

# ASCAT DAILY Report

**Metop-A**

**OPE**

**DAY 2020\_139**

**20200518000000 - 20200518235959**

## DATA STATISTICS

BASED ON ORBITS (#14)

70456 70457 70458 70459 70460 70461 70462 70463 70464 70465 70466 70467 70468  
70469 70470

DB STATISTICS : OPE M02\_20200518

SMO 478	2.59	.81	1.41	5.63
SMR 476	6.12	1.36	3.71	11.10
SZF 459	1.25	1.54	.51	20.03
xxx 479	32.19	5.48	20.56	50.27

INGATE (STORE) STATISTICS : OPE M02\_20200518

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

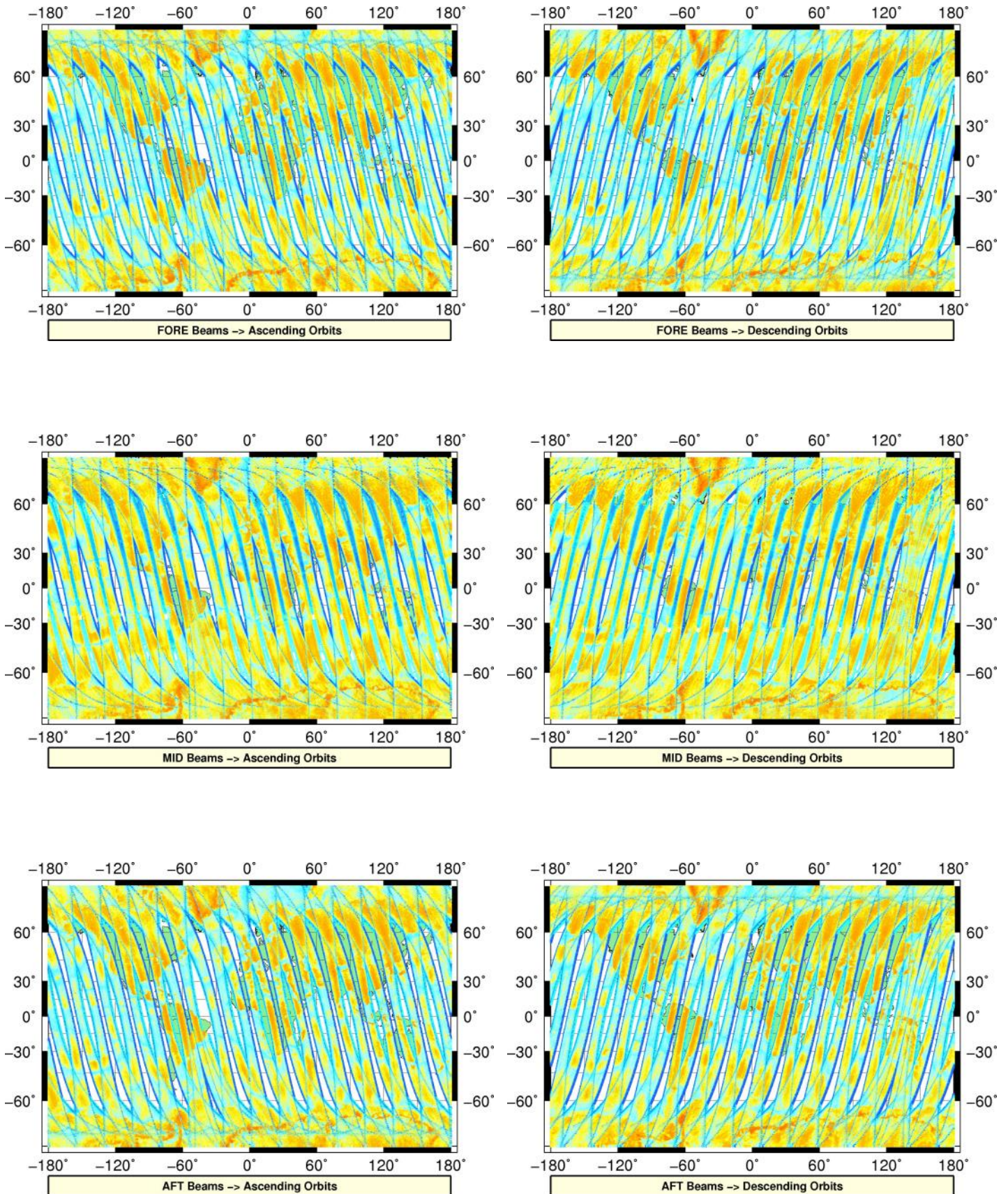
# Overview

## Configuration and SPHR content

Parameter	Value
SENSING START-STOP	20200518000000 - 20200518235959
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	1054586
N_F_LAND	48793279
N_F_GEO	3292087
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

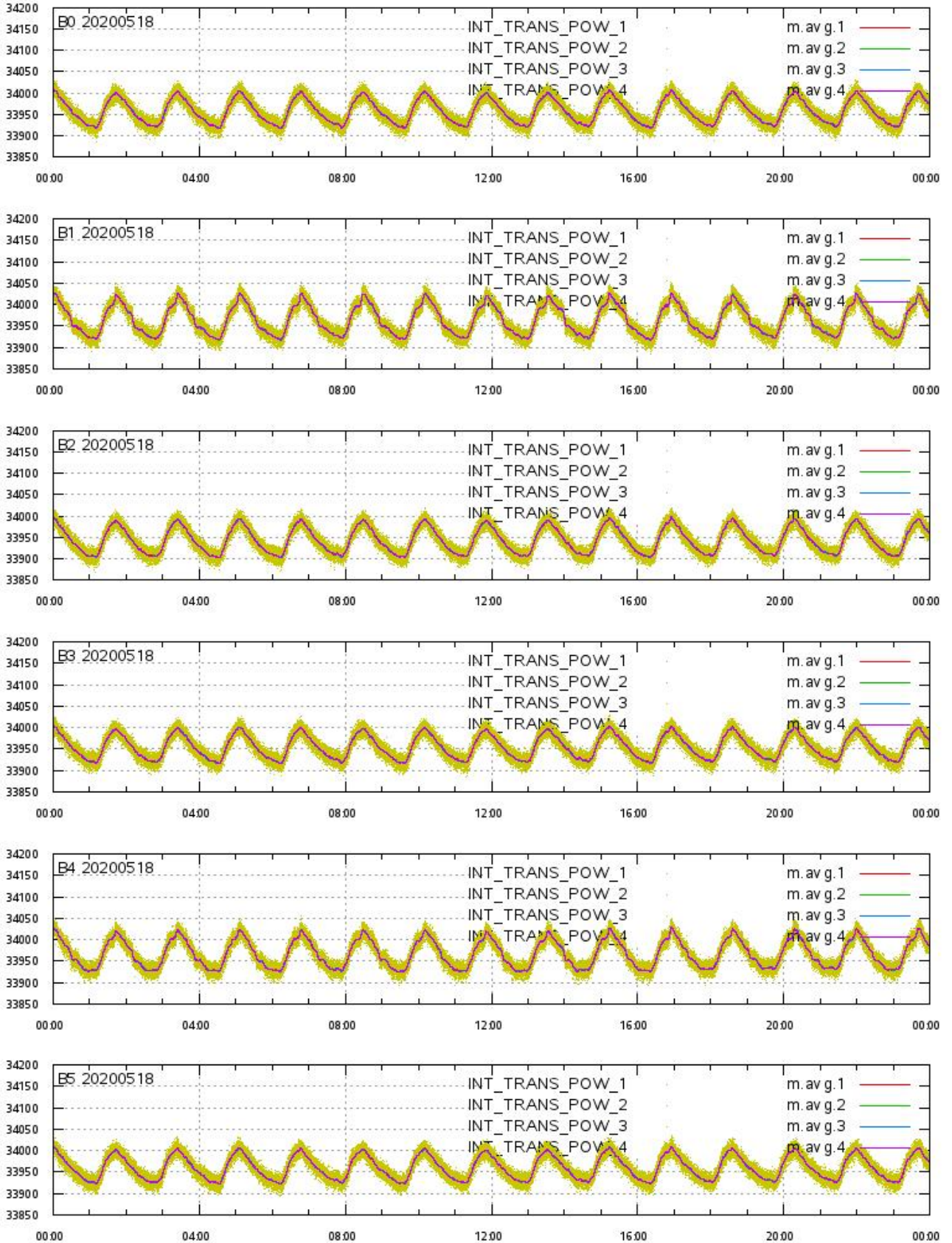
## Echo Data Coverage maps





# L1A Product

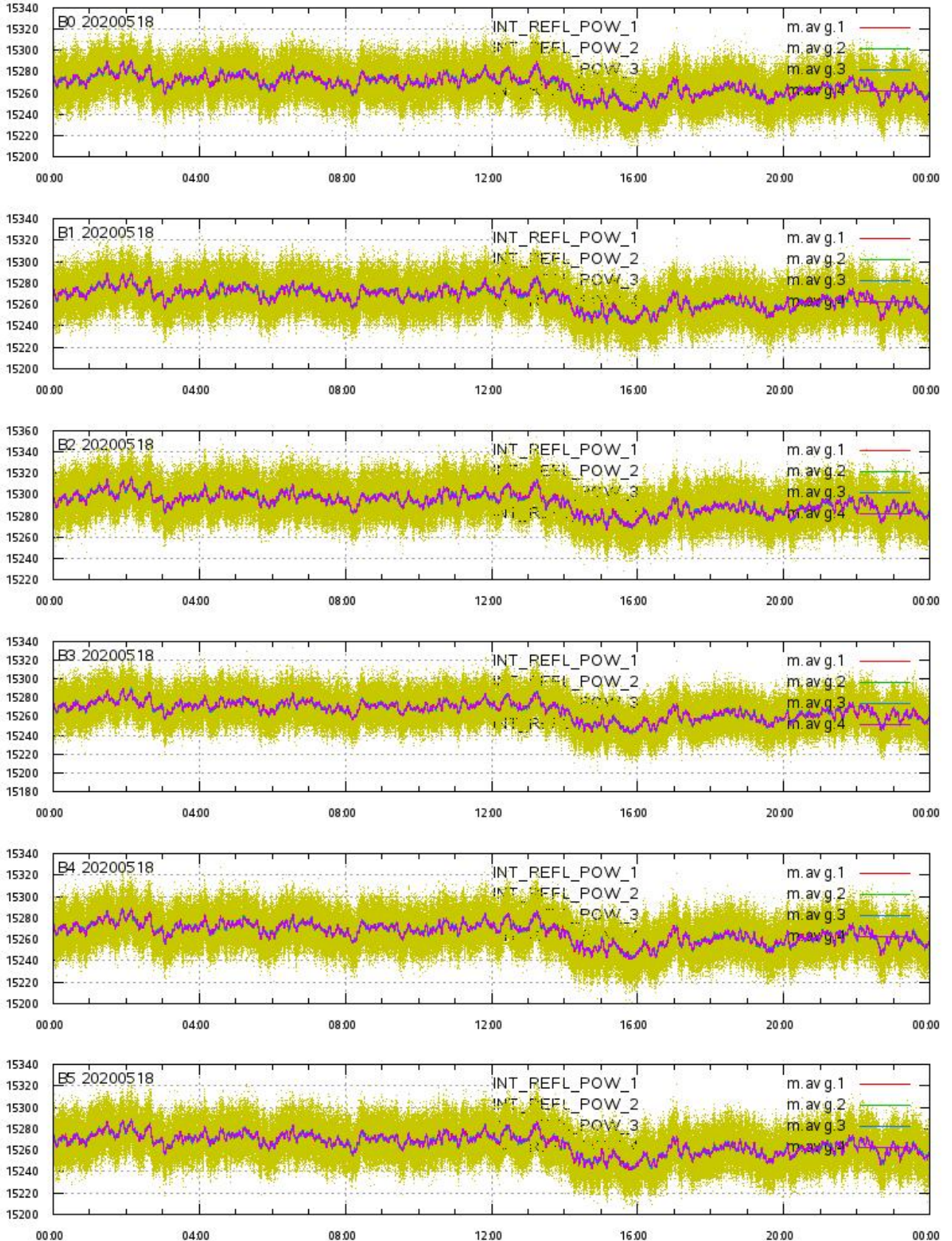
## Integrated Transmitted Powers 1-4 per beam 0-5 vs. UTC\_LOCALISATION





# L1A Product

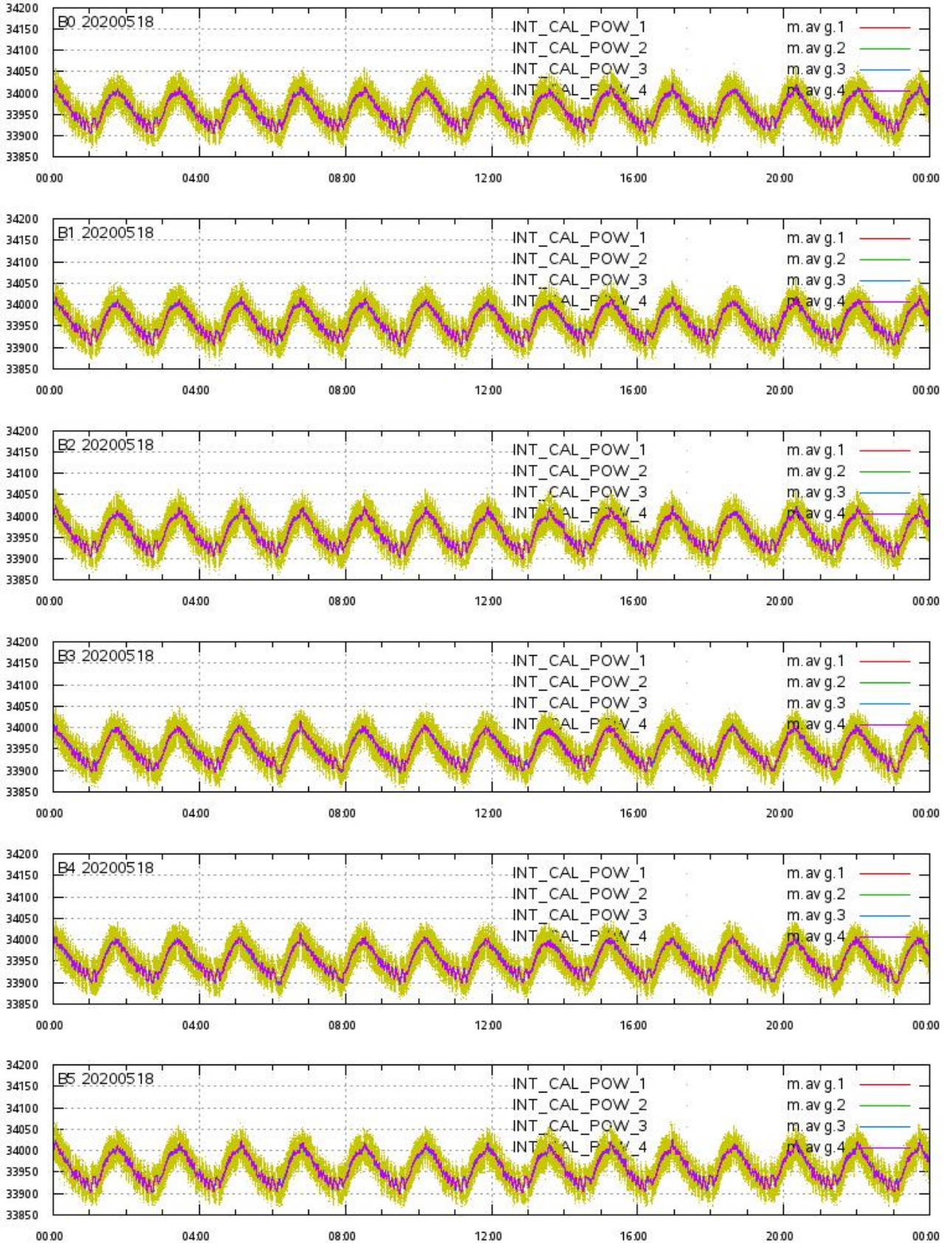
## Integrated Reflected Powers 1-4 per beam 0-5 vs. UTC\_LOCALISATION





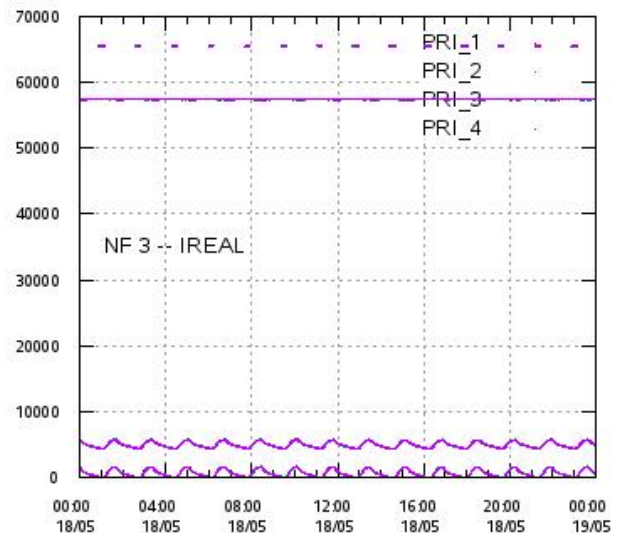
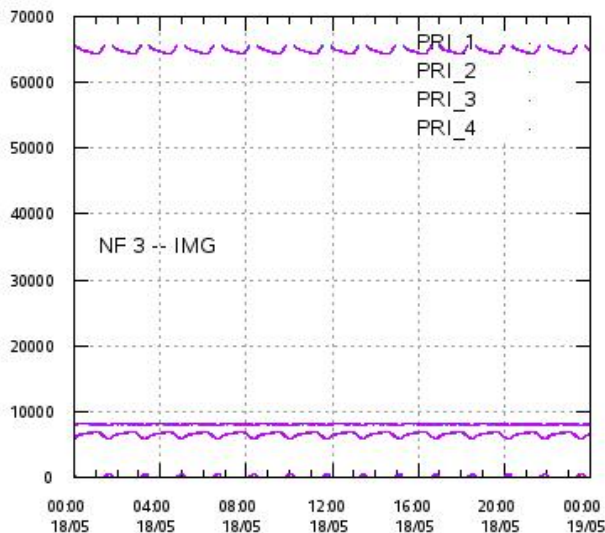
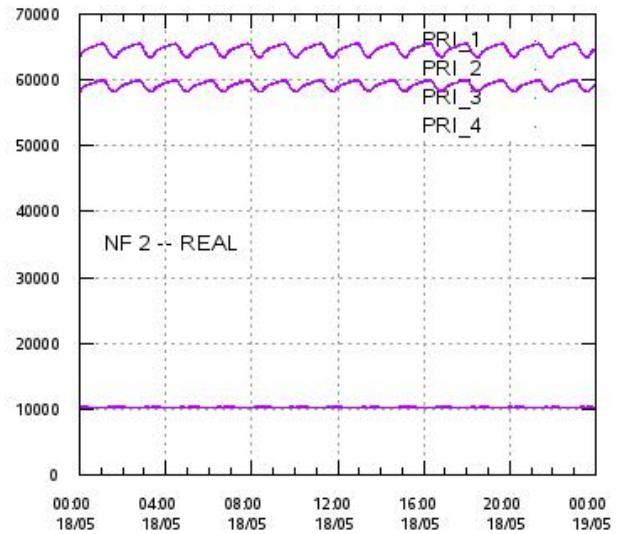
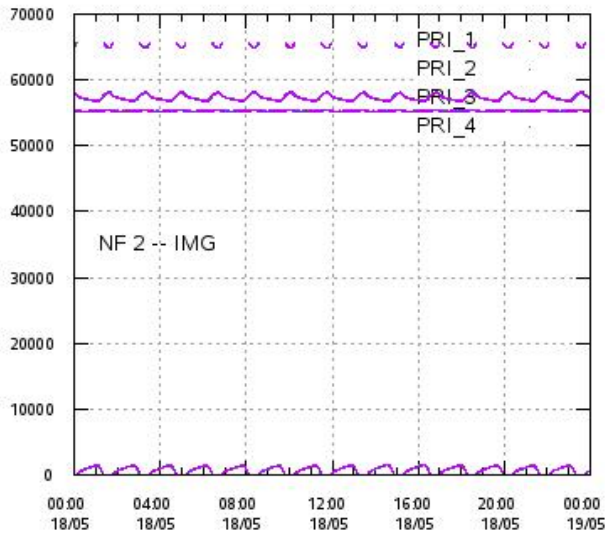
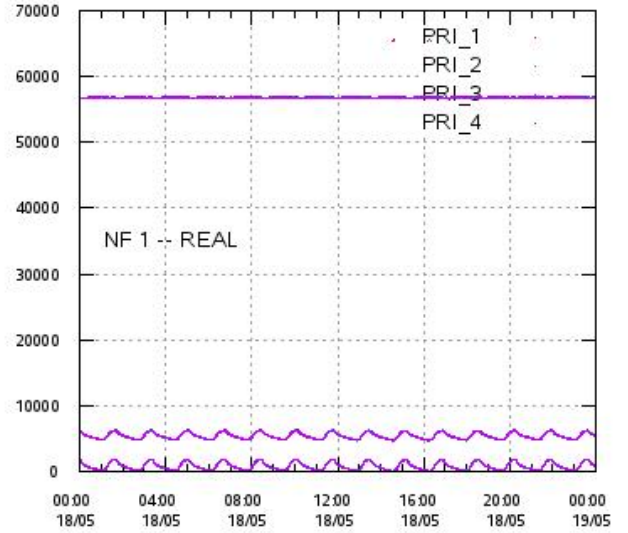
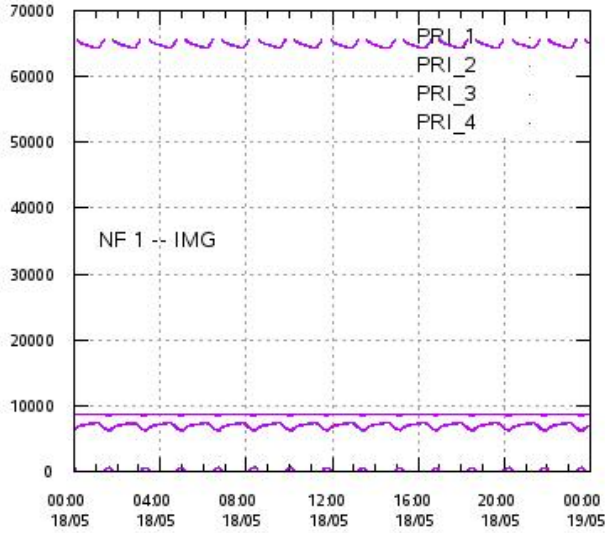
# L1A Product

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



# L1A Product

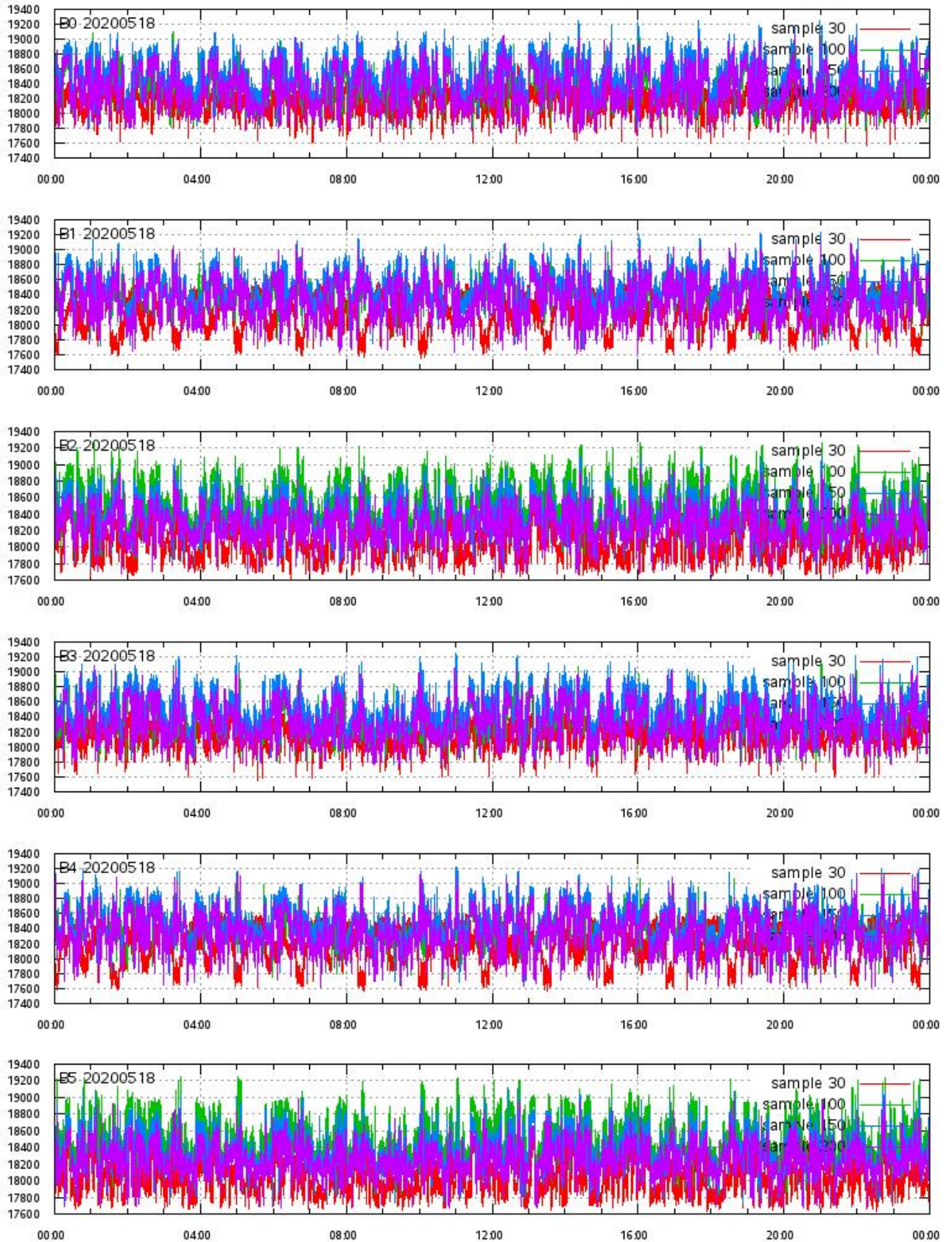
## Calibration Powers vs. UTC\_LOCALISATION





# L1A Product

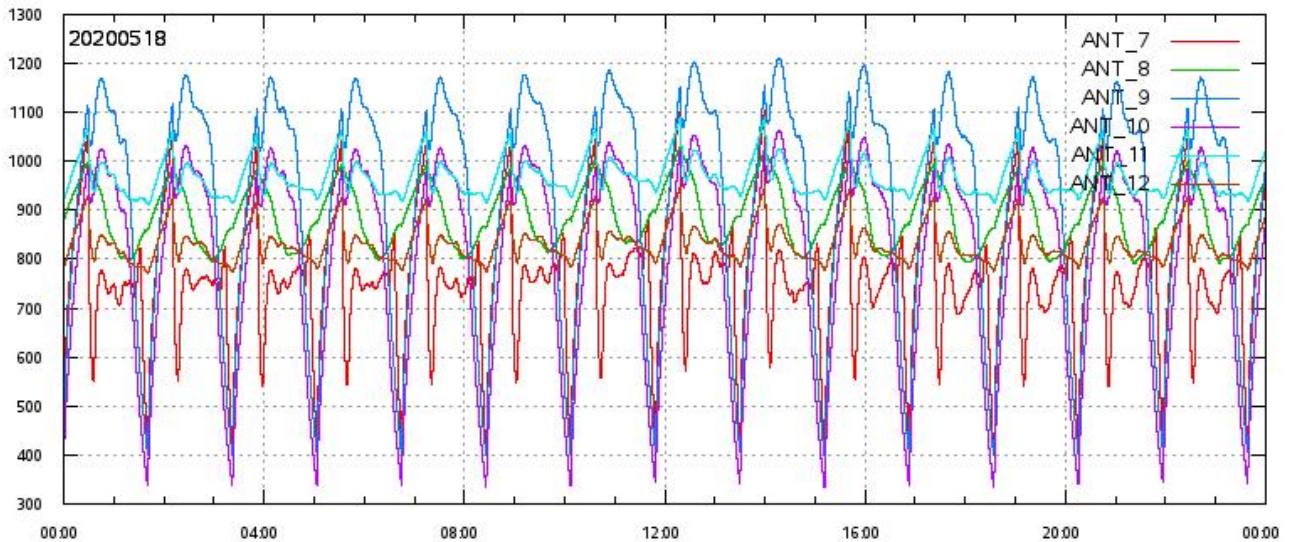
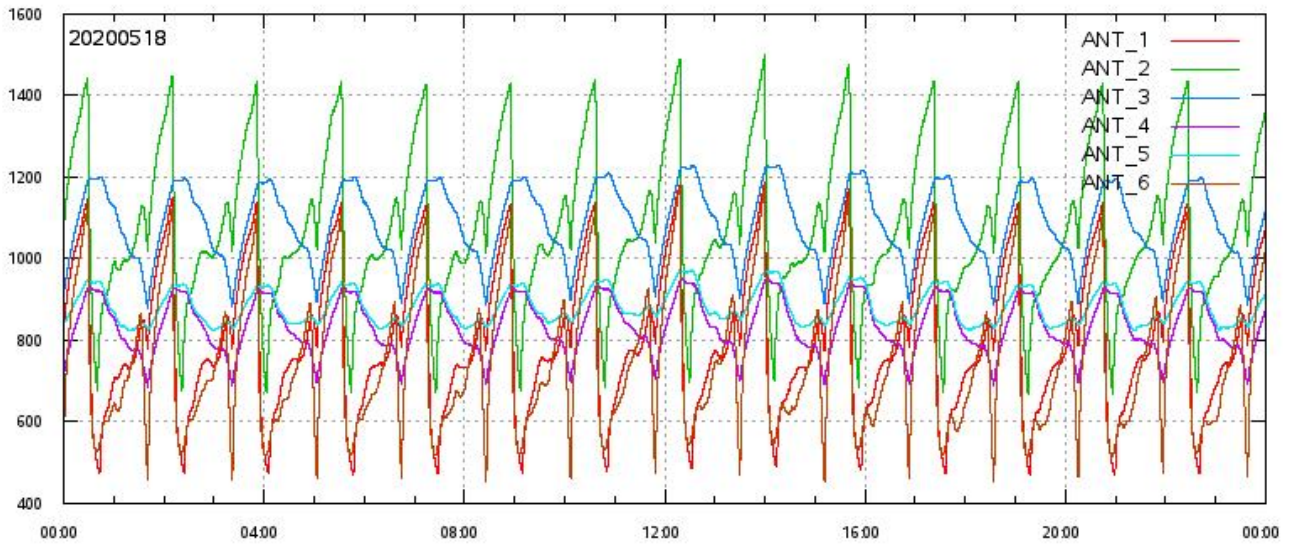
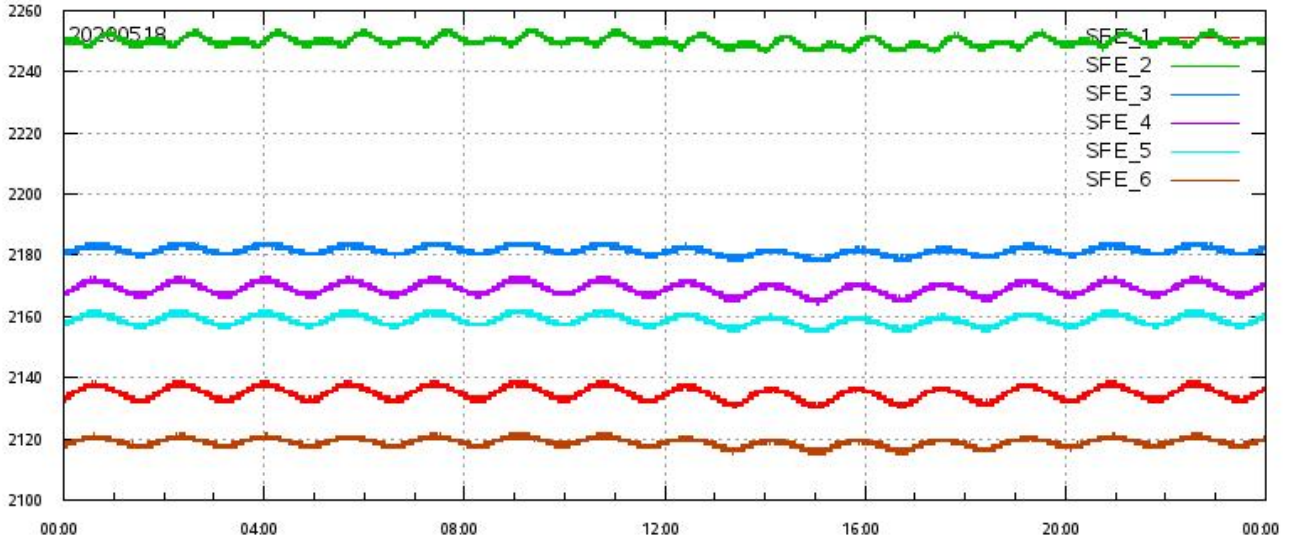
ECHO DATA (raw) for samples 30, 100, 150 and 200 vs. UTC\_LOCALISATION





# L1A Product

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

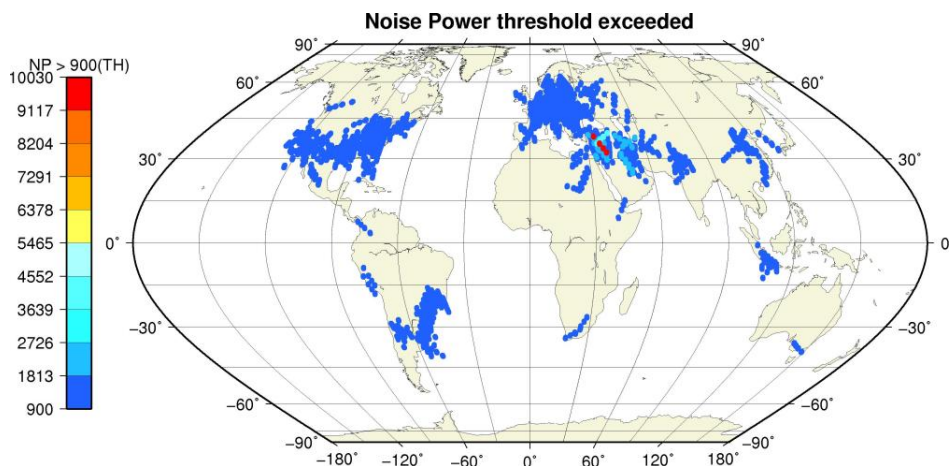
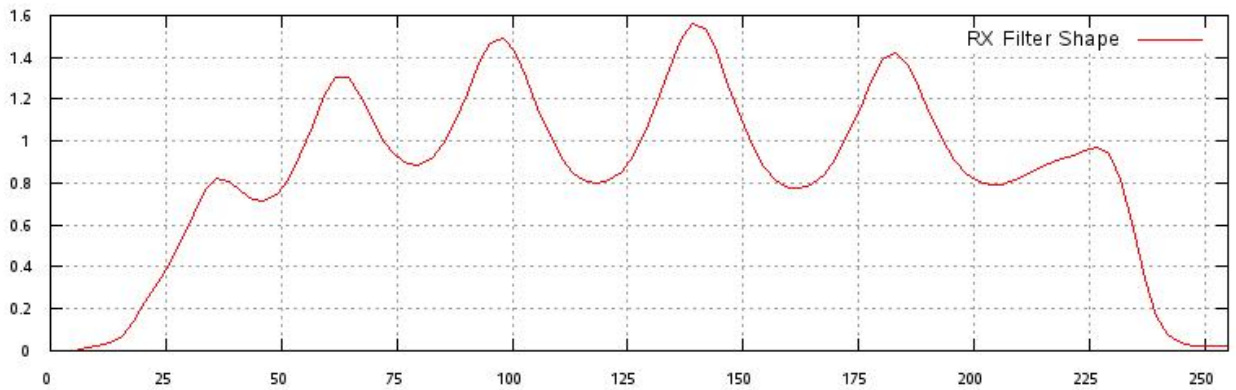
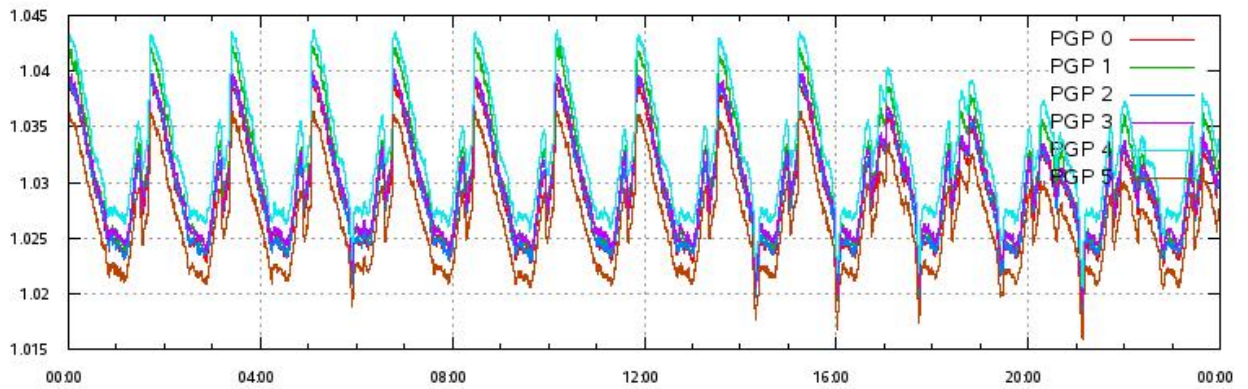
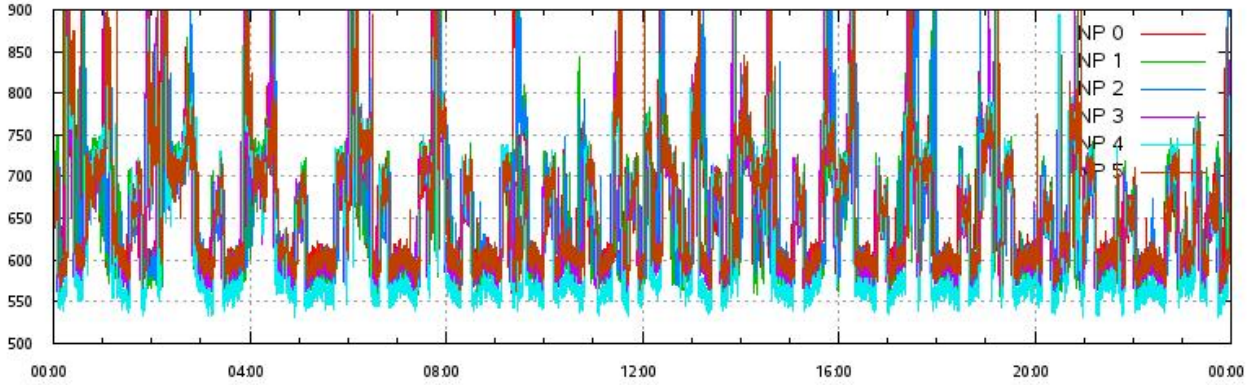


# L1A Product

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

RX Filter Shape average over sample number

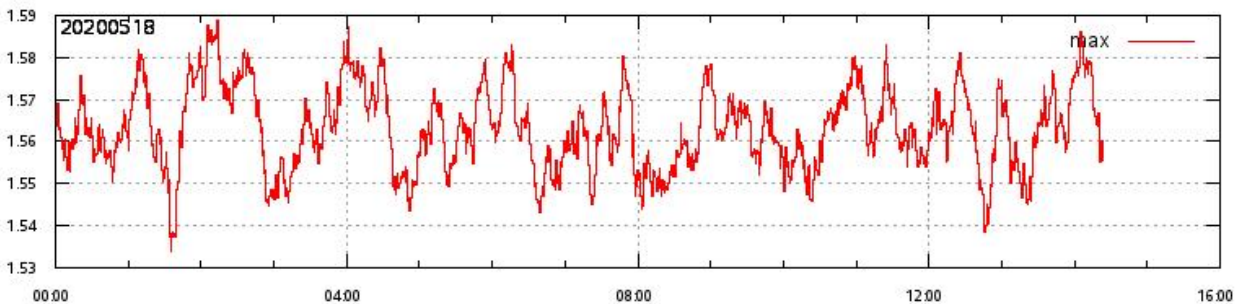
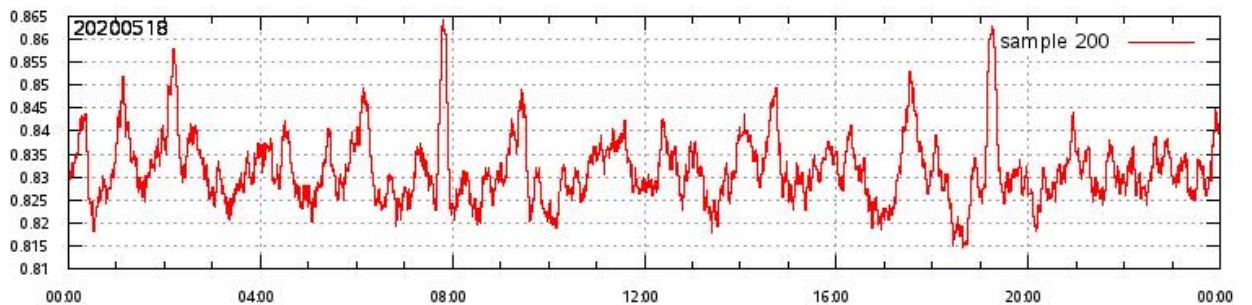
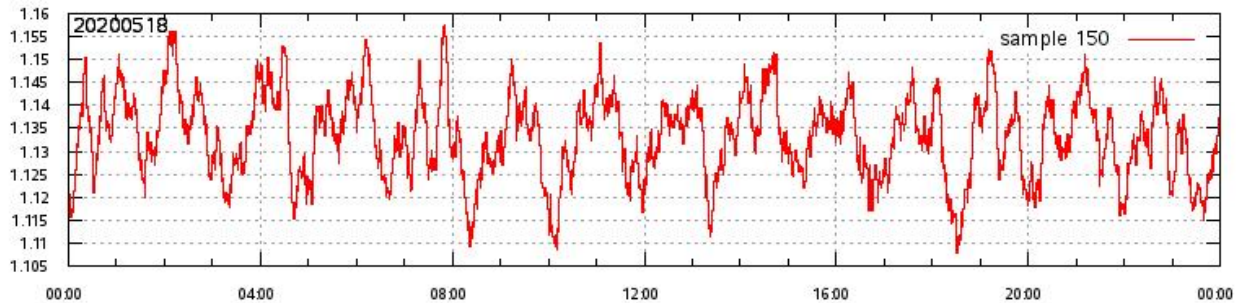
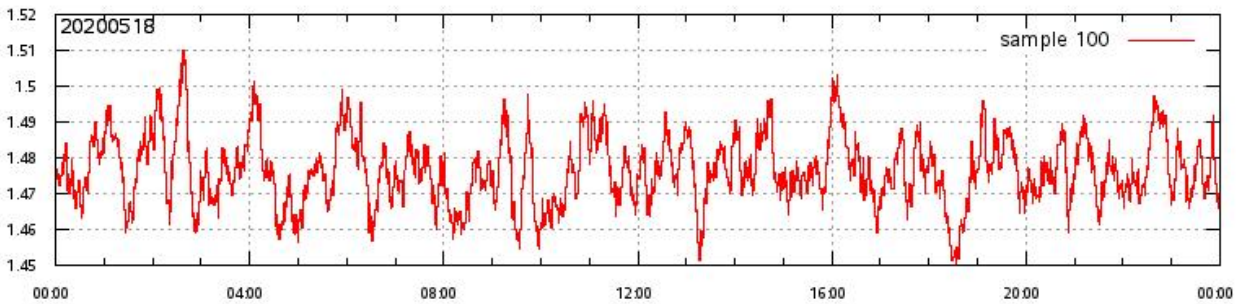
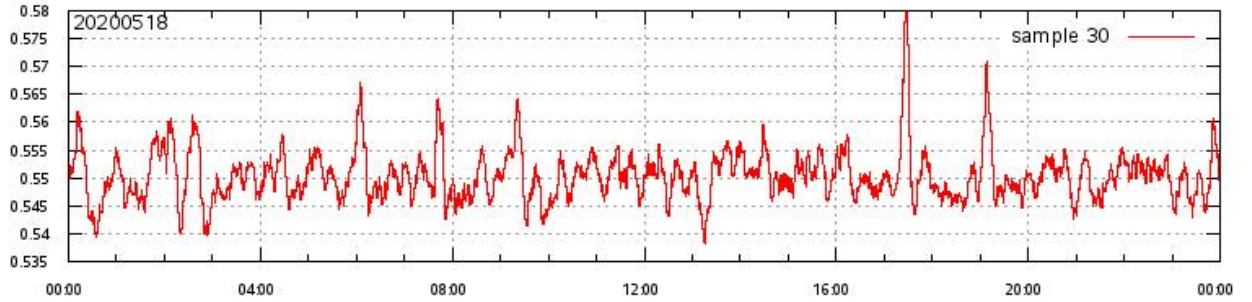
Noise Power threshold exceeded (TH=900) on map





# L1A Product

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

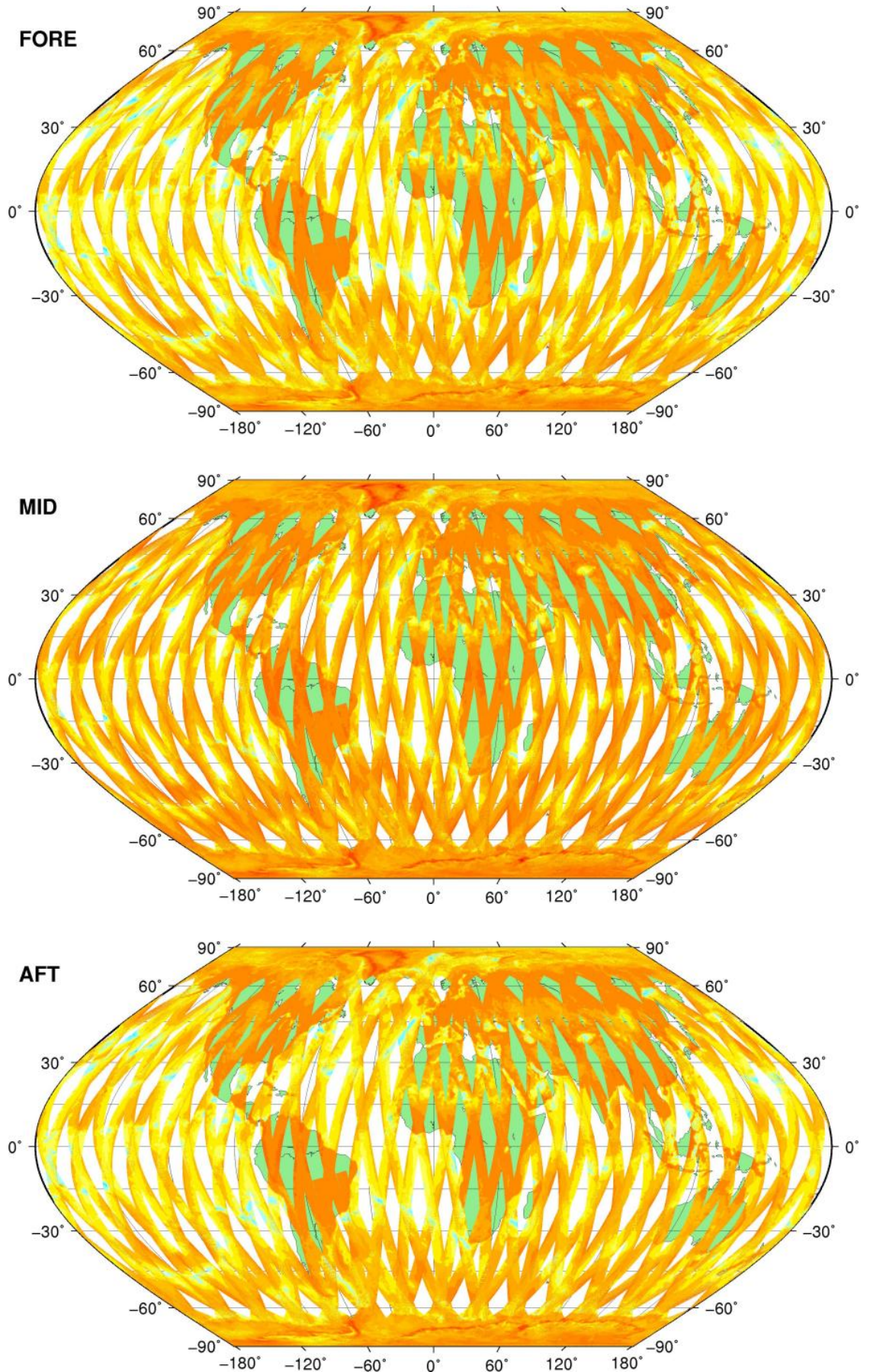




# SZO Product

Sigma0\_TRIP Coverage map

## SIGMA0\_TRIP Coverage

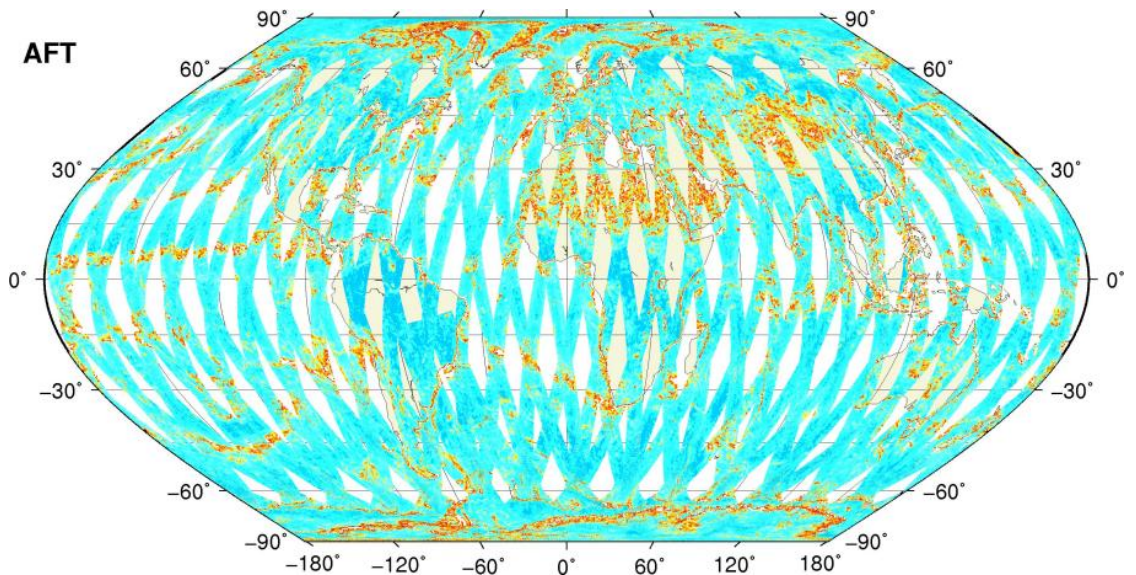
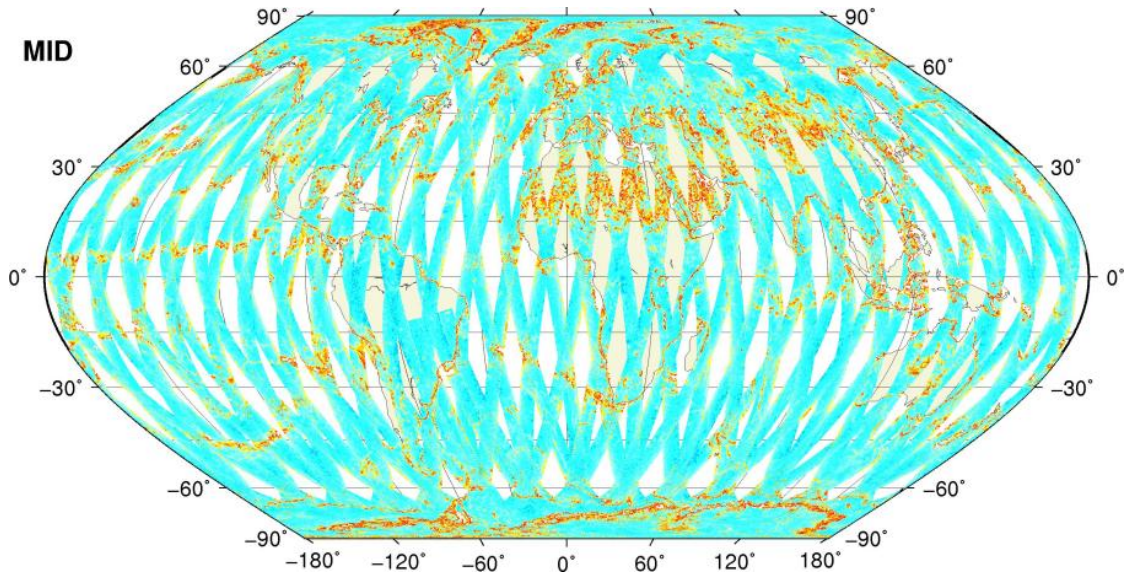
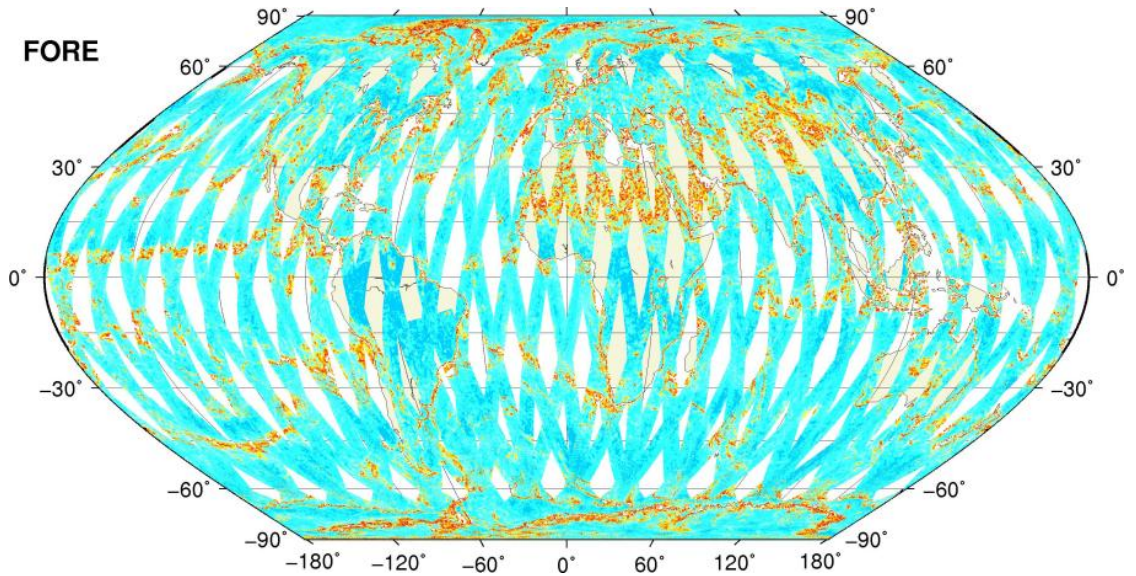




# SZO Product

## Kp Coverage map

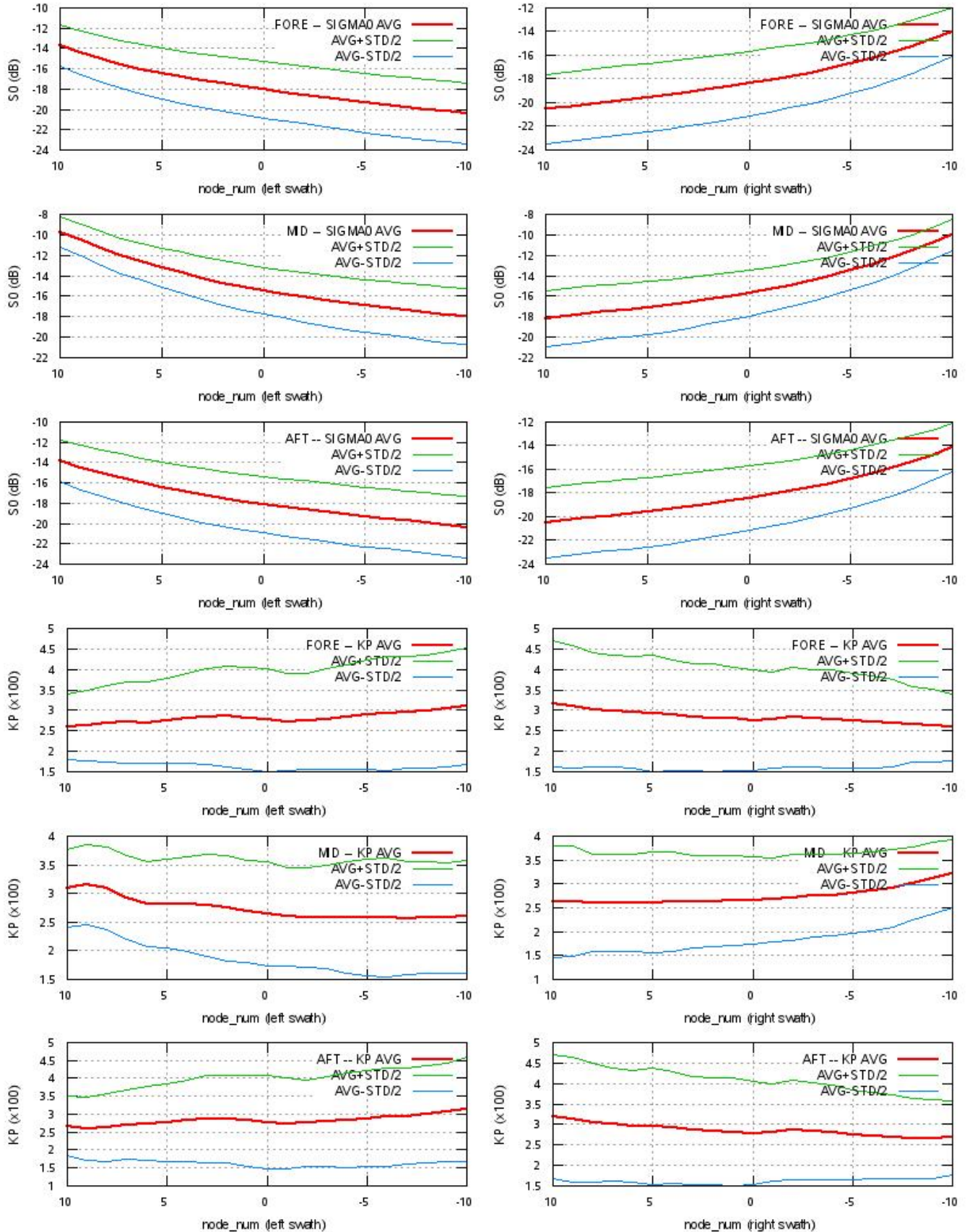
### Kp Coverage





# SZO Product

## S0 - Kp Statistics





# SZO Product

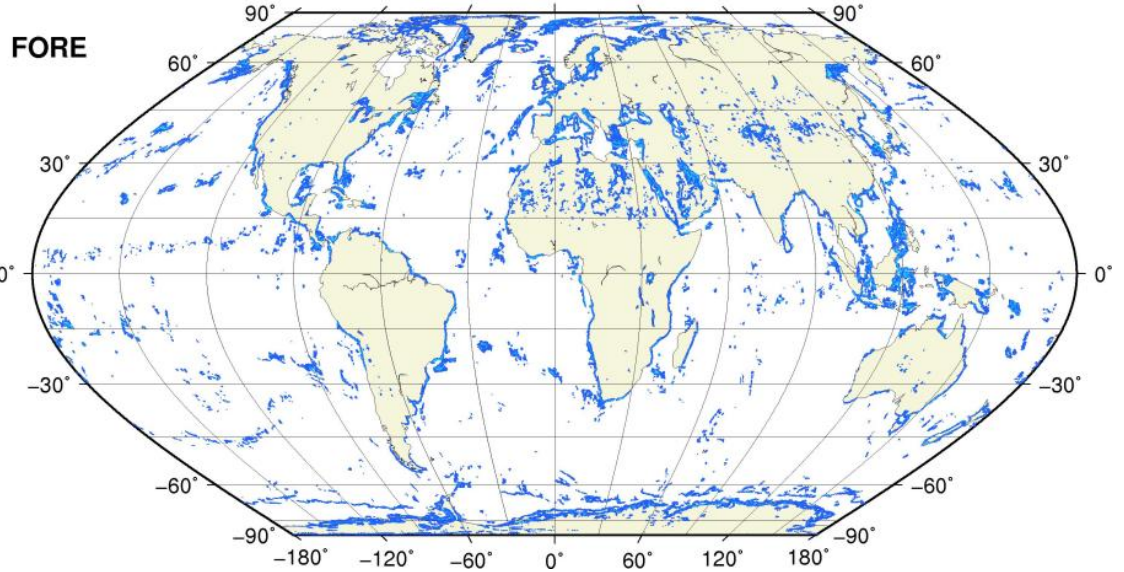
Kp Outliers on map

$0.06 < Kp < 1.0$

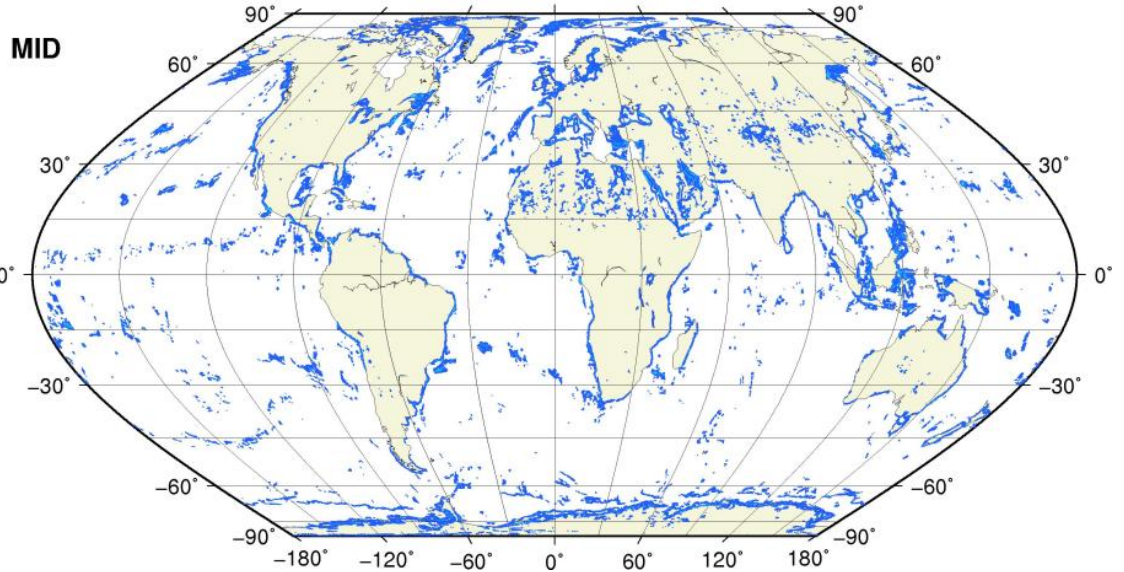
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0



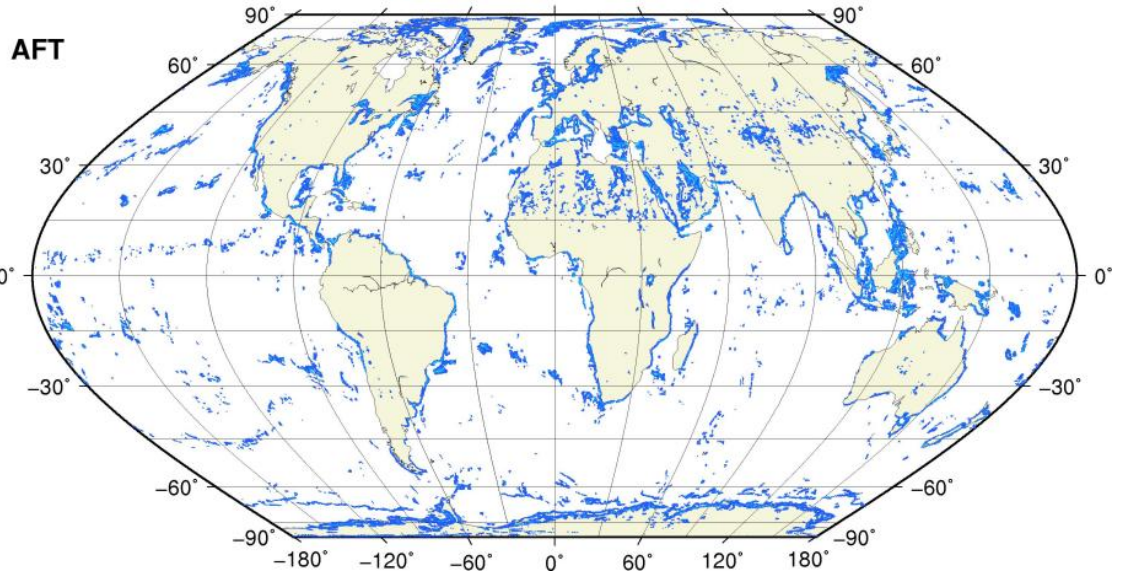
● KP = 1.0 #rec=0



● KP = 1.0 #rec=0



● KP = 1.0 #rec=0

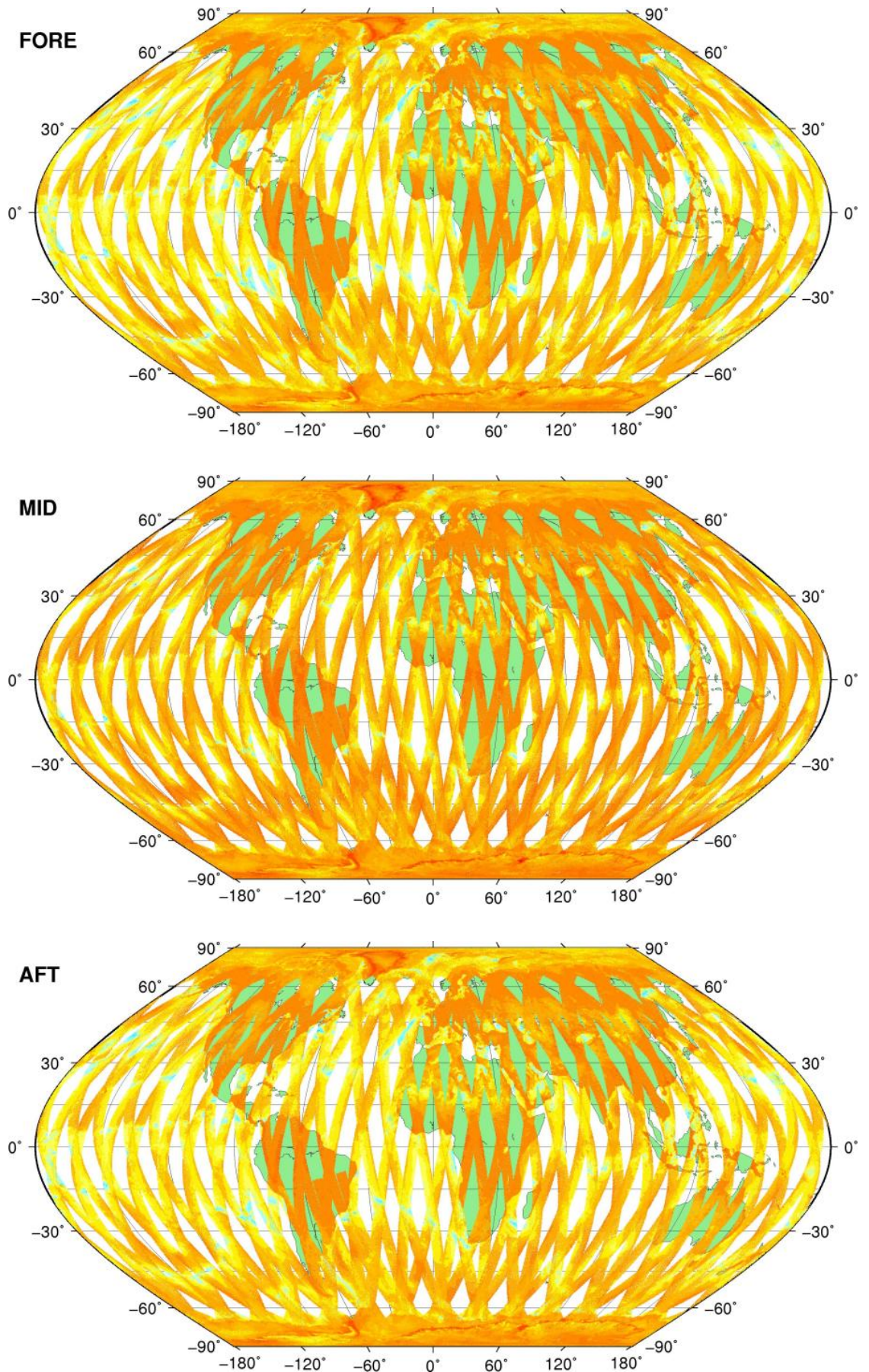




# SZR Product

Sigma0\_TRIP Coverage map

## SIGMA0\_TRIP Coverage

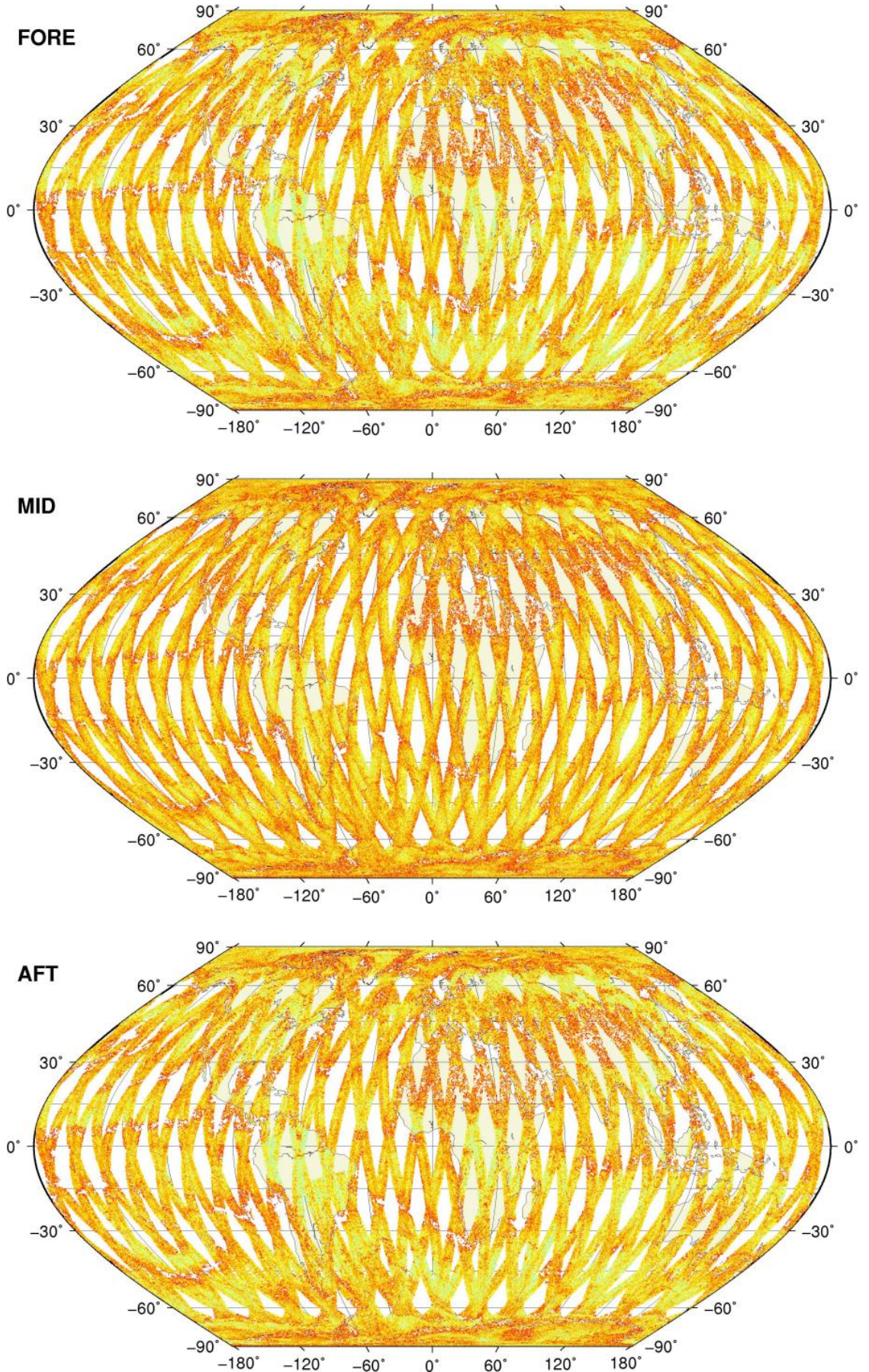




# SZR Product

Kp Coverage map

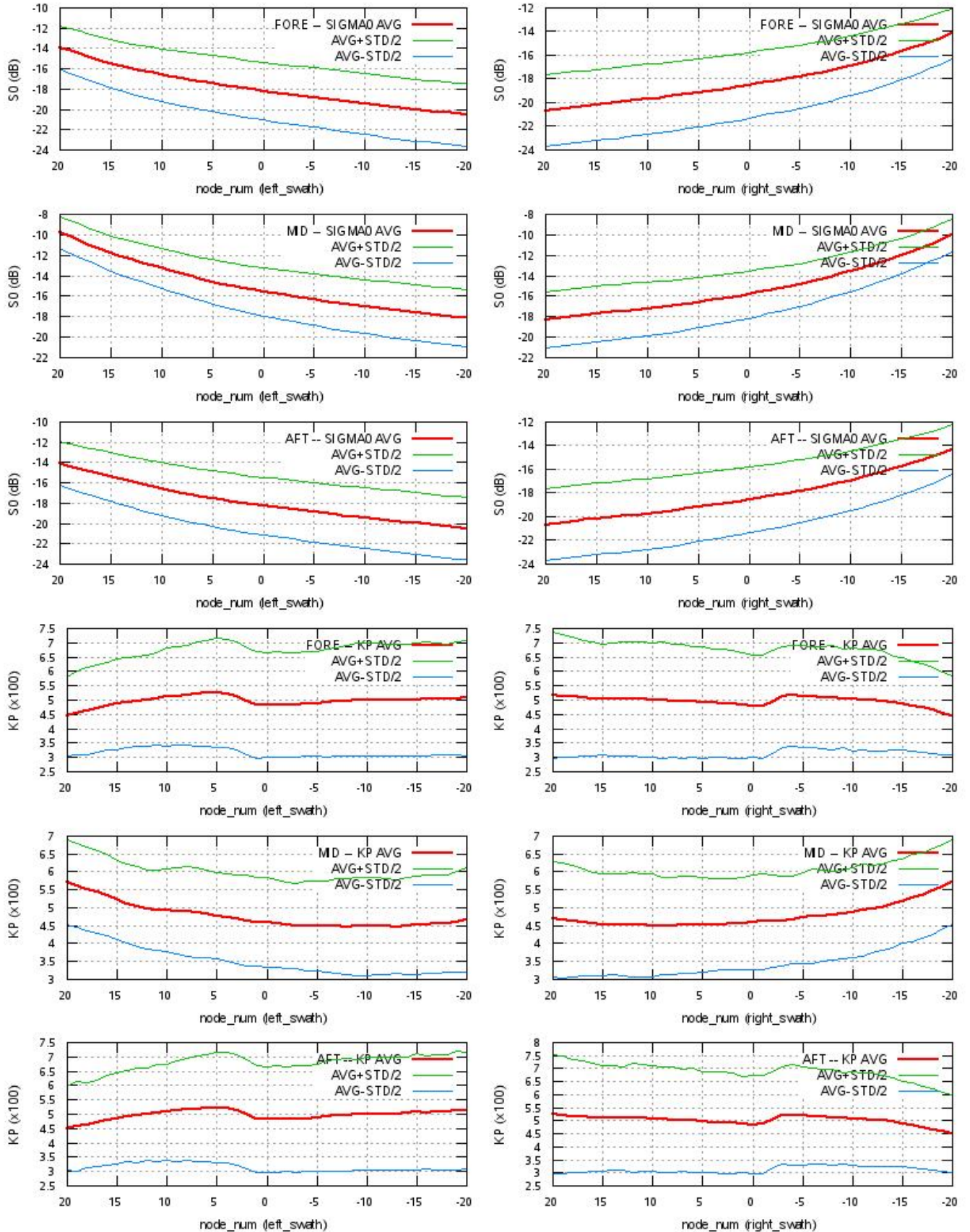
## Kp Coverage





# SZR Product

## S0 - Kp Statistics





# SZR Product

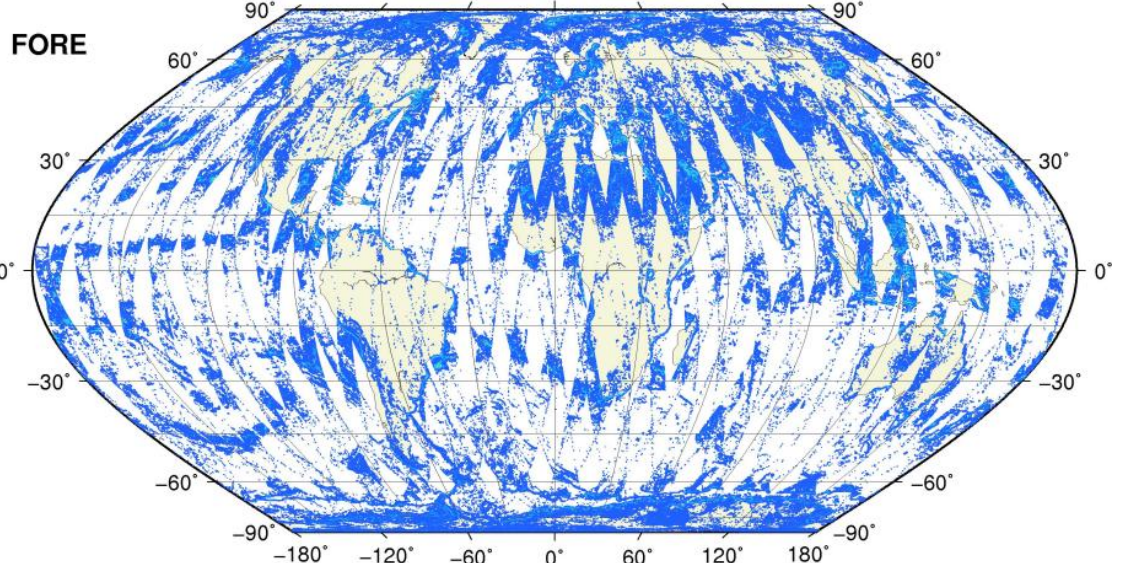
Kp Outliers on map

$0.06 < Kp < 1.0$

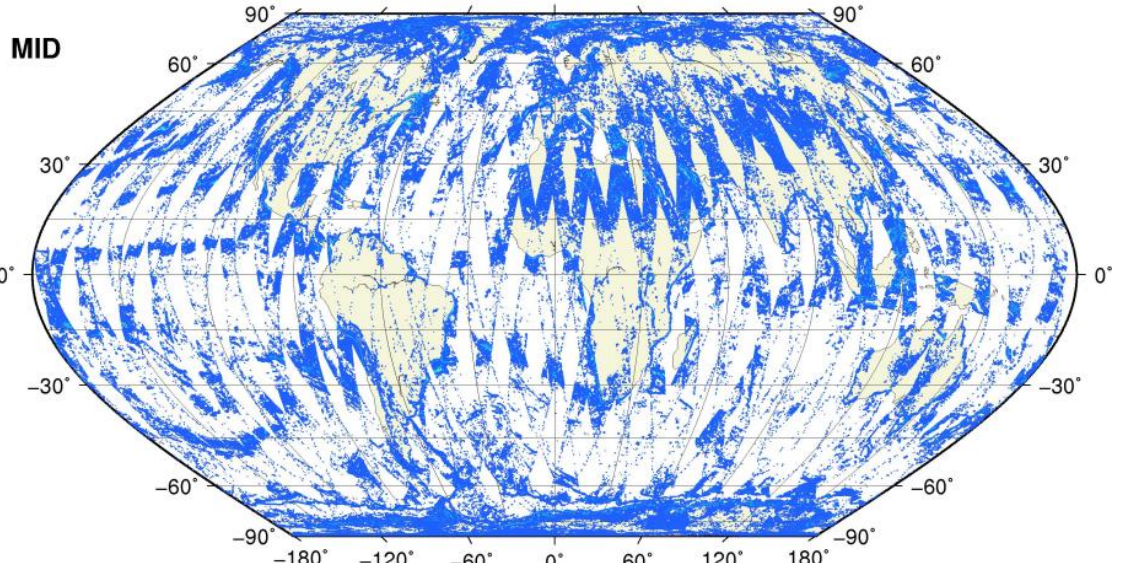
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0



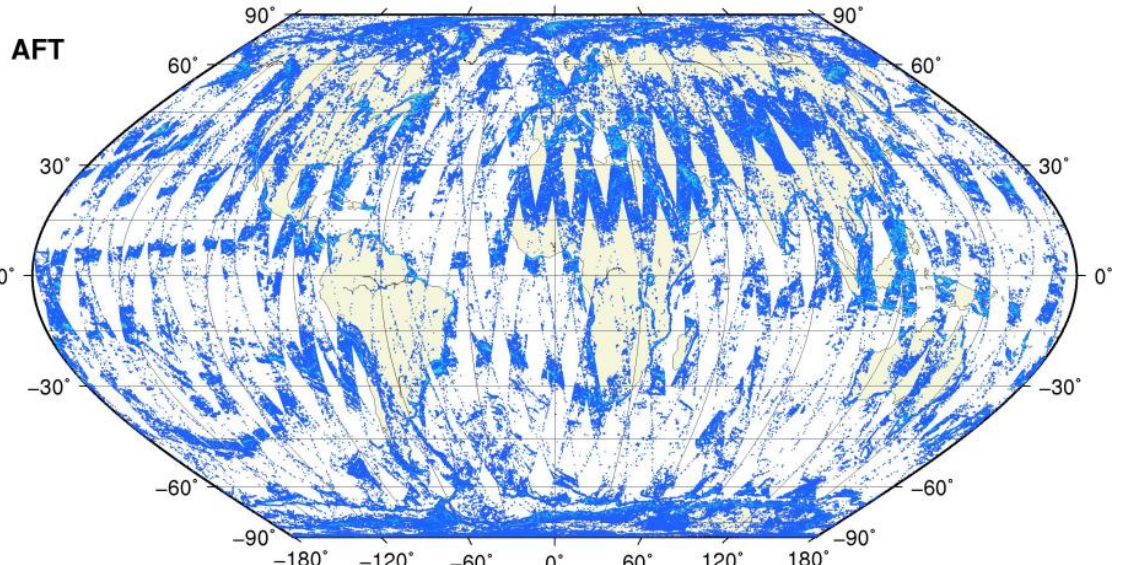
● KP = 1.0 #rec=0



● KP = 1.0 #rec=0



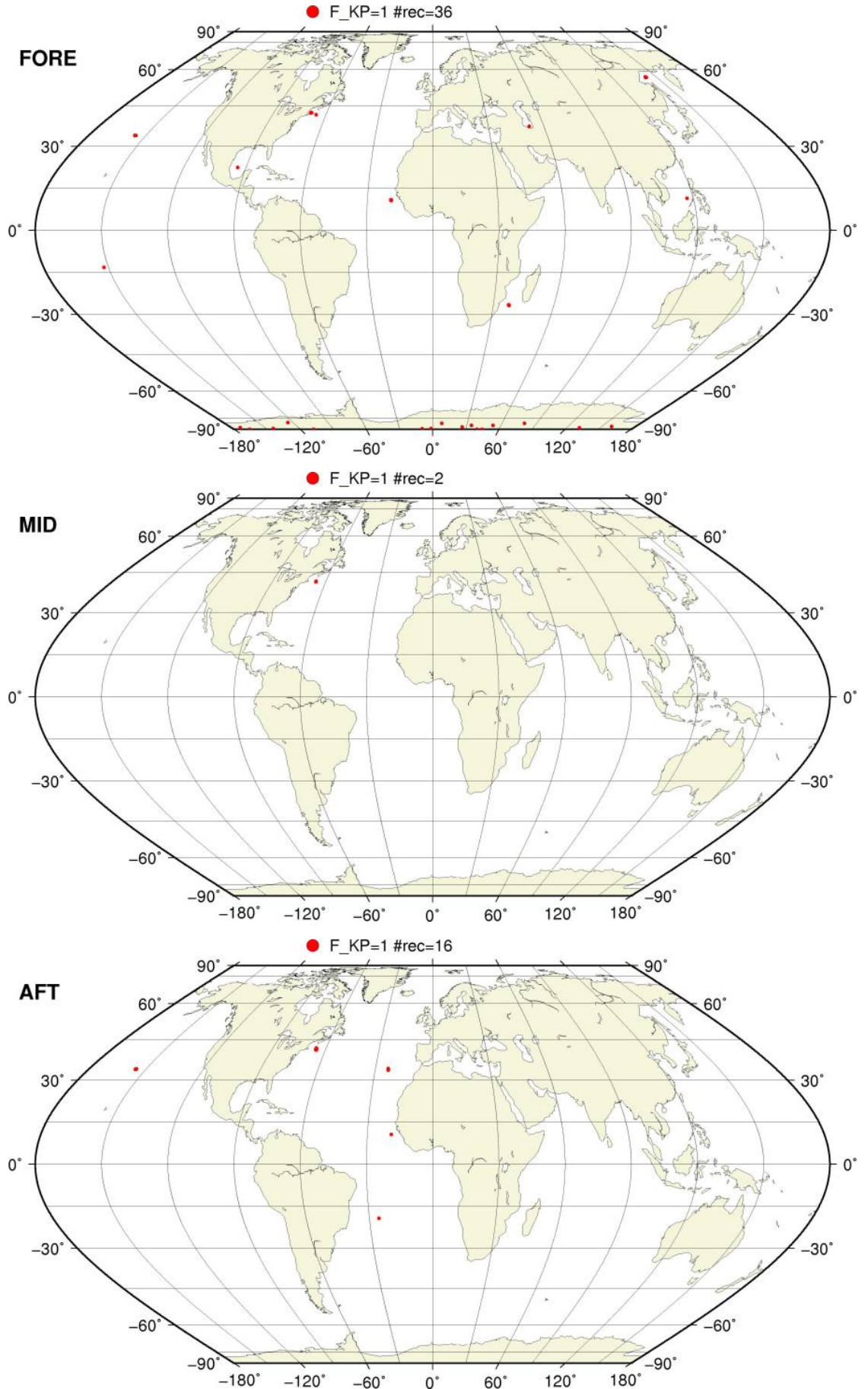
● KP = 1.0 #rec=0





# SZO Flagged Data Coverage

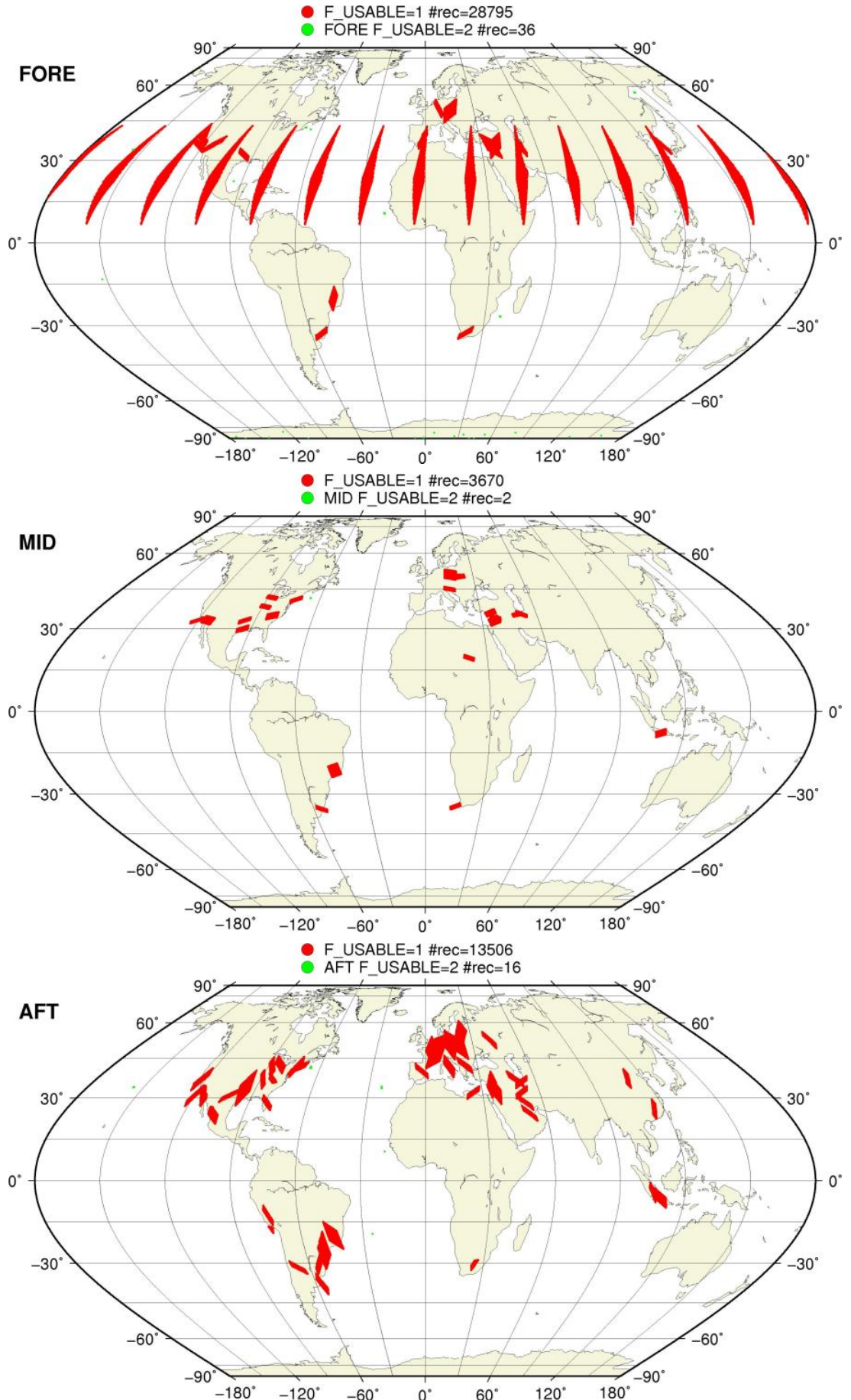
F\_KP = 1 on map





# 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

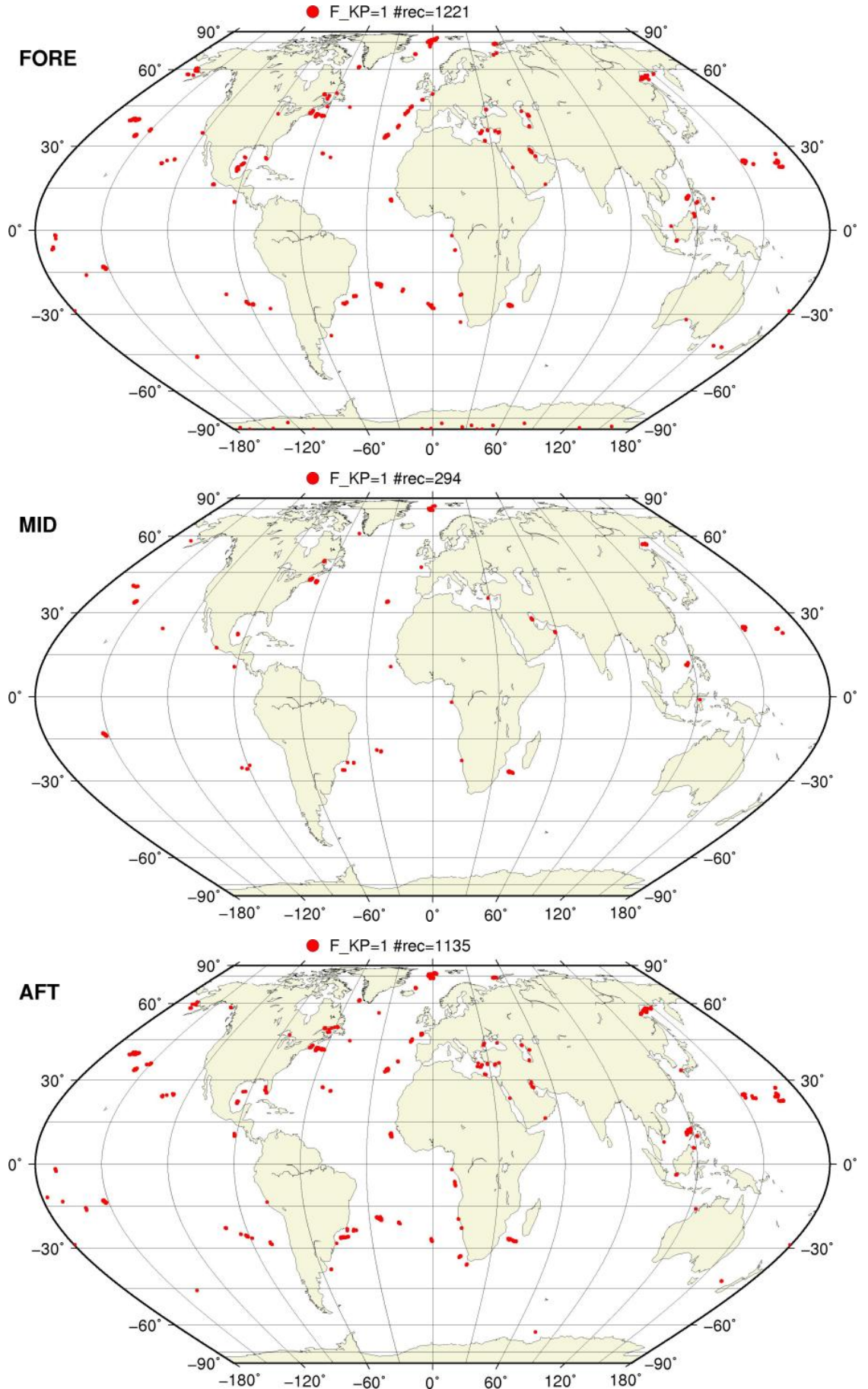
$0 < F_{F/V} \leq 1$  on map





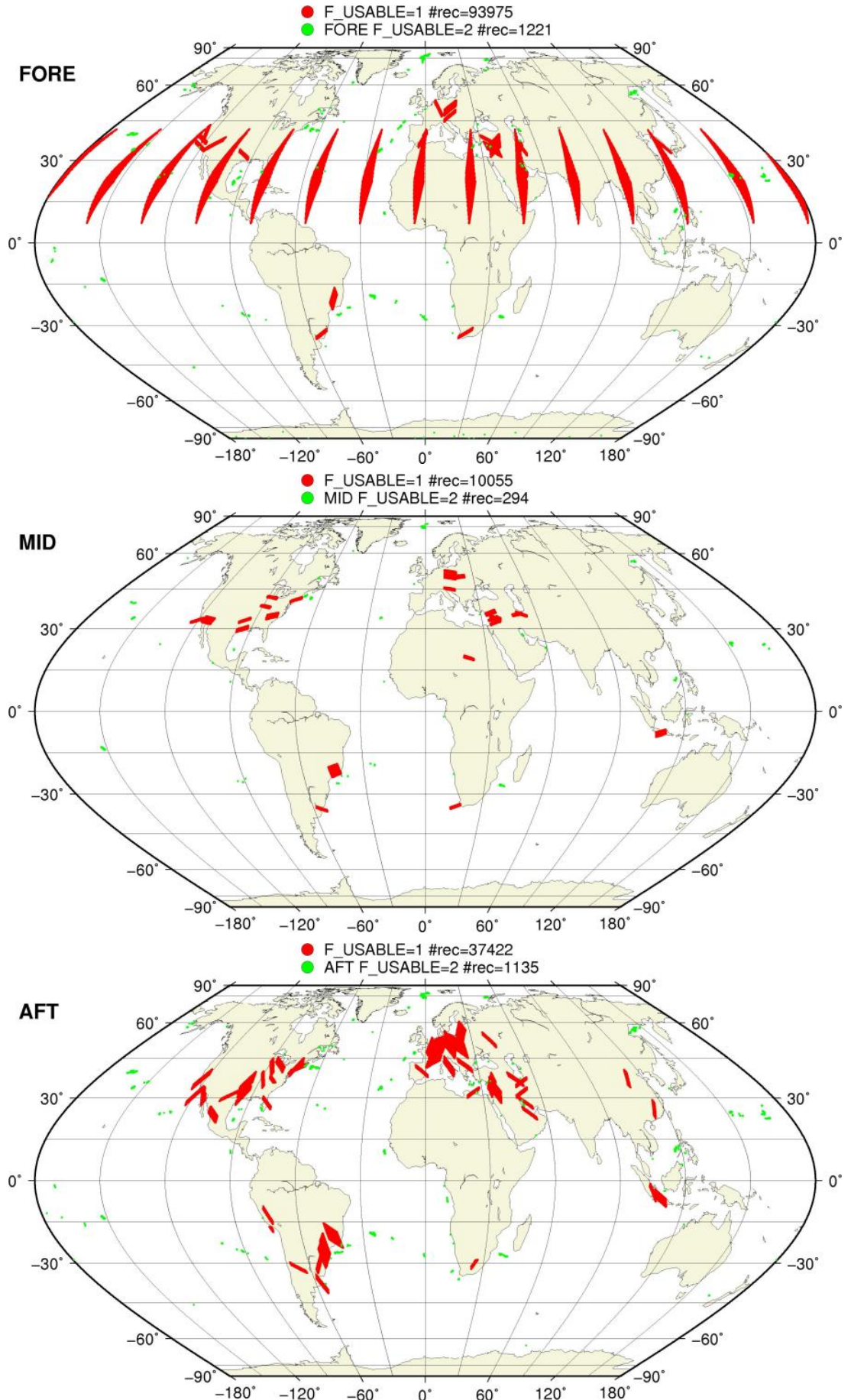
# SZR Flagged Data Coverage

F\_KP = 1 on map



# SZR Flagged Data Coverage

F\_USABLE = 1 or 2 on map





# SZR Flagged Data Coverage

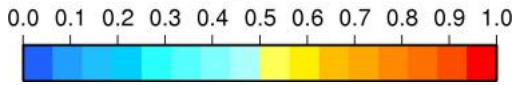
$0 < F_{OA} \leq 1$  on map



# SZR Flagged Data Coverage

0 < F\_F/V <=1 on map

0 < F\_F <= 1



0 < F\_V <= 1

