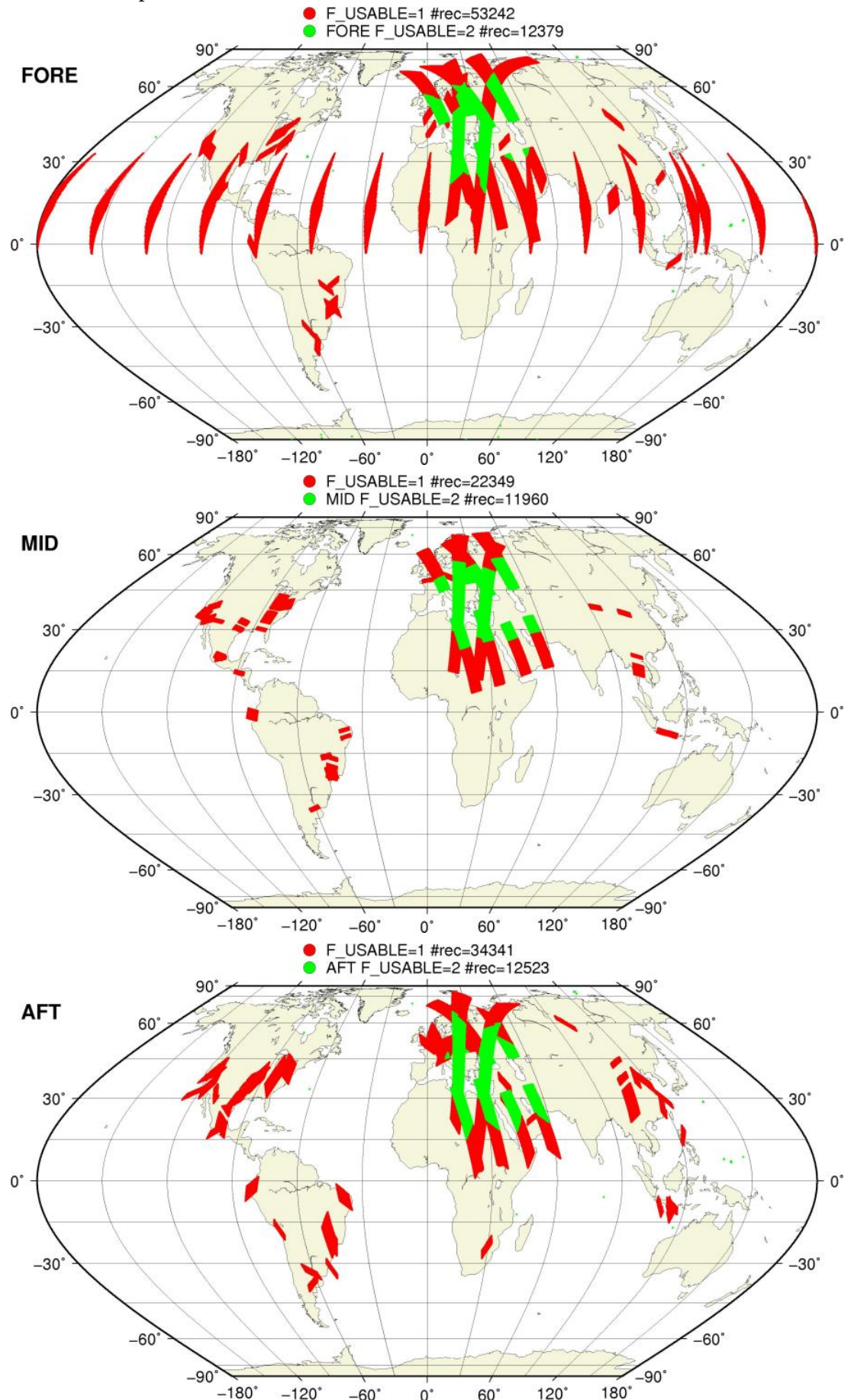
F\_KP = 1 on map





## SZO Flagged Data Coverage

F\_USABLE = 1 or 2 on map





## SZO Flagged Data Coverage

$0 < F\_OA \leq 1$  on map



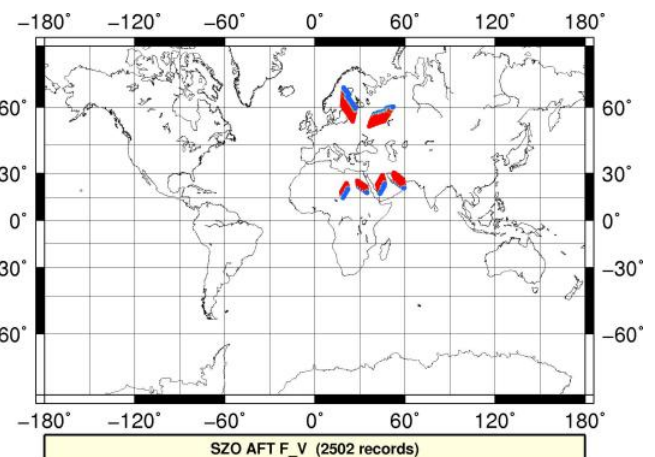
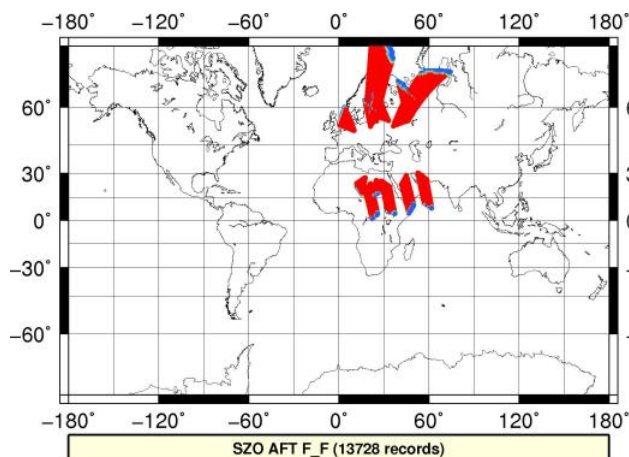
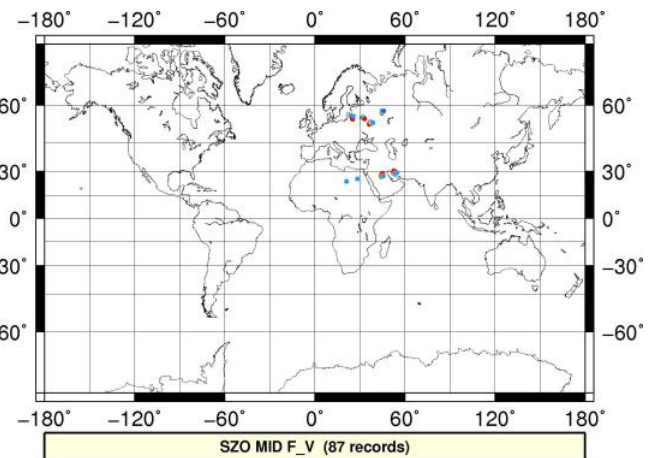
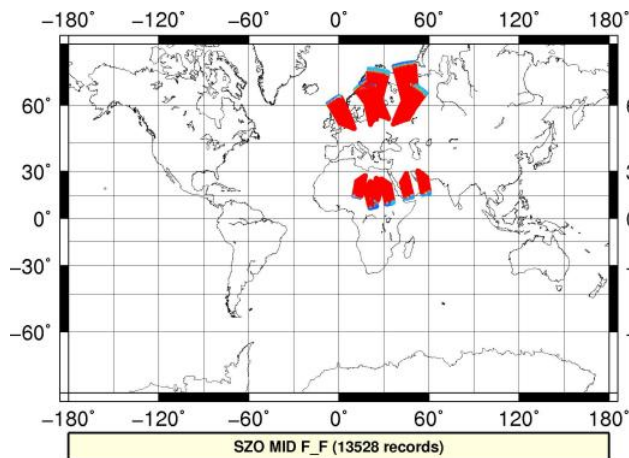
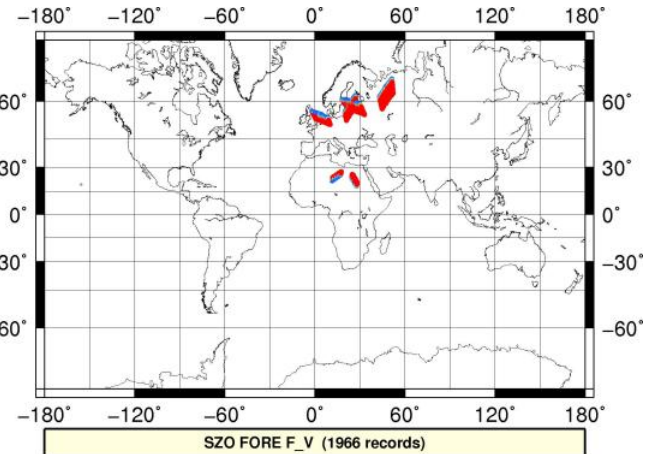
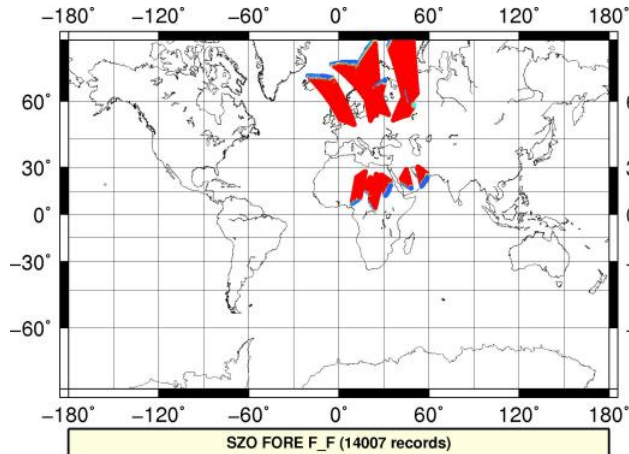
## SZO Flagged Data Coverage

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

$0 < F_F \leq 1$



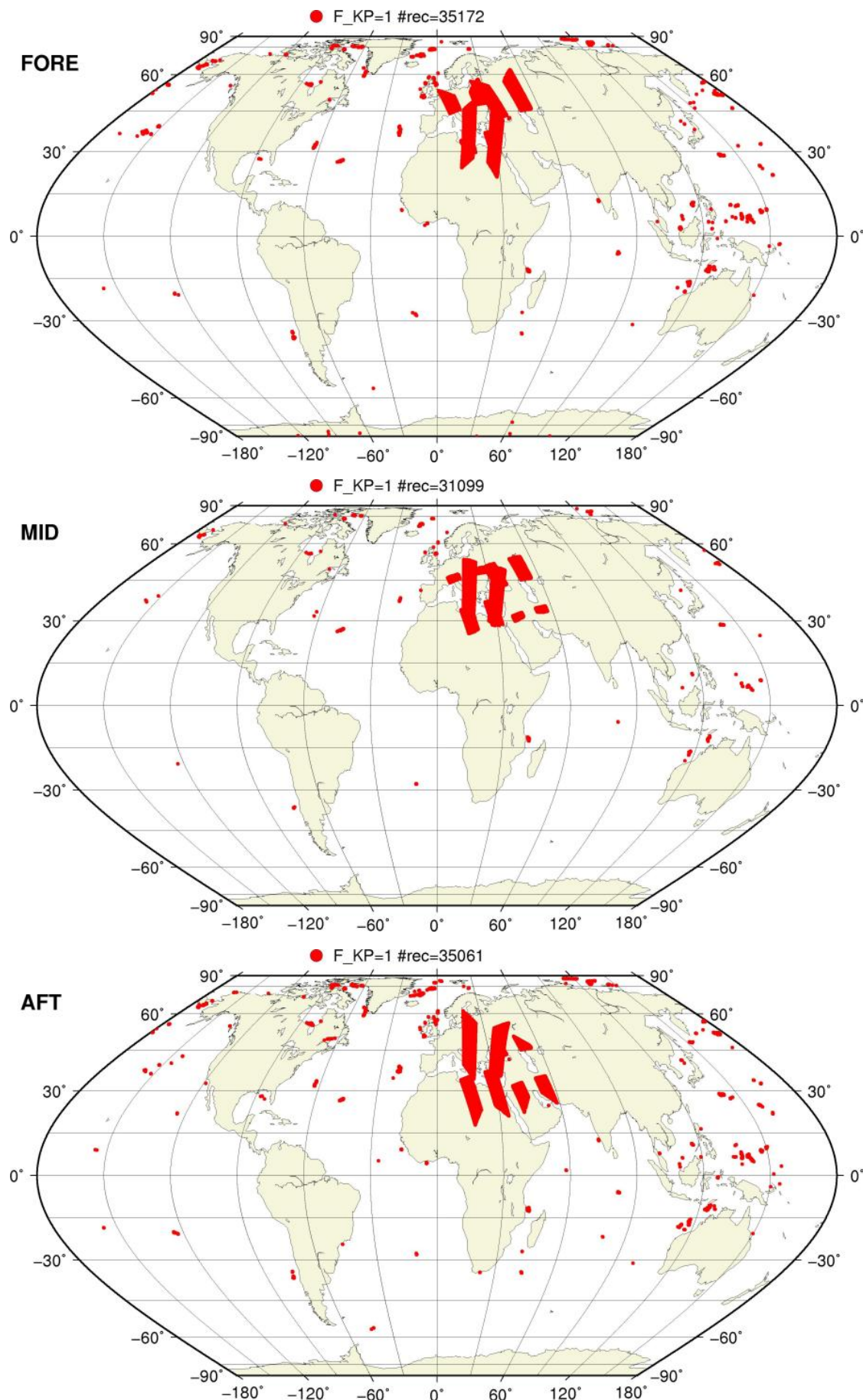
$0 < F_V \leq 1$





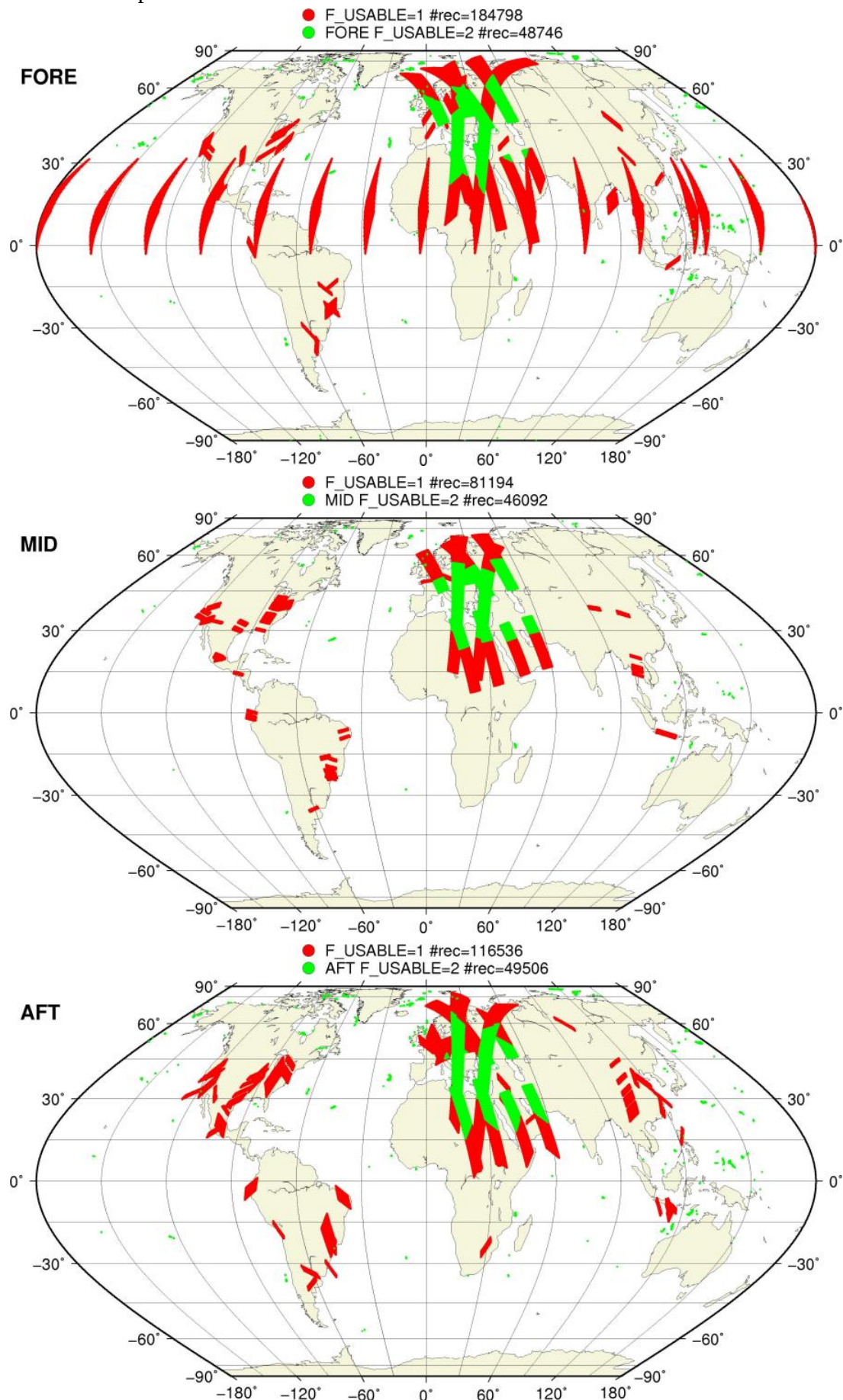
## SZR Flagged Data Coverage

F\_KP = 1 on map



## SZR Flagged Data Coverage

F\_USABLE = 1 or 2 on map





## SZR Flagged Data Coverage

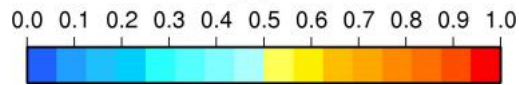
$0 < F_{OA} \leq 1$  on map



## SZR Flagged Data Coverage

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

$0 < F_F \leq 1$



$0 < F_V \leq 1$

