

# ASCAT DAILY Report

**Metop-A**

**OPE**

**DAY 2020\_222**

**20200809000000 - 20200809235959**

## DATA STATISTICS

BASED ON ORBITS (#14)

71635 71636 71637 71638 71639 71640 71641 71642 71643 71644 71645 71646 71647  
71648 71649

DB STATISTICS : OPE M02\_20200809

SMO	479	2.94	.95	1.31	5.64
SMR	479	6.87	1.60	3.80	14.34
SZF	462	1.64	2.53	.43	45.07
xxx	479	33.58	4.79	5.89	45.72

INGATE (STORE) STATISTICS : OPE M02\_20200809

xxx_1A	/fbf/tcdras/store/gsl/ASCA_xxx_1A_M02	-- number of files (xxx_1A) : 479
SZO_1B	/fbf/tcdras/store/gsl/ASCA_SZO_1B_M02	-- number of files (SZO_1B) : 479
SZR_1B	/fbf/tcdras/store/gsl/ASCA_SZR_1B_M02	-- number of files (SZR_1B) : 479
SZF_1B	/fbf/tcdras/store/gsl/ASCA_SZF_1B_M02	-- number of files (SZF_1B) : 479
SMO_02	/fbf/tcdras/store/gsl/ASCA_SMO_02_M02	-- number of files (SMO_02) : 479
SMR_02	/fbf/tcdras/store/gsl/ASCA_SMR_02_M02	-- number of files (SMR_02) : 479

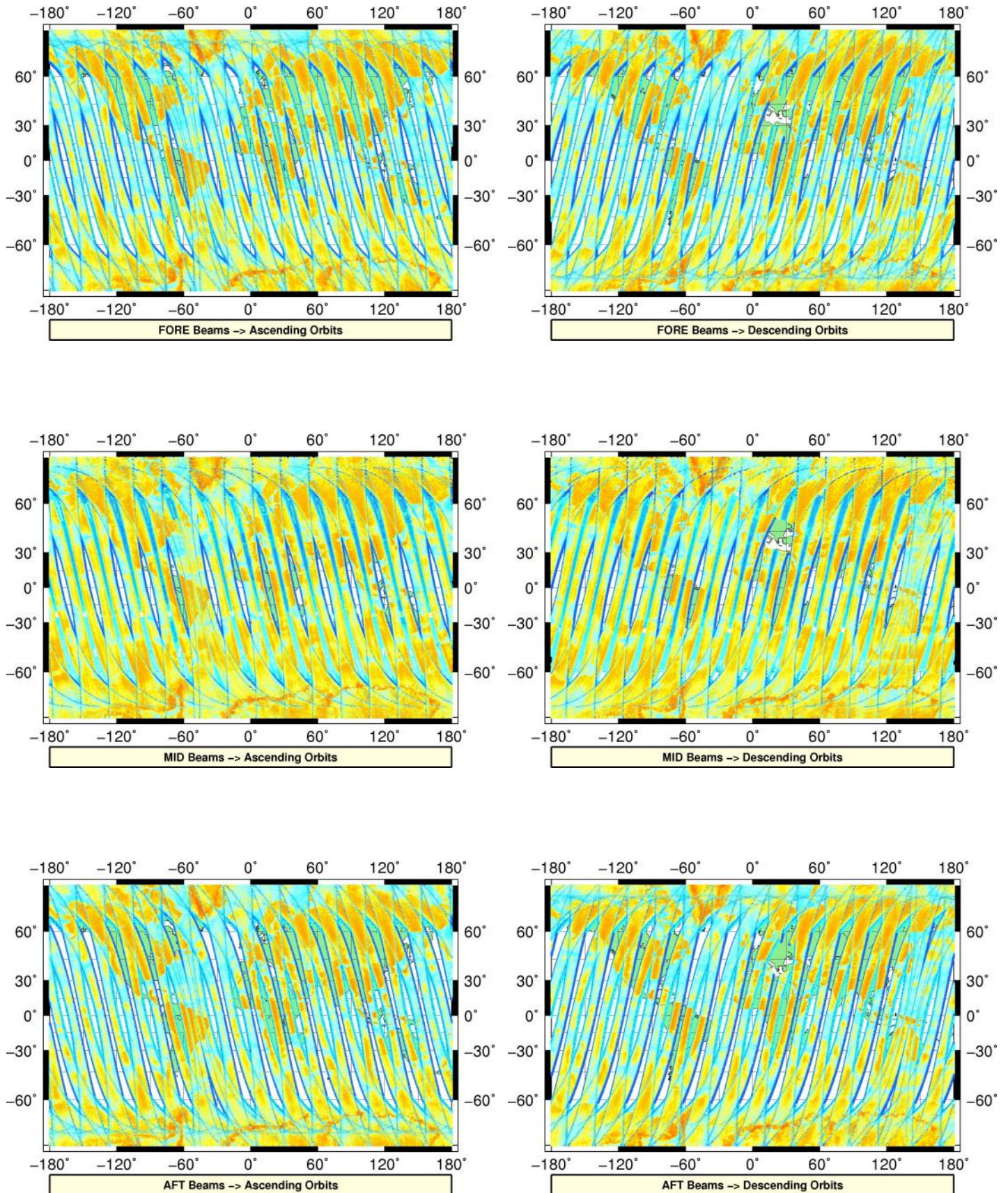
# Overview

## Configuration and SPHR content

Parameter	Value
SENSING START-STOP	20200809000000 - 20200809235959
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	607922
N_L1A_MDR_B0	101321
N_L1A_MDR_B1	101321
N_L1A_MDR_B2	101320
N_L1A_MDR_B3	101320
N_L1A_MDR_B4	101320
N_L1A_MDR_B5	101320
N_GAPS	18
TOTAL_GAPS_SIZE	6336042
N_HKTM_PACKETS_RECEIVED	16127
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	1031524
N_F_LAND	48435183
N_F_GEO	3258955
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

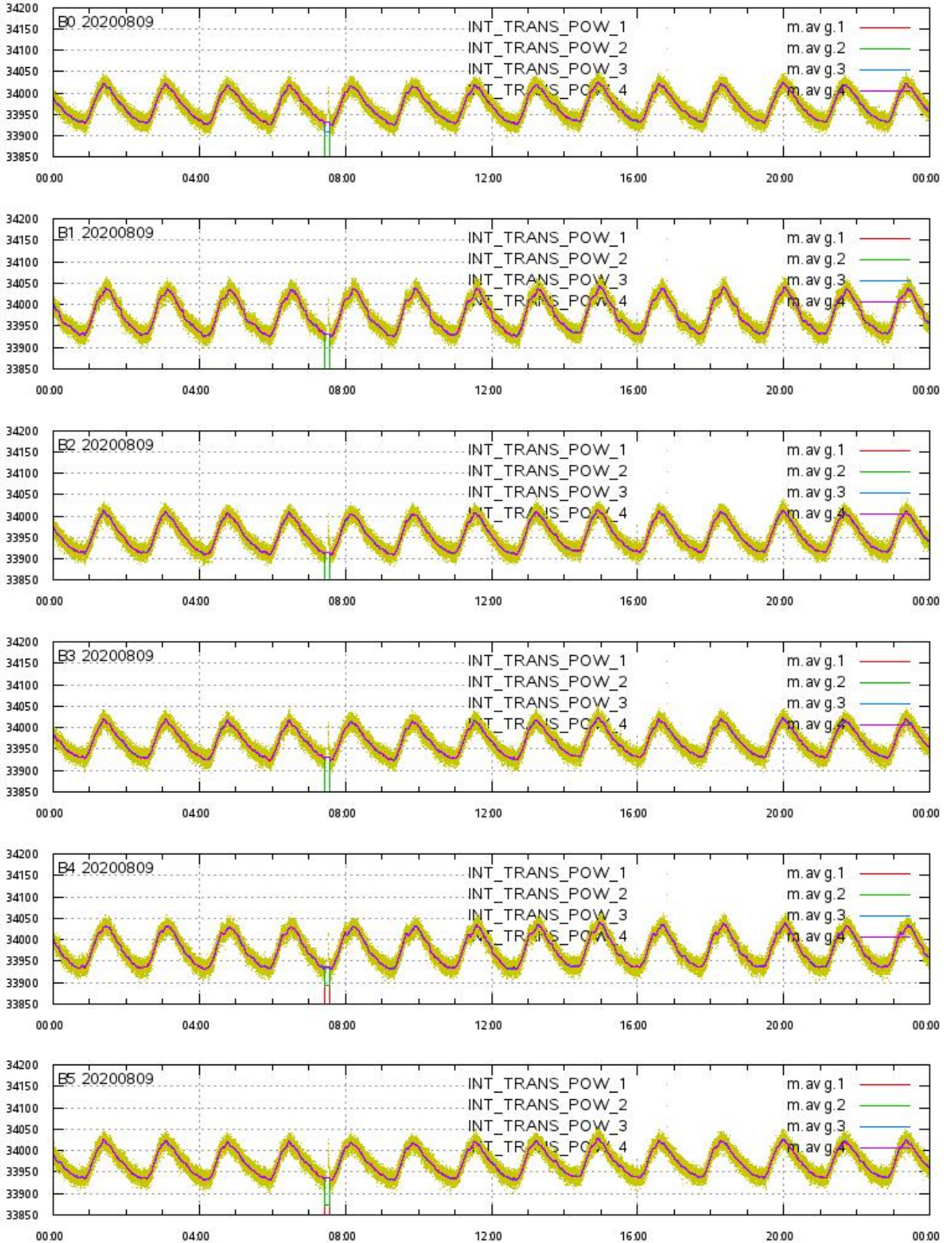
## Echo Data Coverage maps





# L1A Product

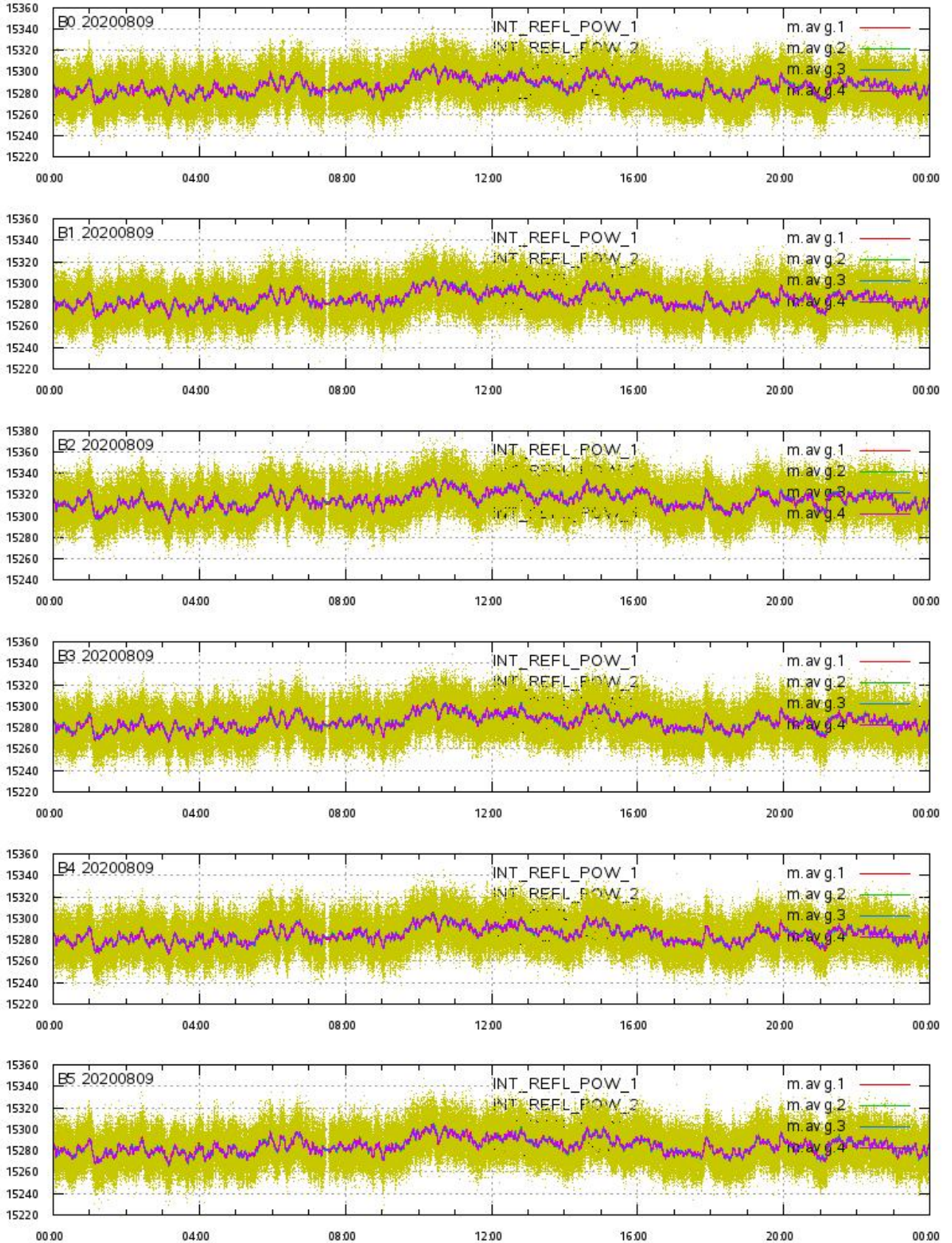
## Integrated Transmitted Powers 1-4 per beam 0-5 vs. UTC\_LOCALISATION





# L1A Product

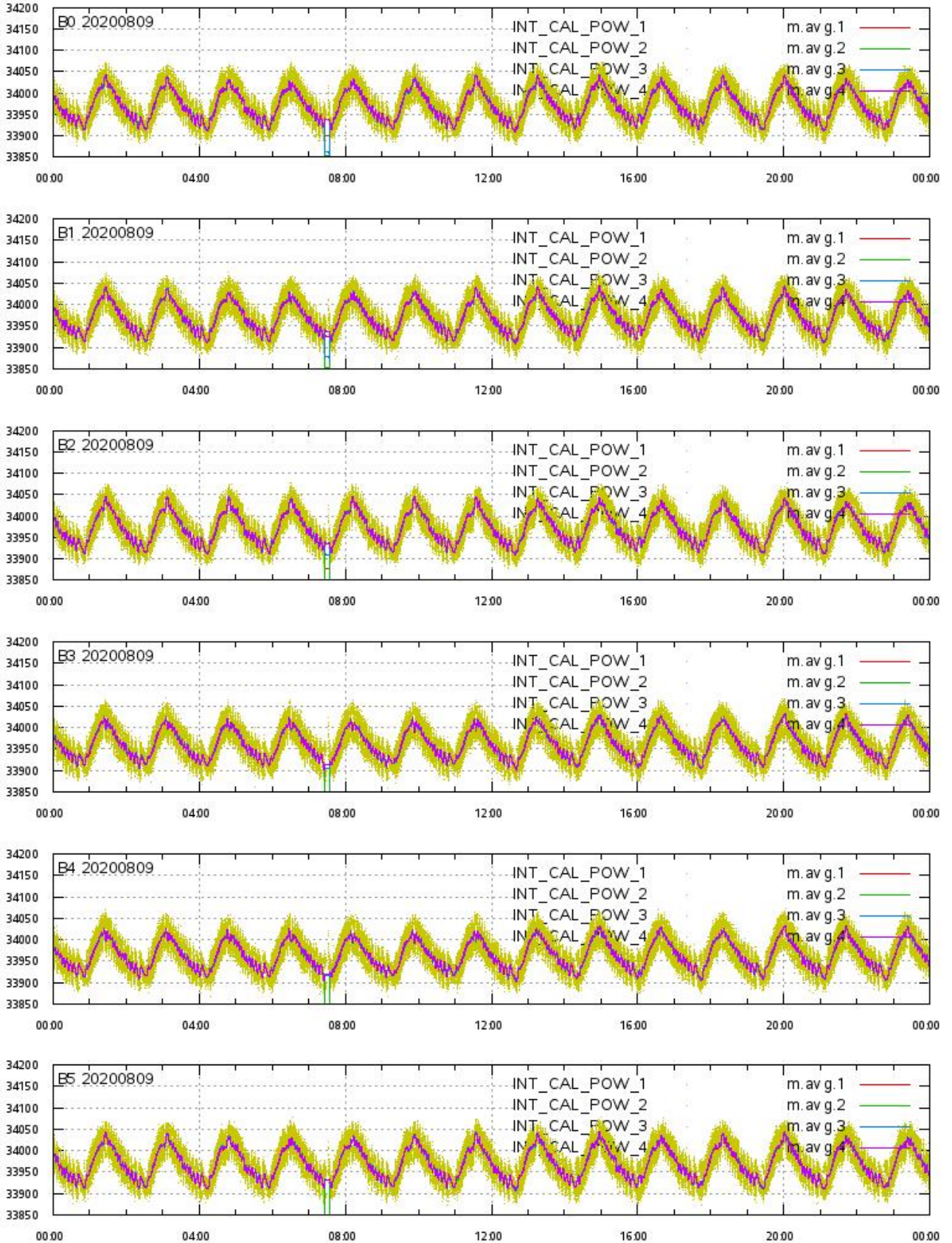
## Integrated Reflected Powers 1-4 per beam 0-5 vs. UTC\_LOCALISATION





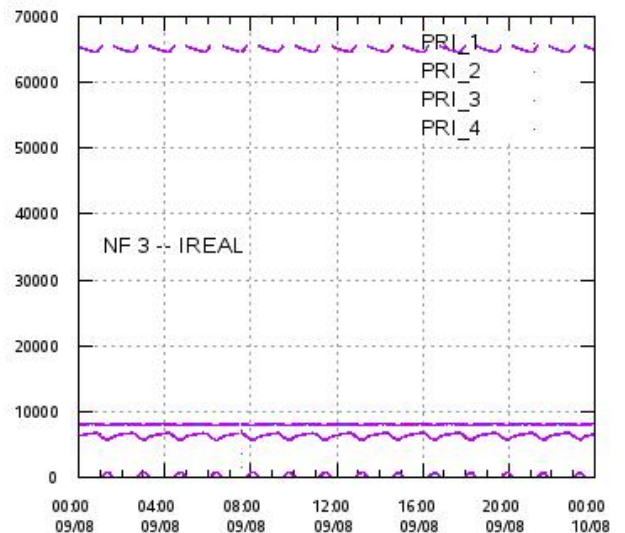
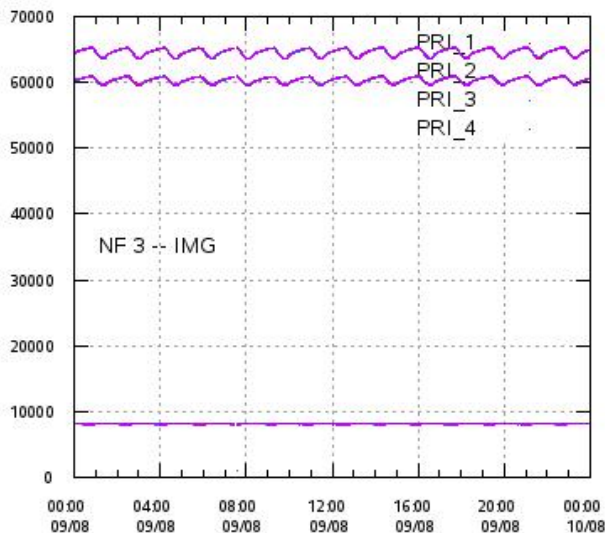
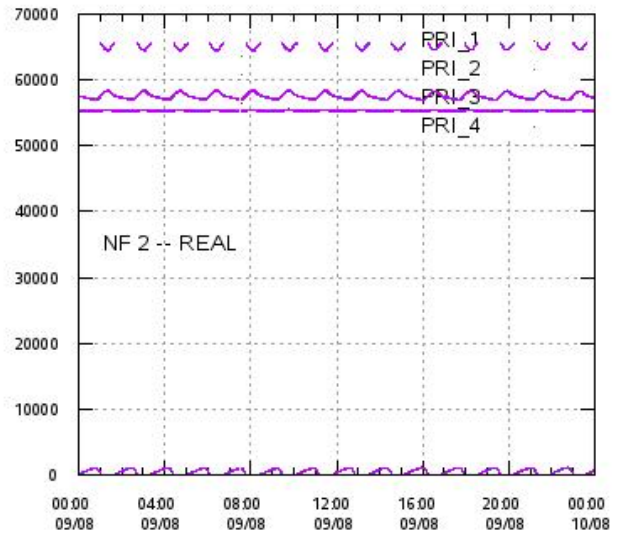
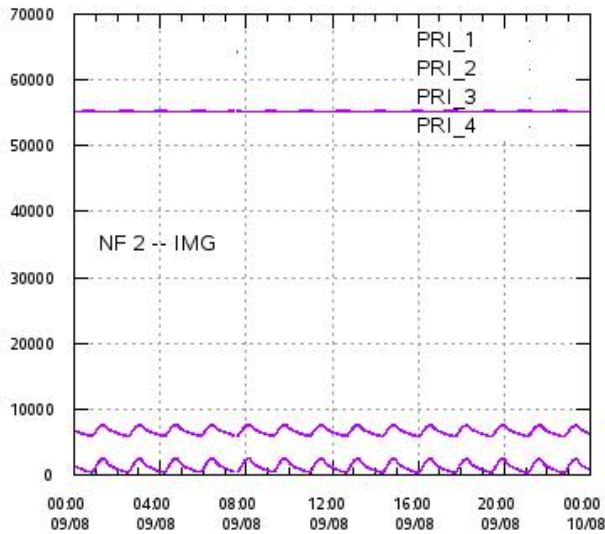
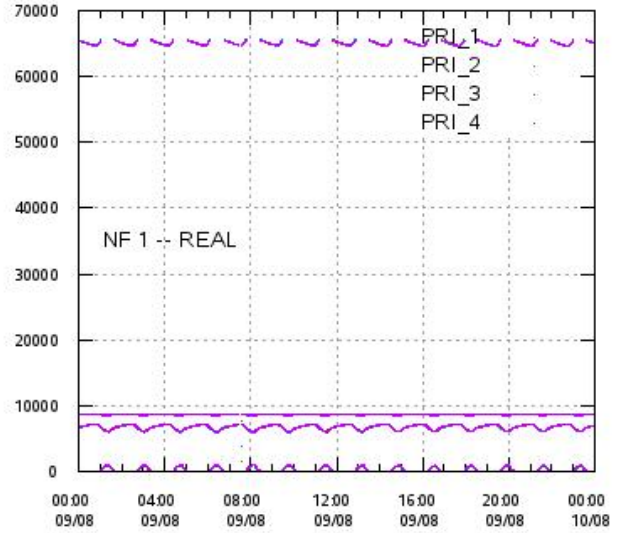
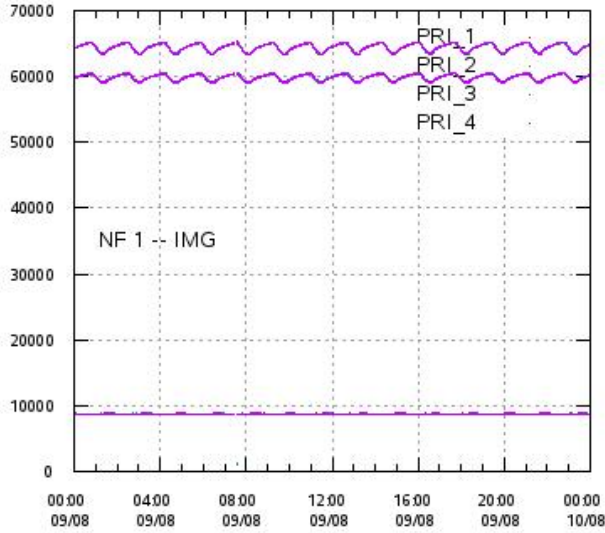
# L1A Product

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



# L1A Product

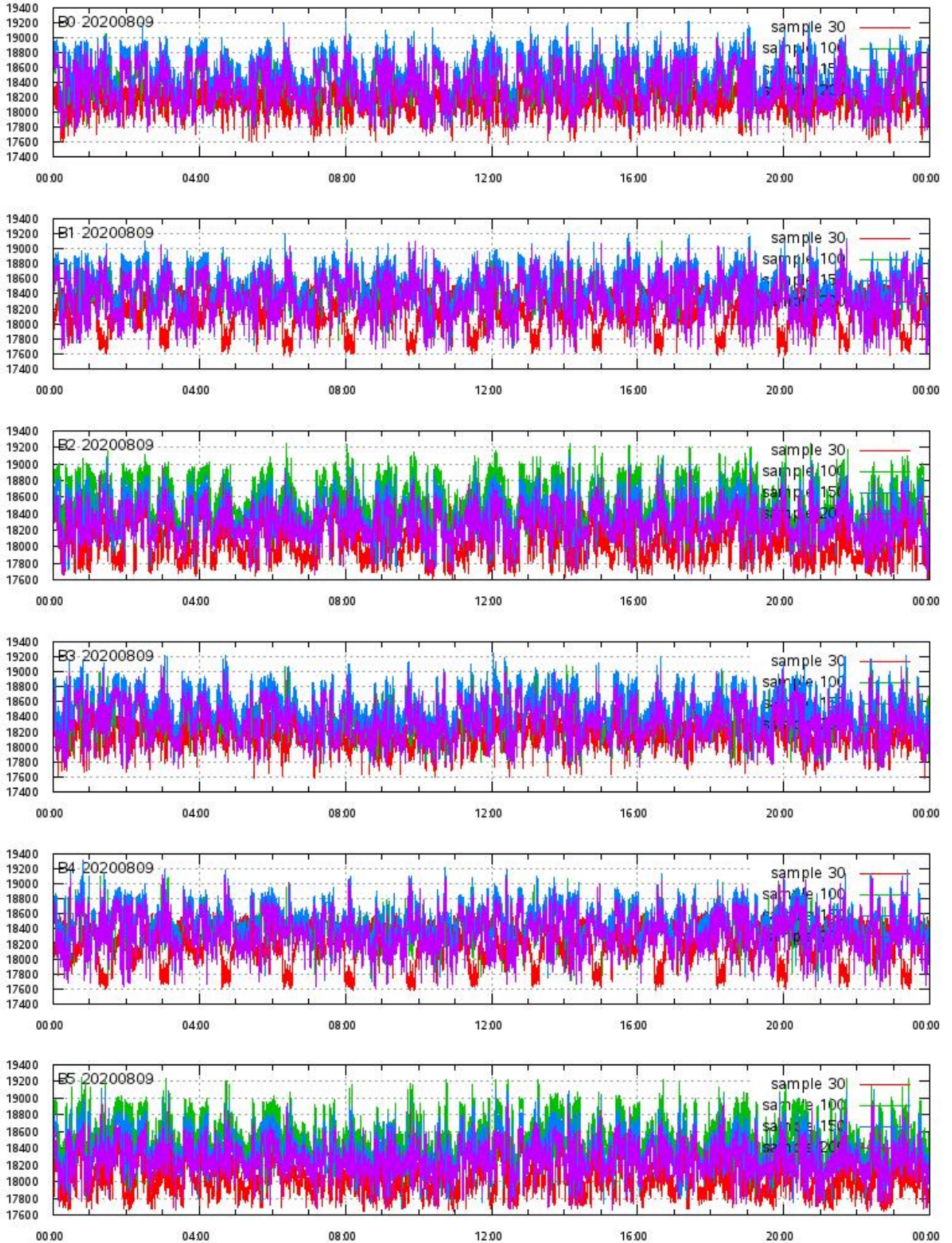
## Calibration Powers vs. UTC\_LOCALISATION





# L1A Product

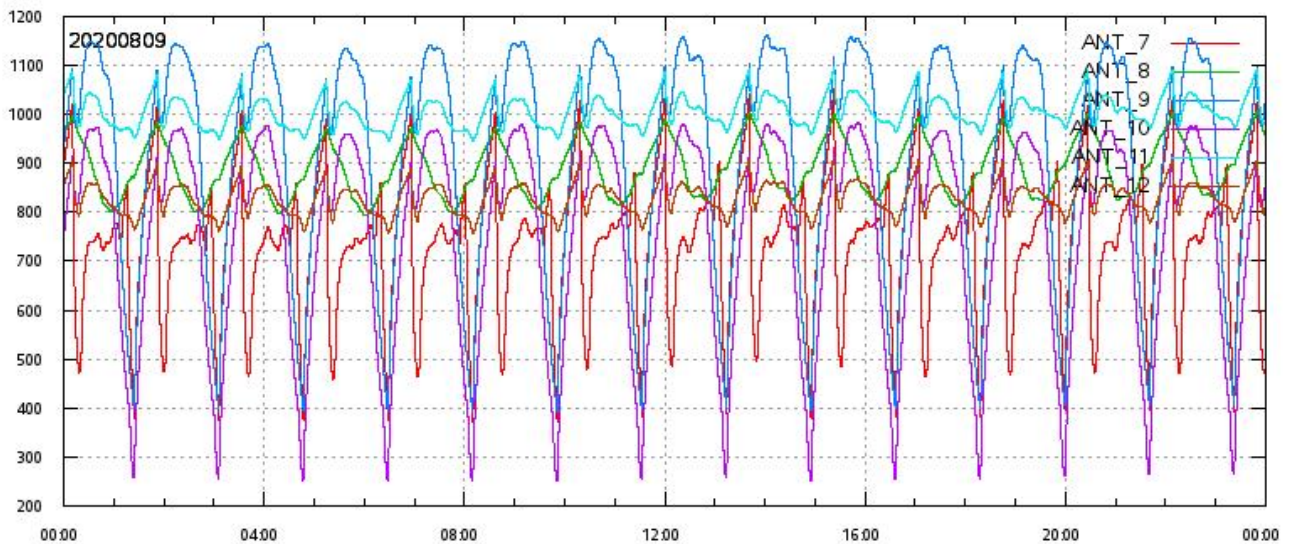
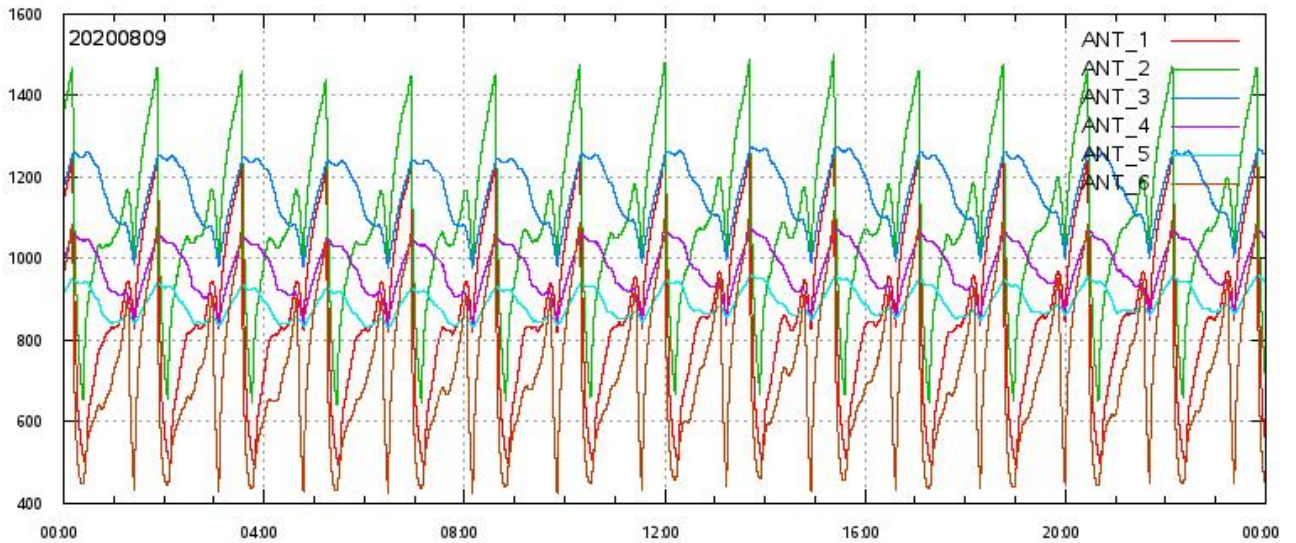
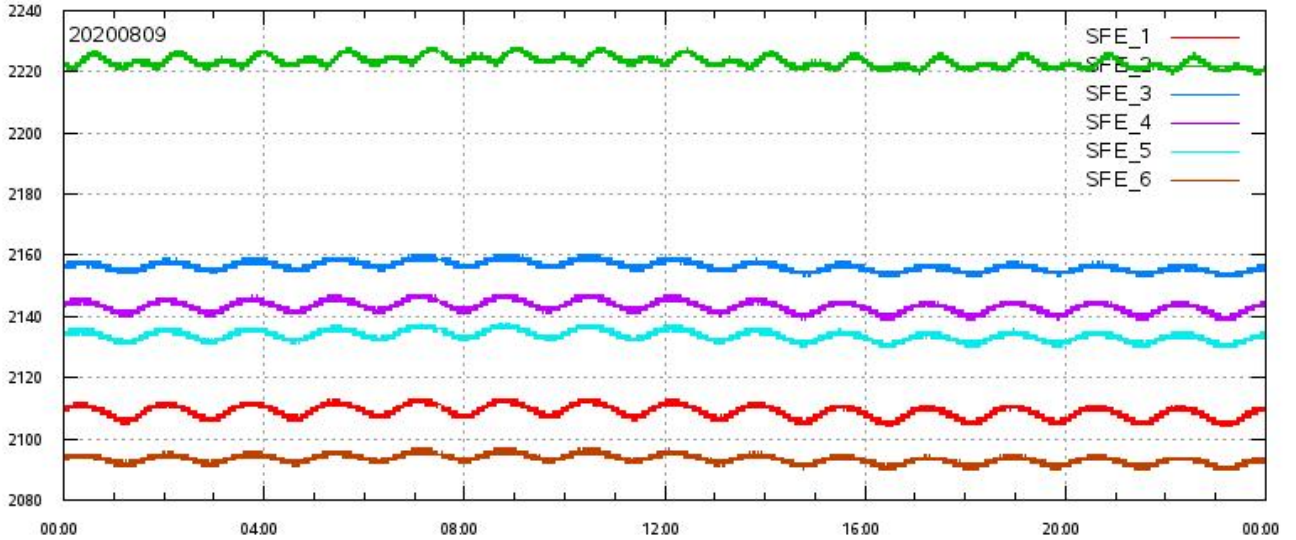
ECHO DATA (raw) for samples 30, 100, 150 and 200 vs. UTC\_LOCALISATION





# L1A Product

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

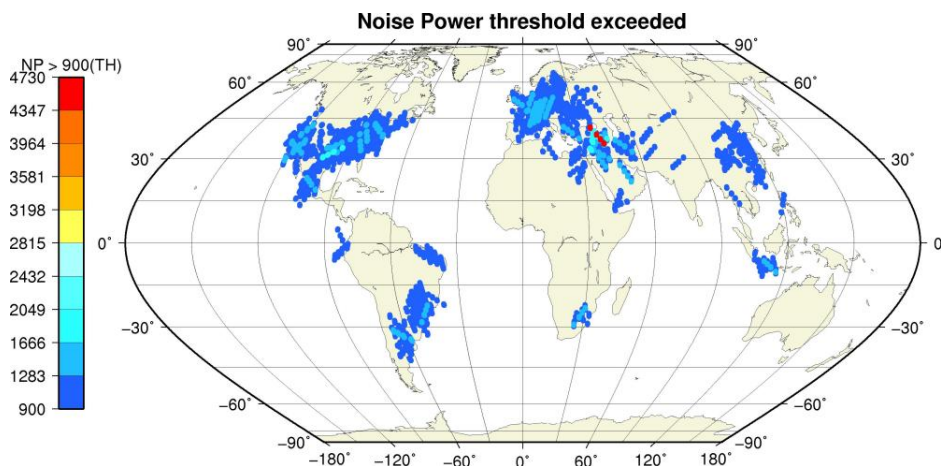
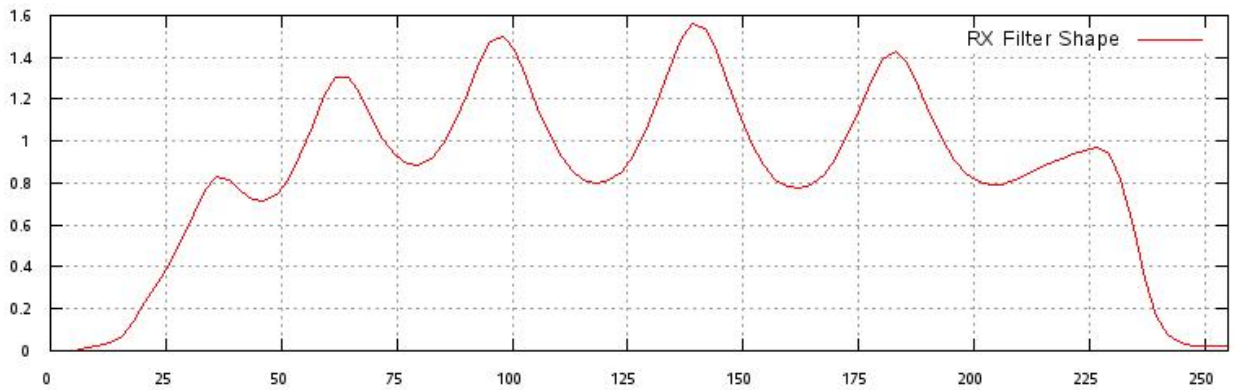
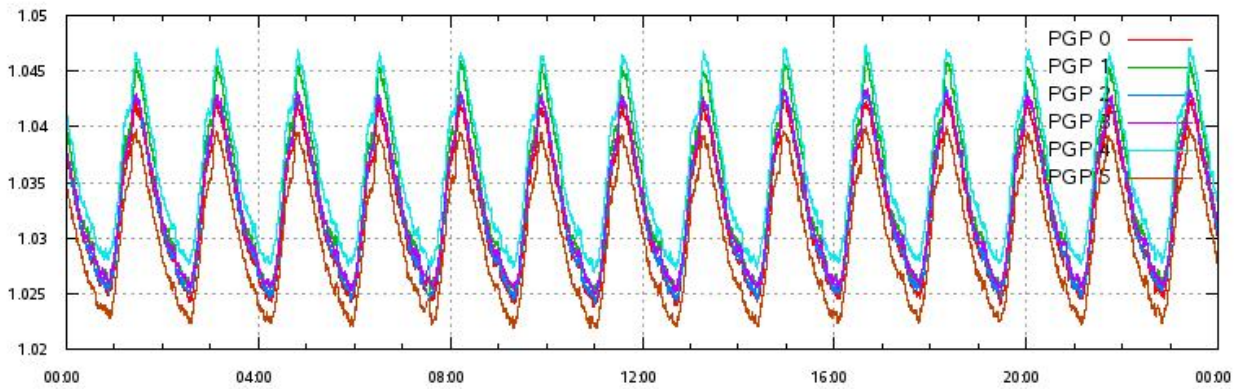
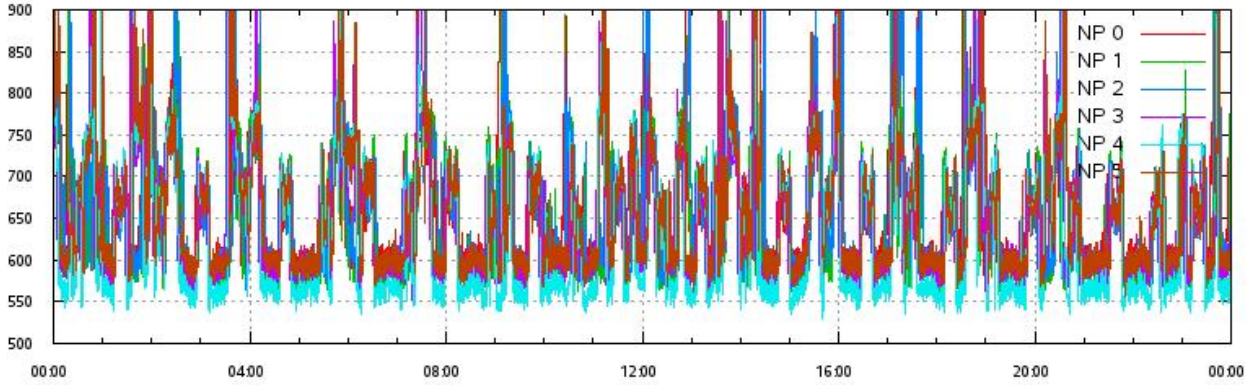


# L1A Product

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

RX Filter Shape average over sample number

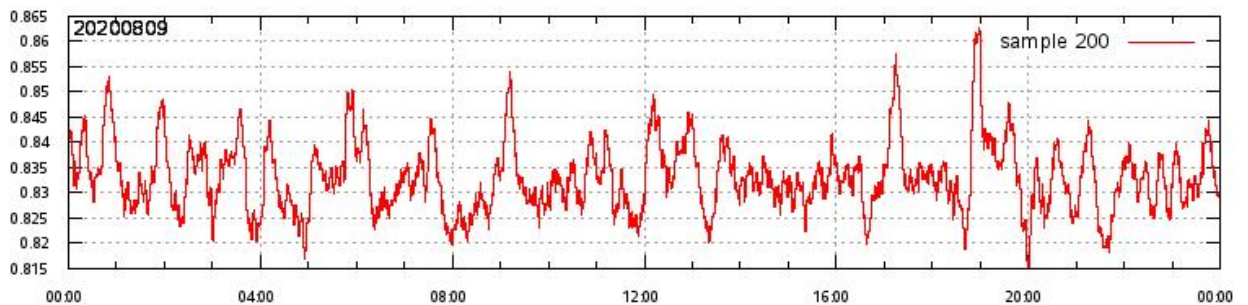
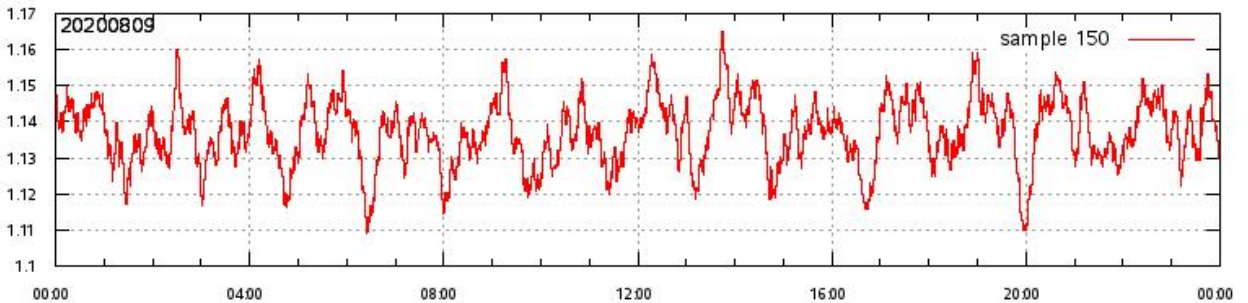
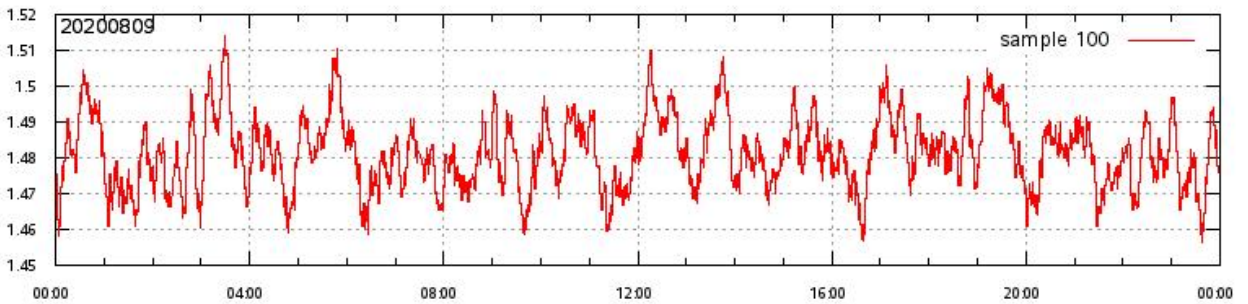
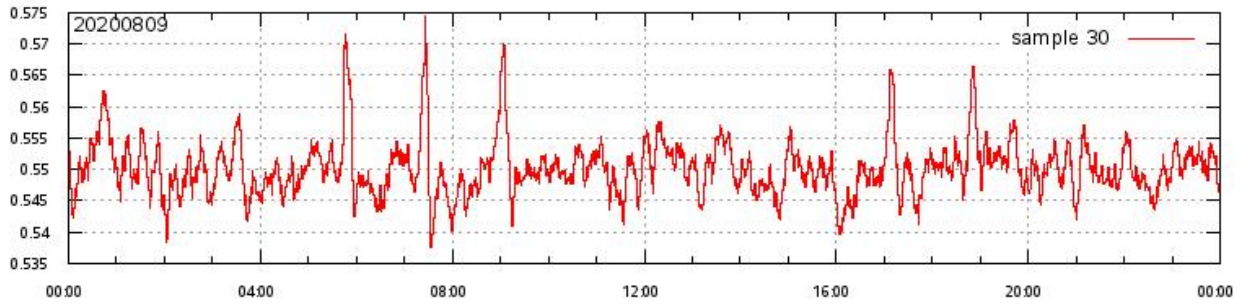
Noise Power threshold exceeded (TH=900) on map





# L1A Product

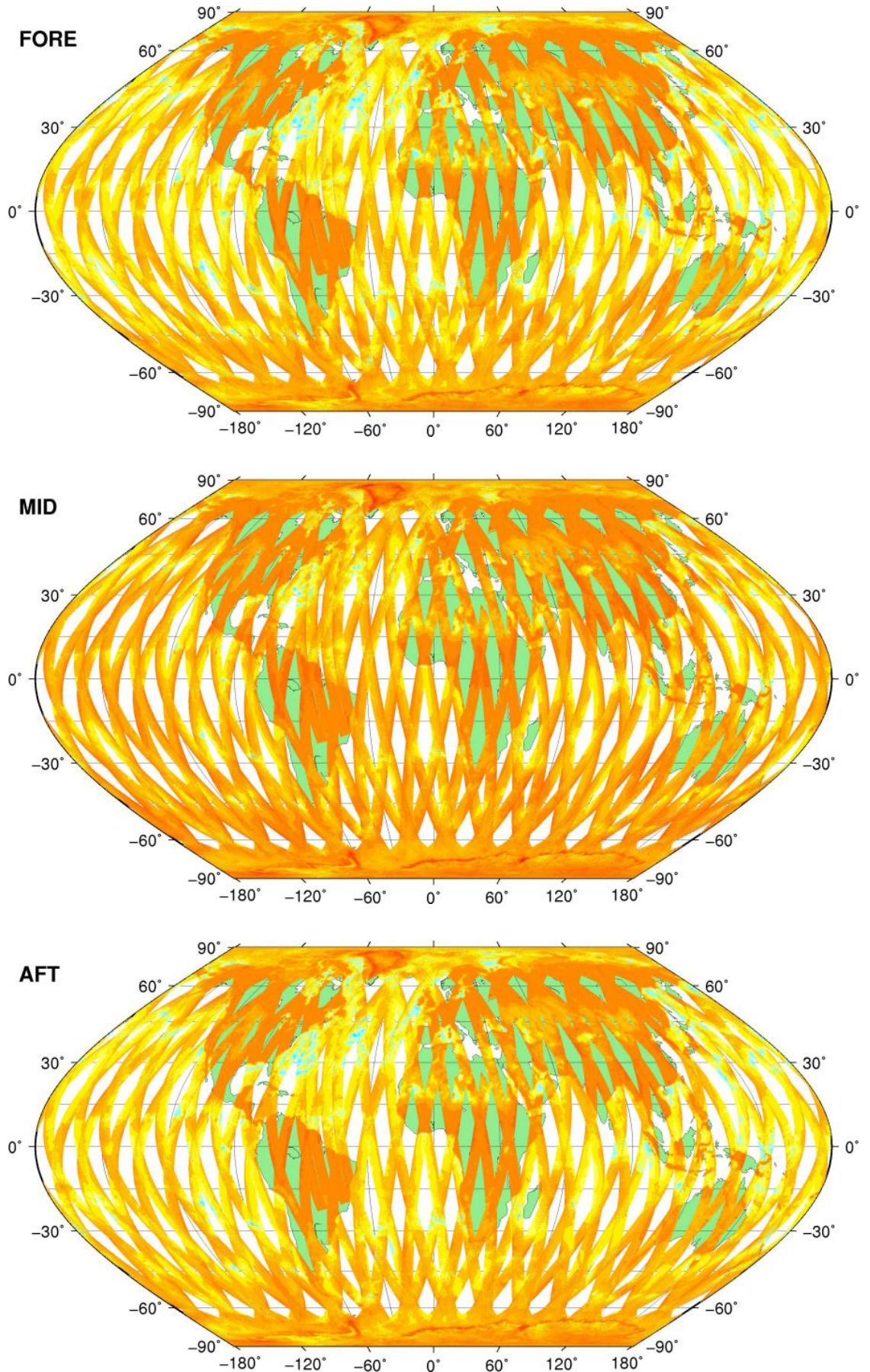
RX filter shape in detail for sample 30,100,150, 200 & max vs. UTC\_LOCALISATION



# SZO Product

Sigma0\_TRIP Coverage map

## SIGMA0\_TRIP Coverage

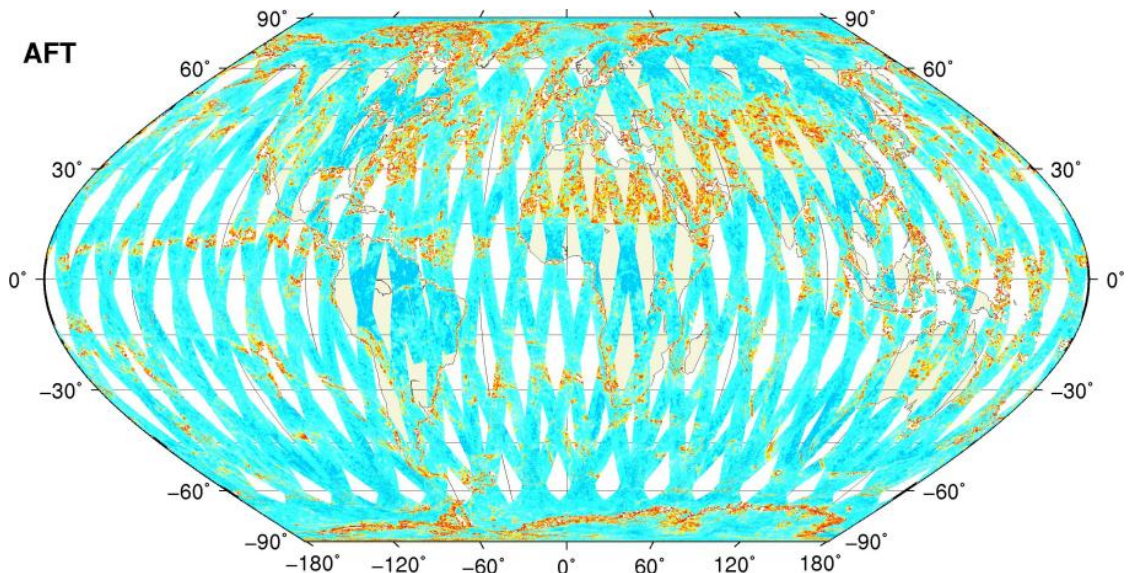
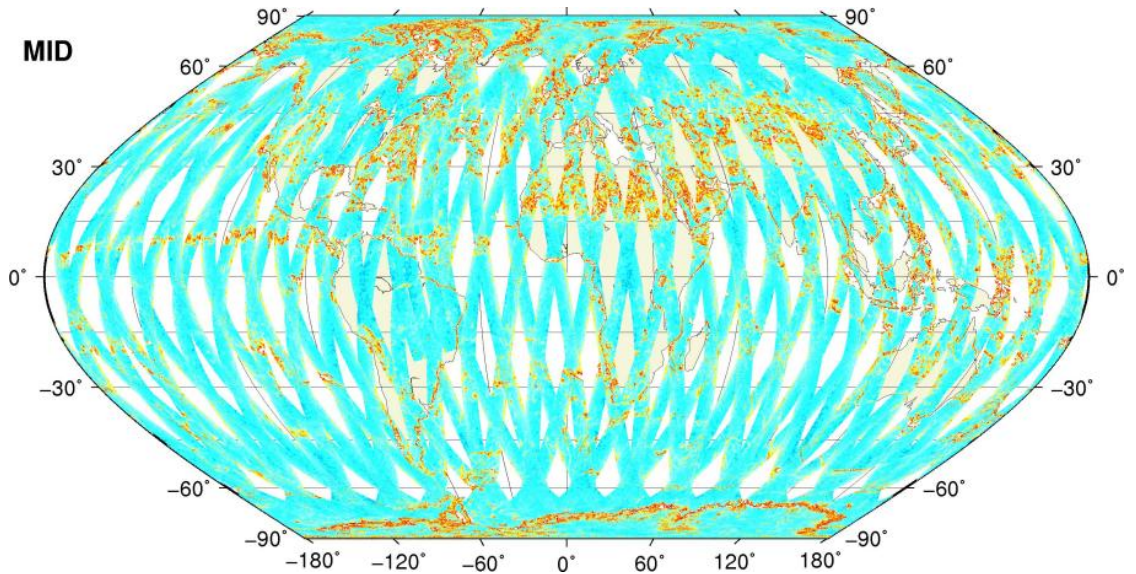
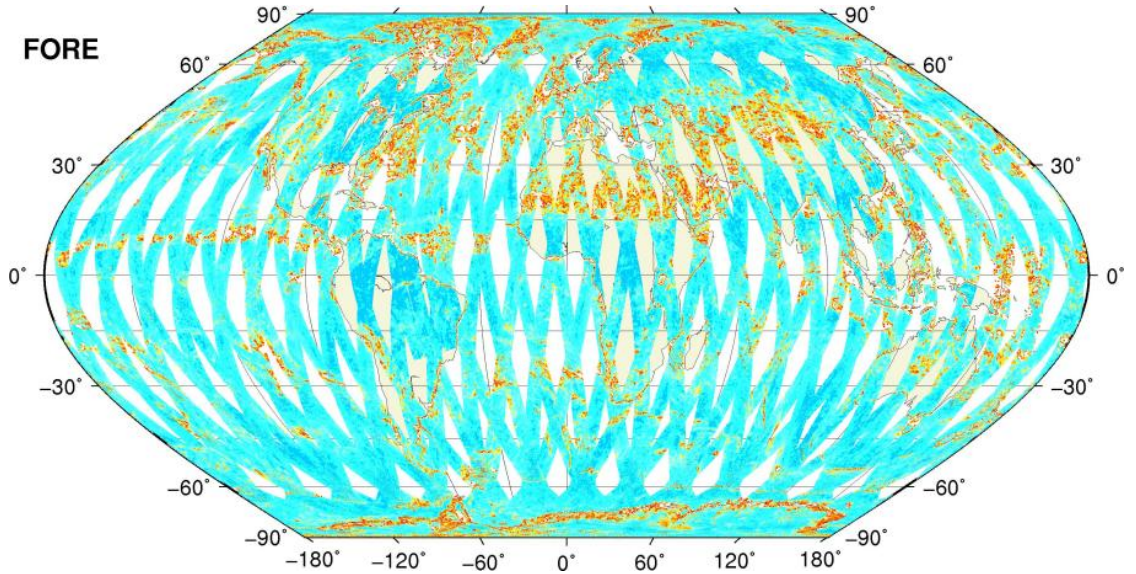




# SZO Product

Kp Coverage map

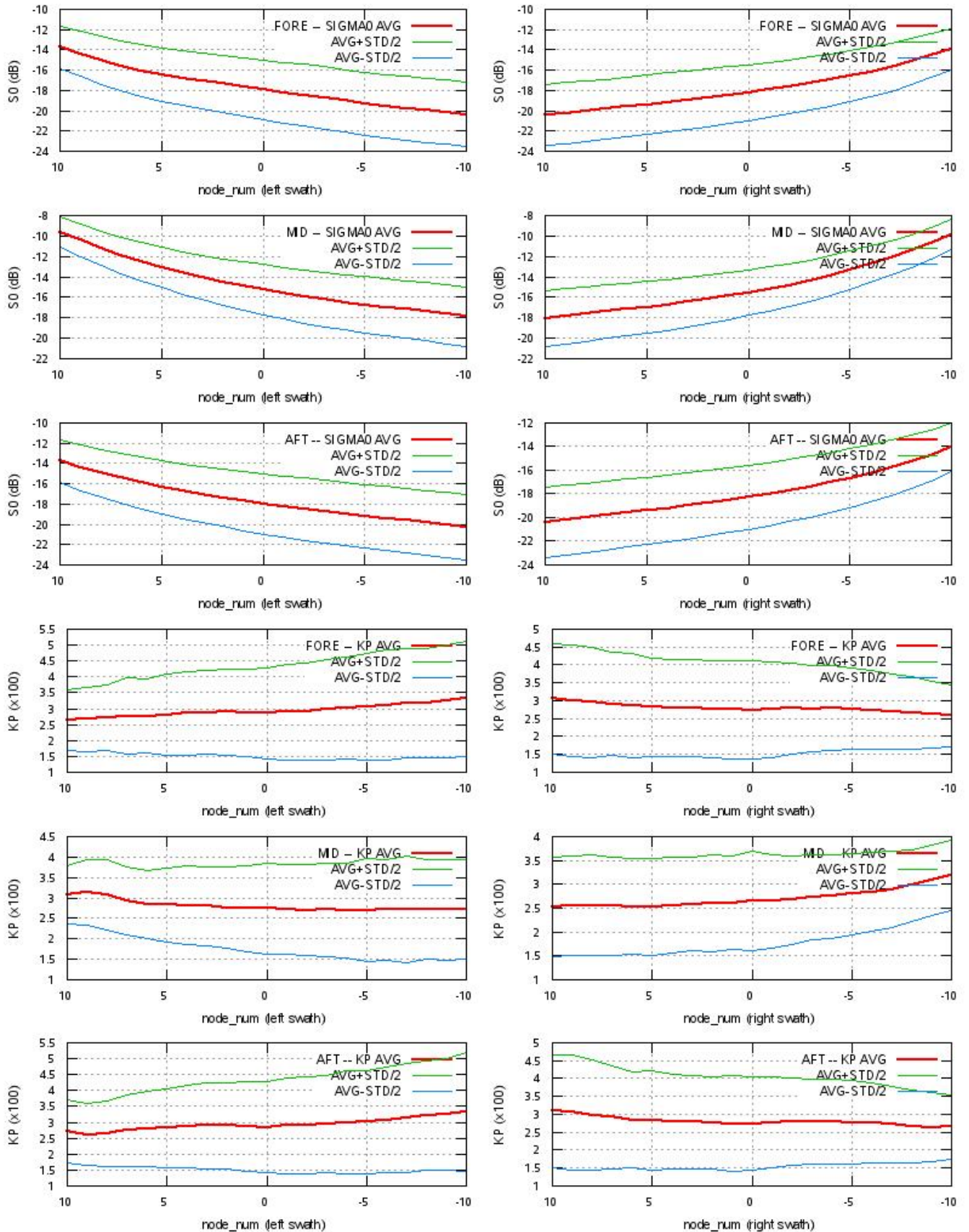
## Kp Coverage





# SZO Product

## S0 - Kp Statistics





# SZO Product

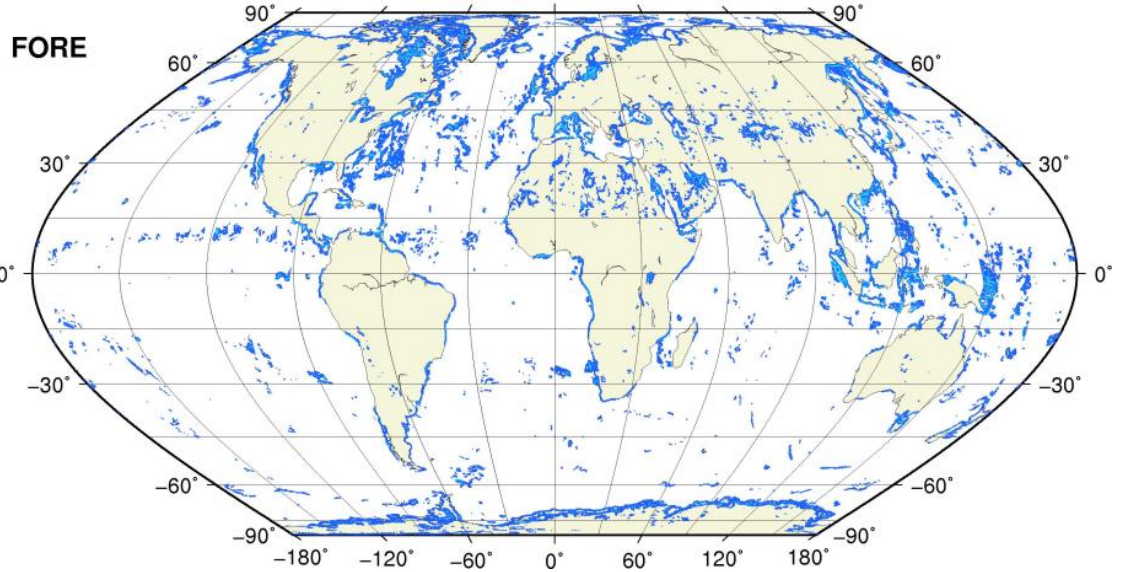
Kp Outliers on map

$0.06 < Kp < 1.0$

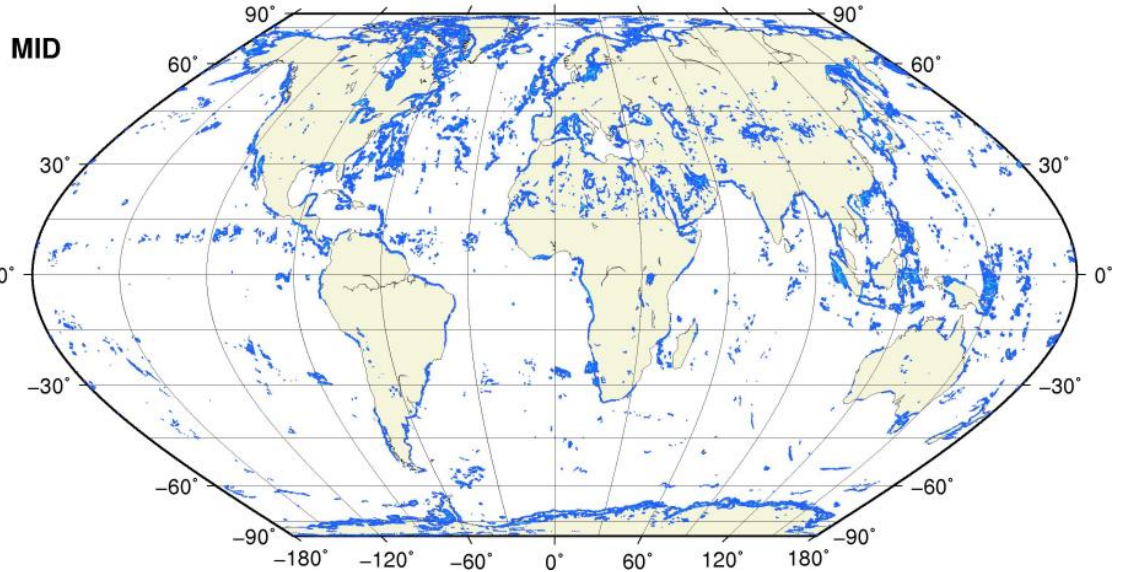
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0



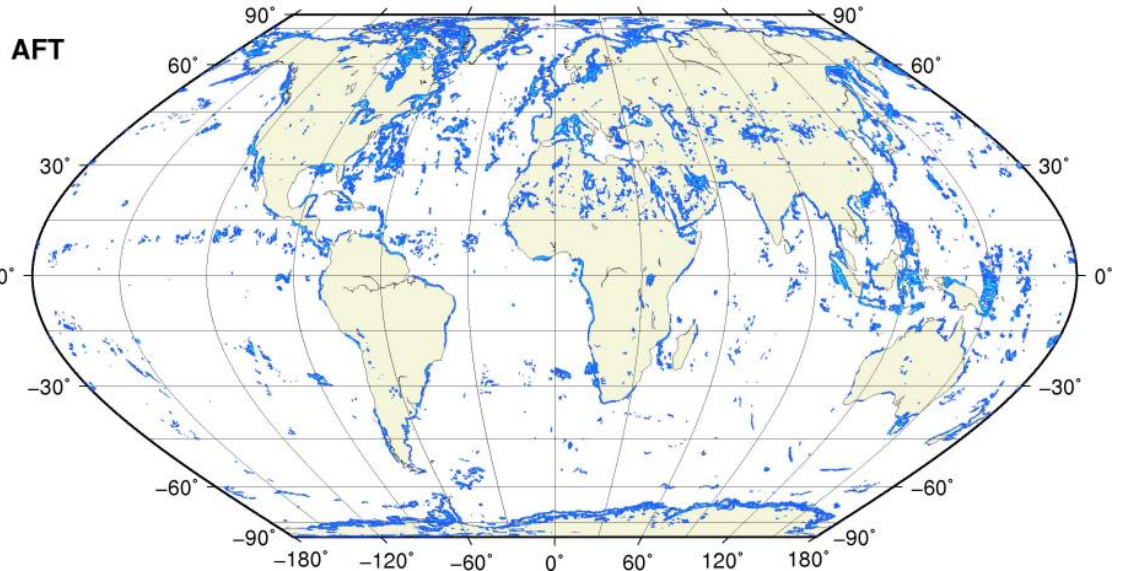
● KP = 1.0 #rec=0



● KP = 1.0 #rec=0



● KP = 1.0 #rec=0

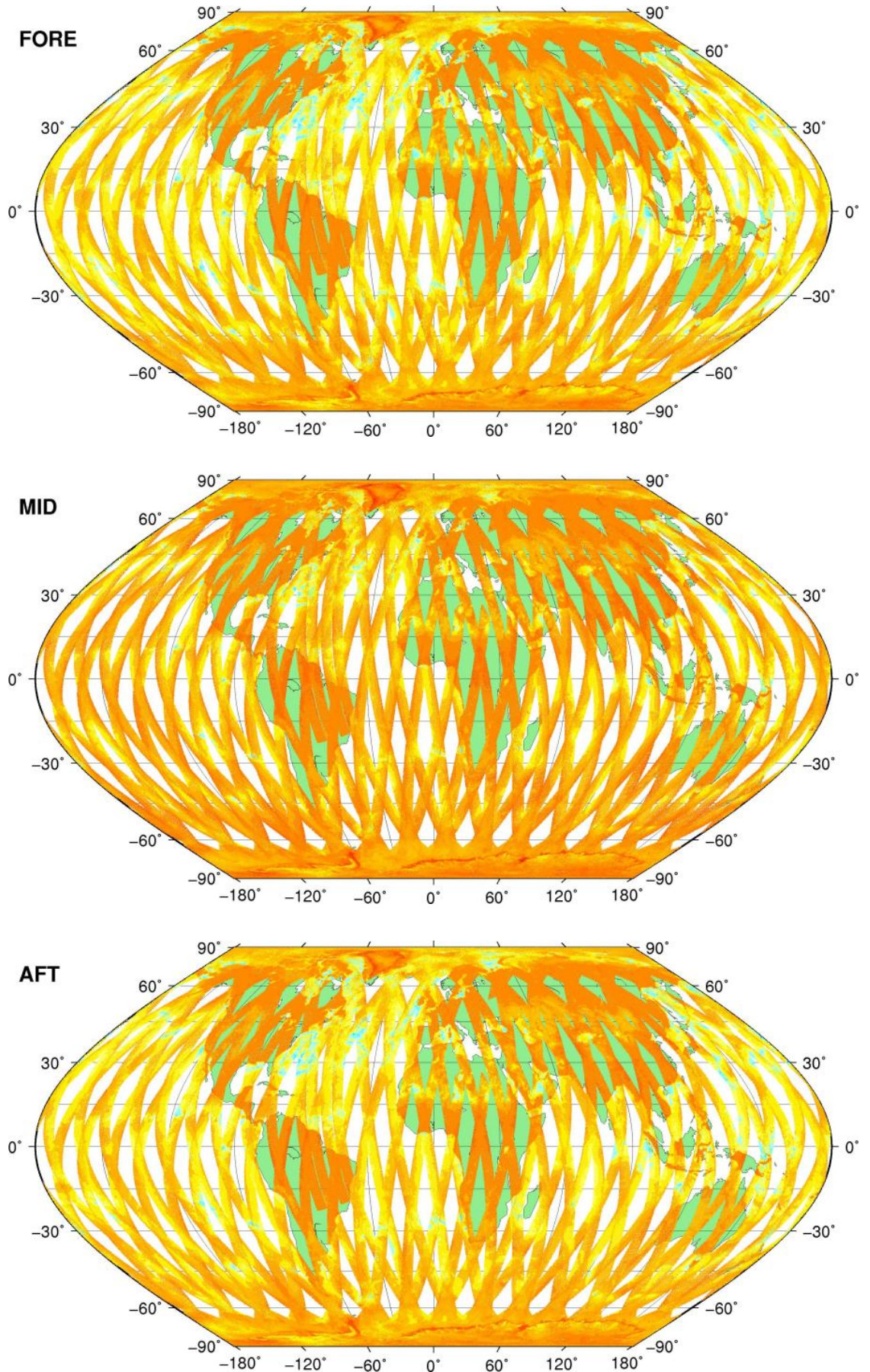
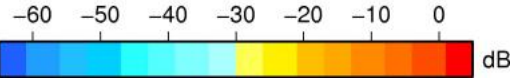




# SZR Product

Sigma0\_TRIP Coverage map

## SIGMA0\_TRIP Coverage

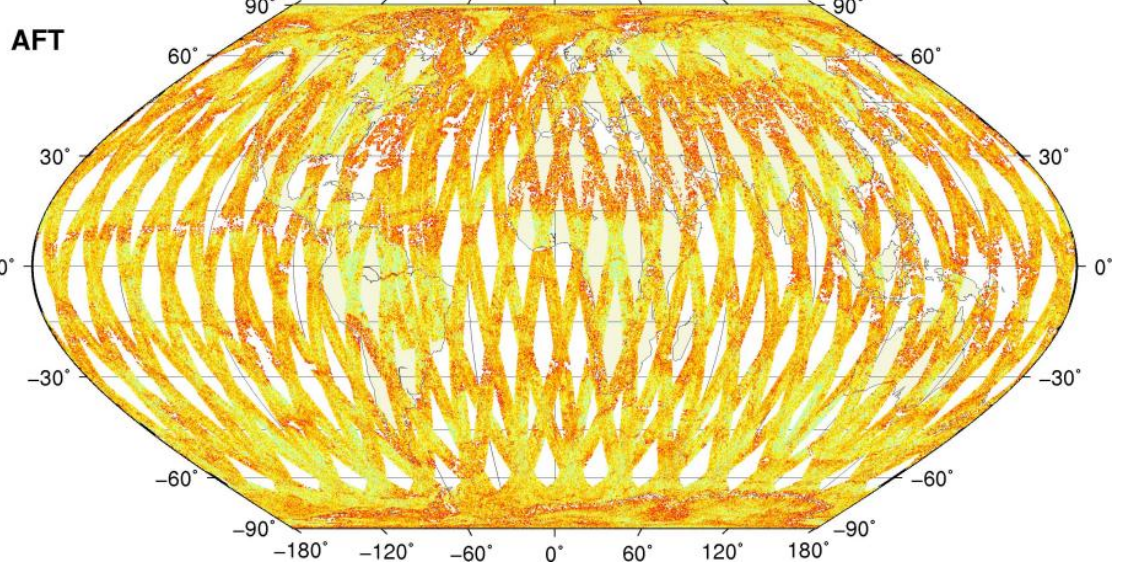
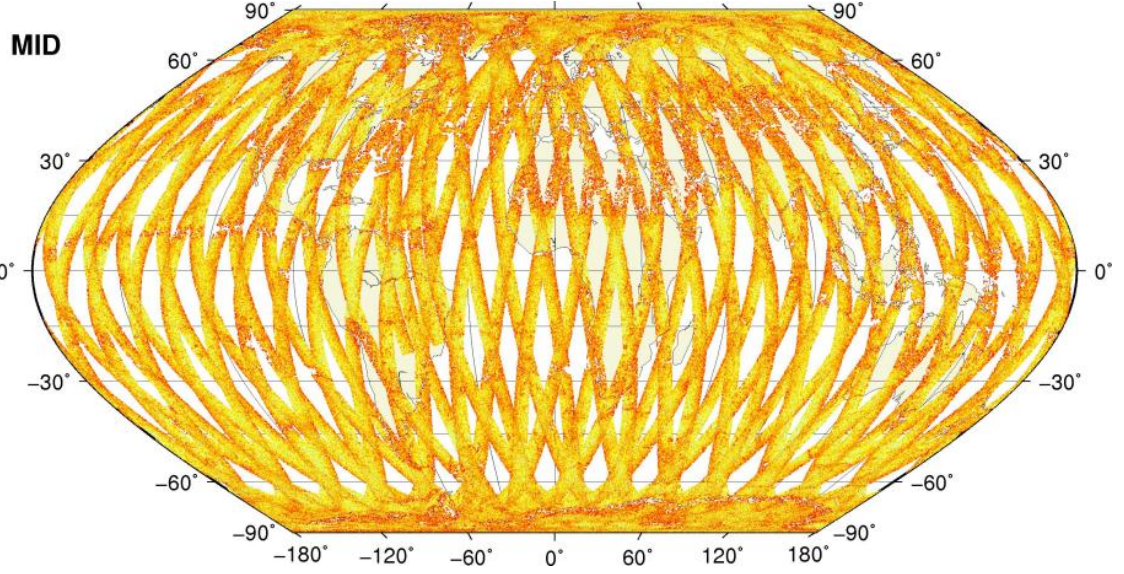
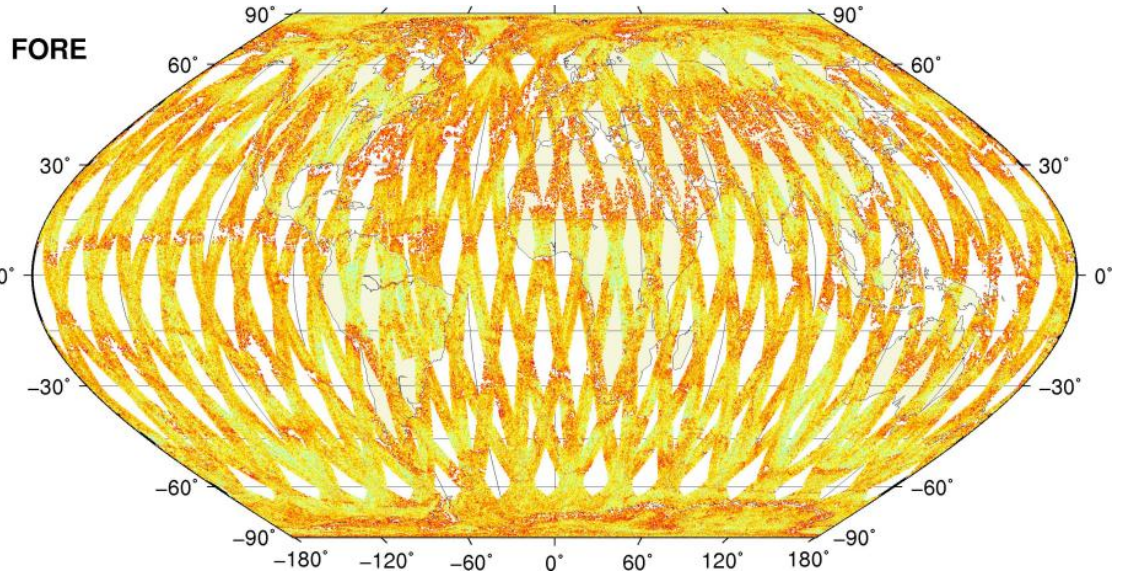




# SZR Product

Kp Coverage map

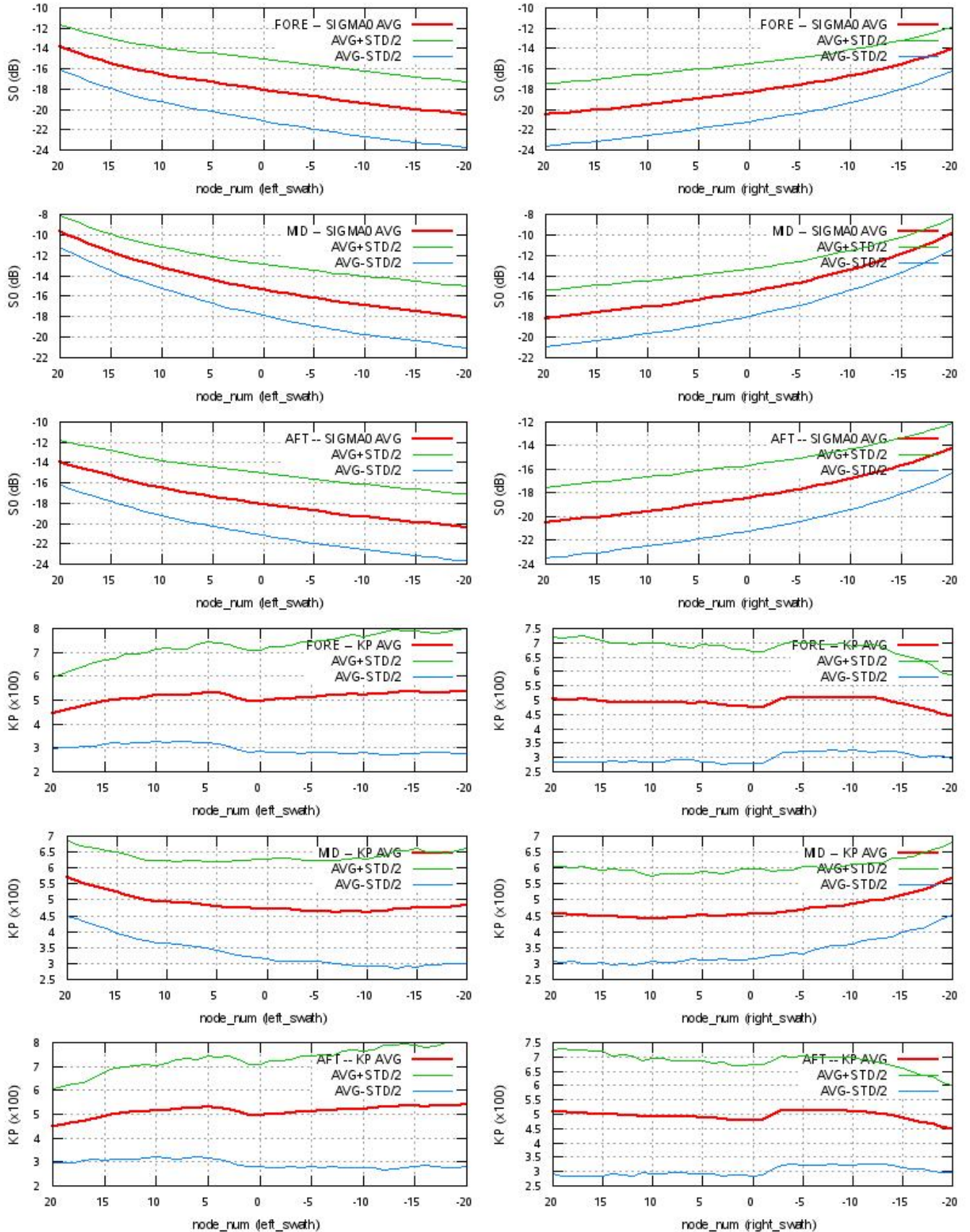
## Kp Coverage





# SZR Product

## S0 - Kp Statistics





# SZR Product

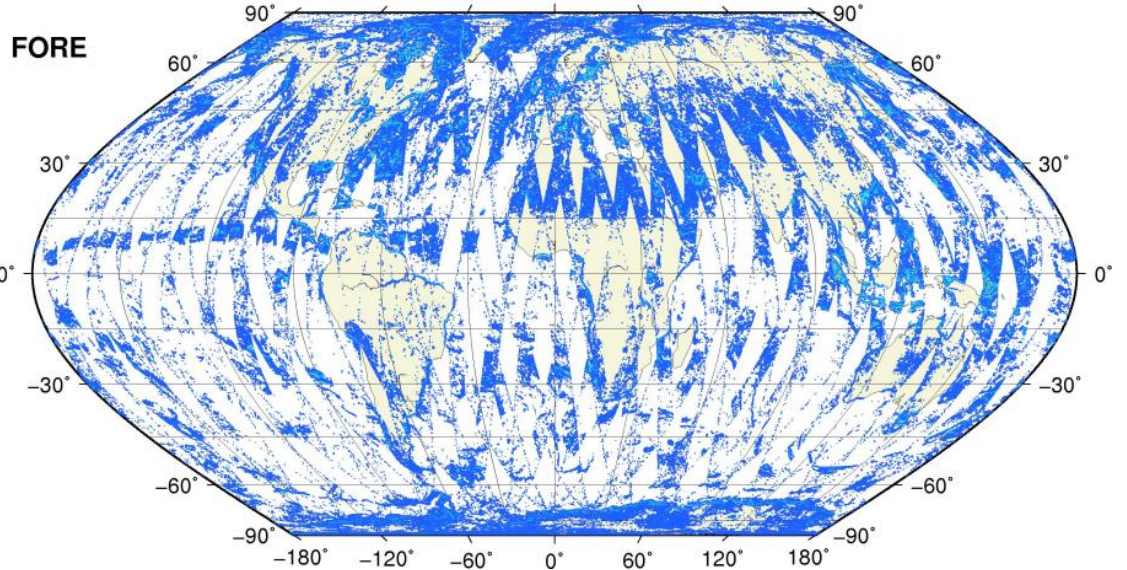
Kp Outliers on map

$0.06 < Kp < 1.0$

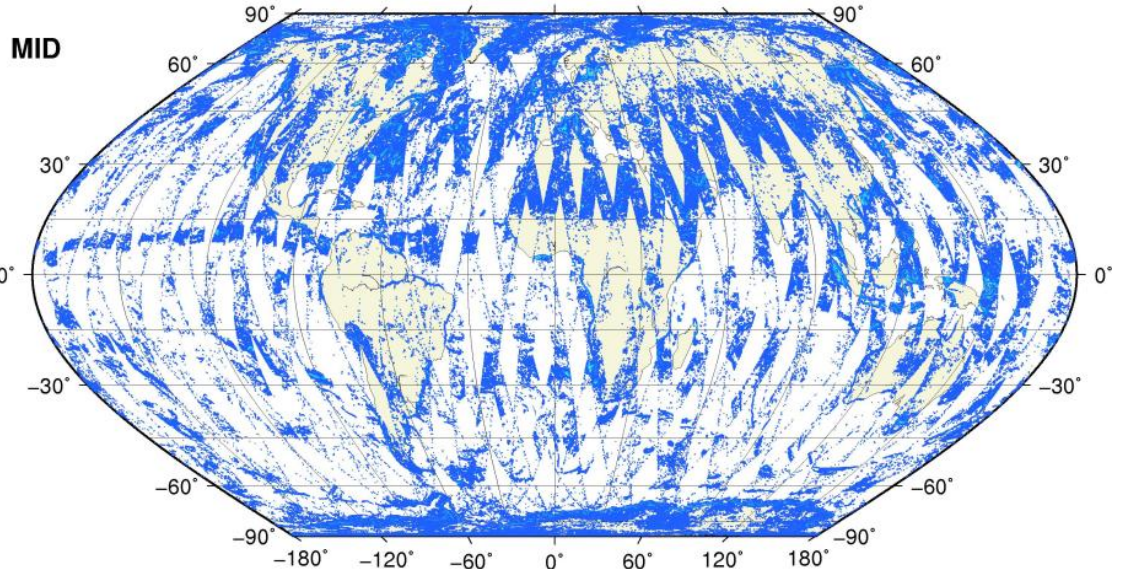
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0



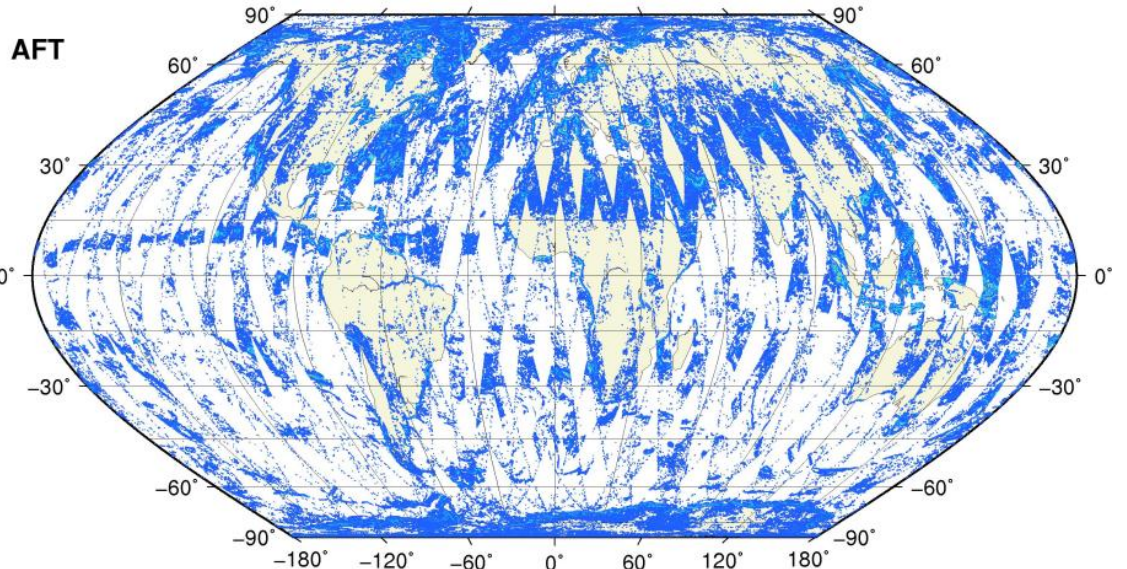
● KP = 1.0 #rec=0



● KP = 1.0 #rec=0



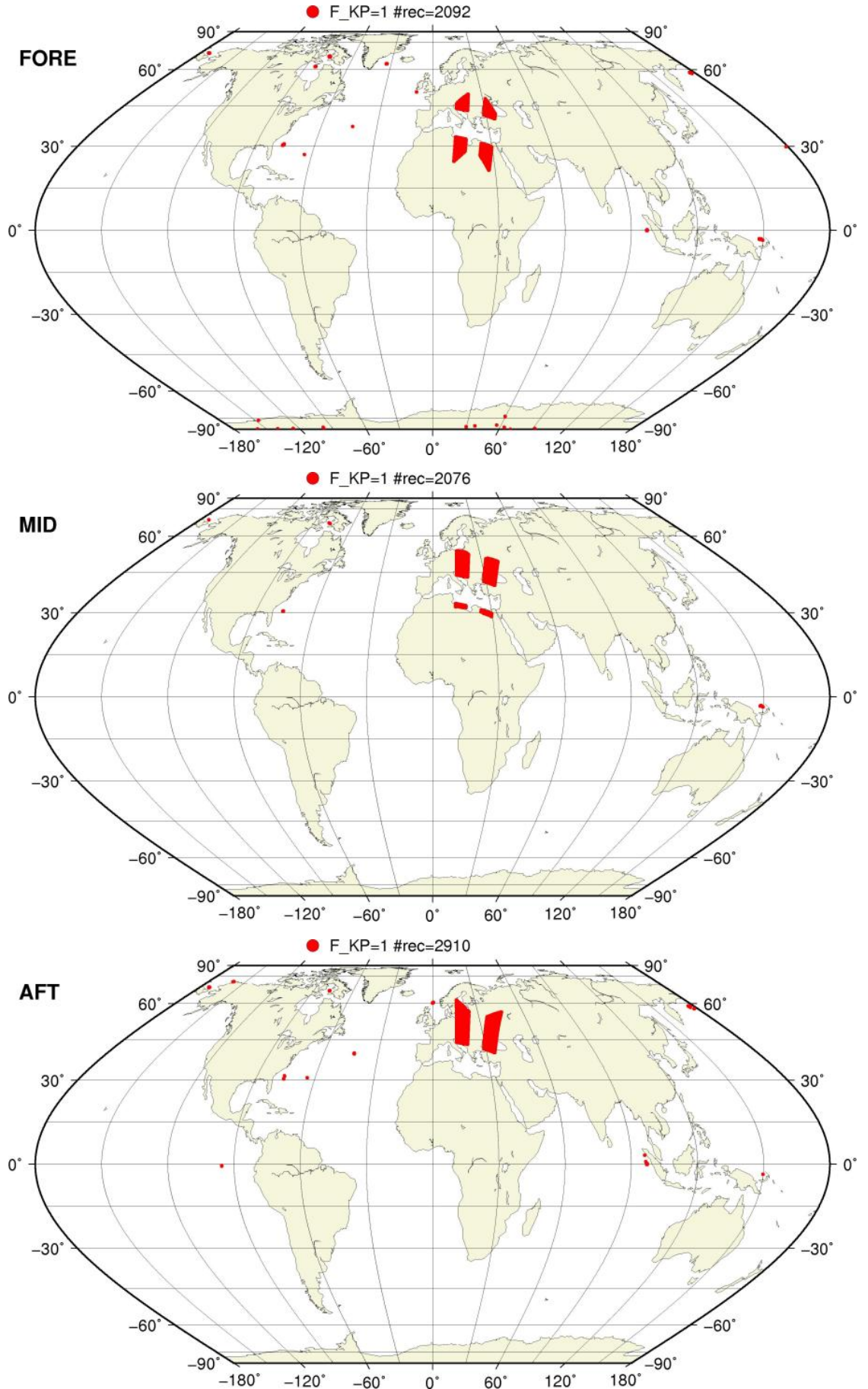
● KP = 1.0 #rec=0





# SZO Flagged Data Coverage

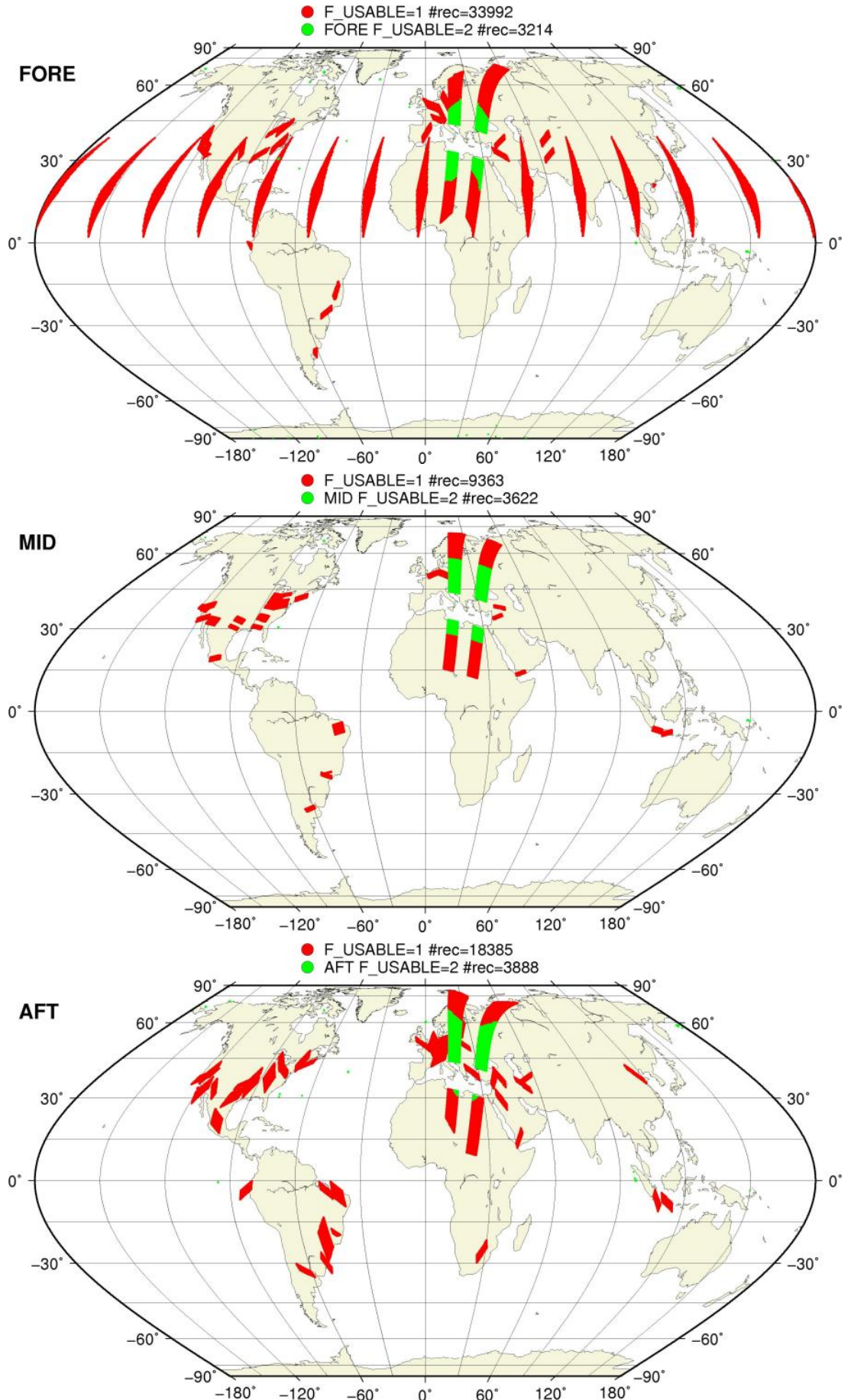
F\_KP = 1 on map





# SZO Flagged Data Coverage

F\_USABLE = 1 or 2 on map



# SZO Flagged Data Coverage

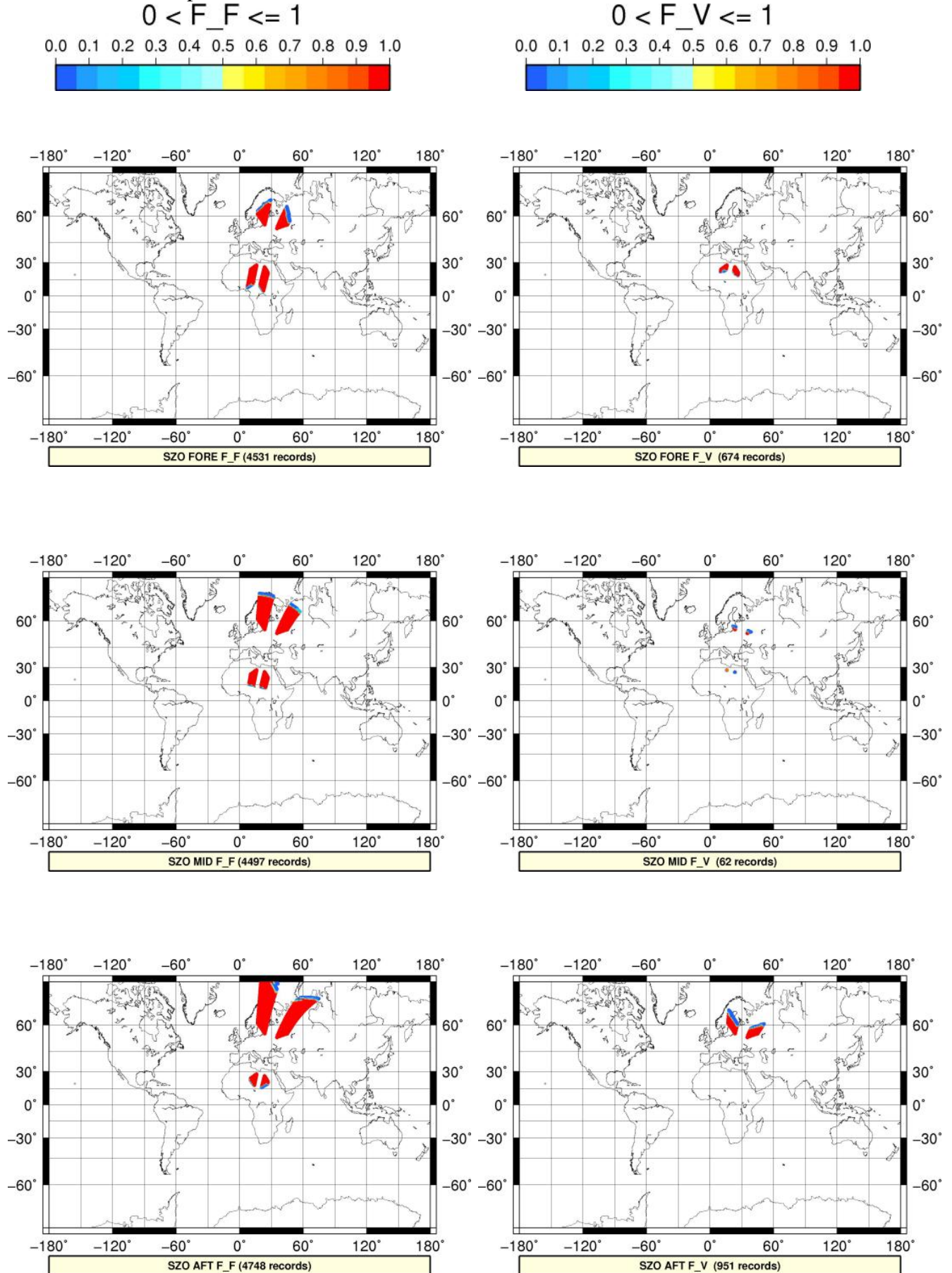
$0 < F_{OA} \leq 1$  on map





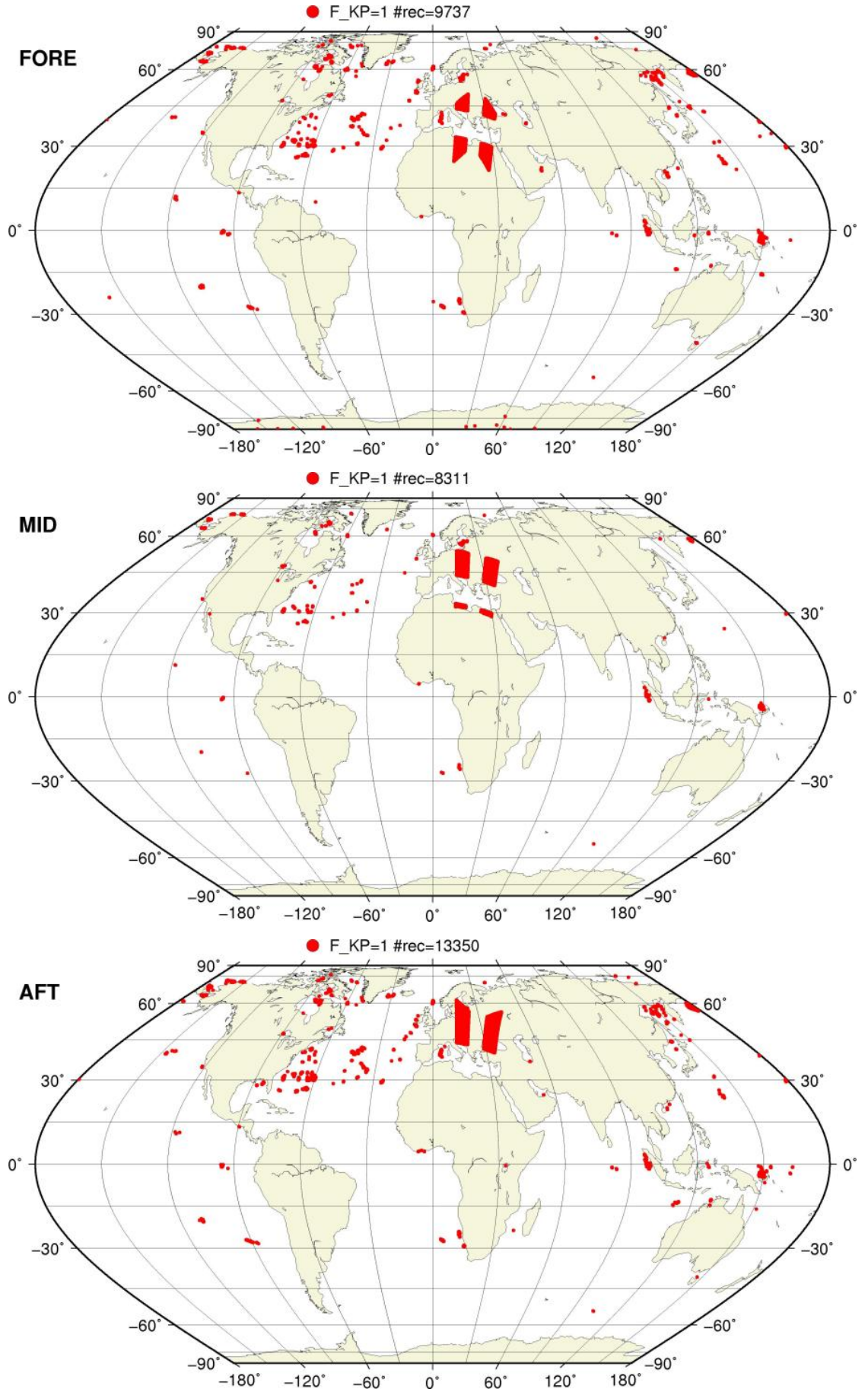
# SZO Flagged Data Coverage

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



# SZR Flagged Data Coverage

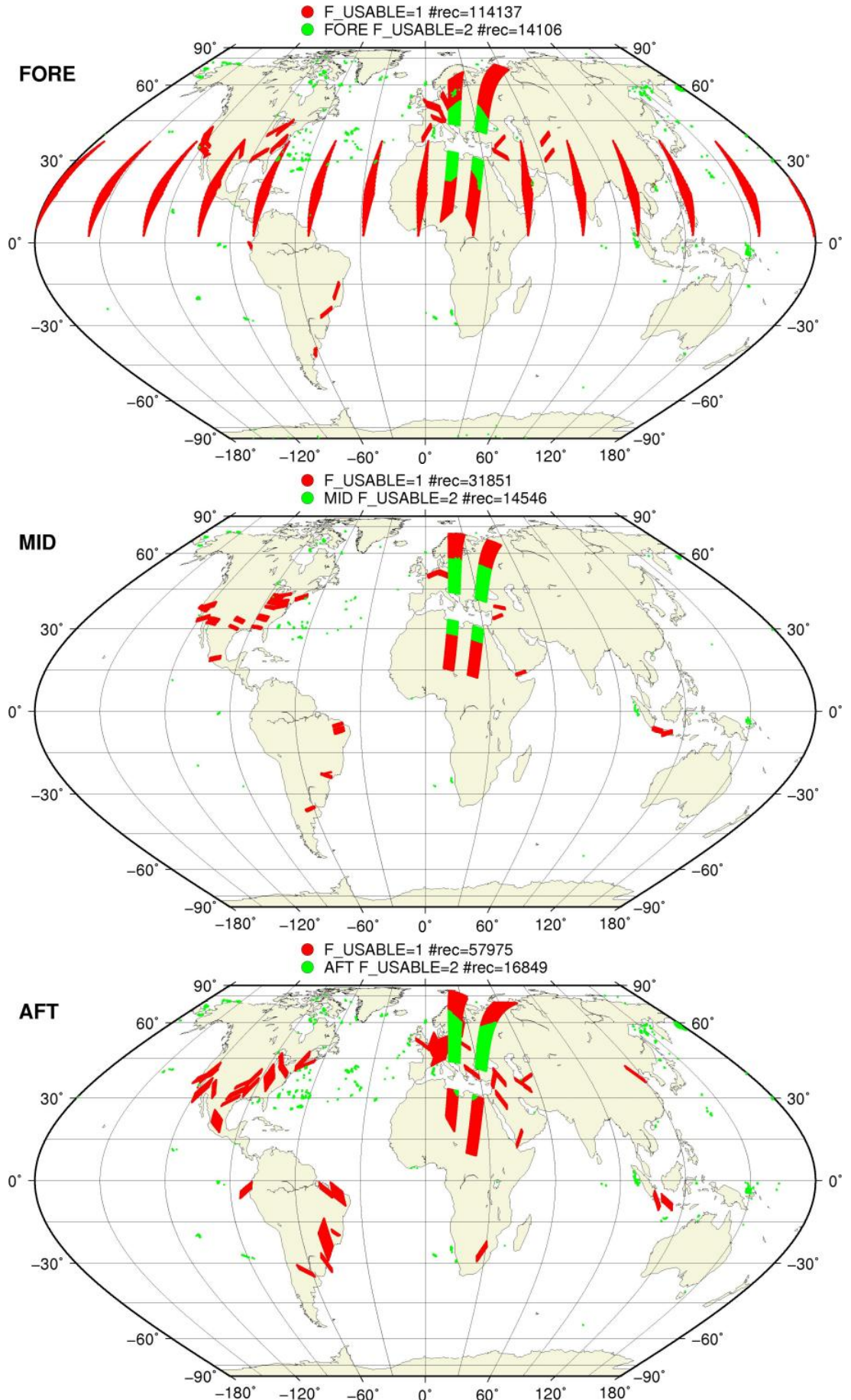
F\_KP = 1 on map





# 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

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

