

# ASCAT DAILY Report

**Metop-A**

**OPE**

**DAY 2020\_242**

**20200829000000 - 20200829235959**

## DATA STATISTICS

BASED ON ORBITS (#14)

71919 71920 71921 71922 71923 71924 71925 71926 71927 71928 71929 71930 71931  
71932 71933

DB STATISTICS : OPE M02\_20200829

SMO	474	2.14	.52	1.32	4.44
SMR	476	5.22	1.14	3.83	10.92
SZF	463	.95	1.91	.26	23.97
xxx	476	21.54	8.90	9.29	45.06

INGATE (STORE) STATISTICS : OPE M02\_20200829

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

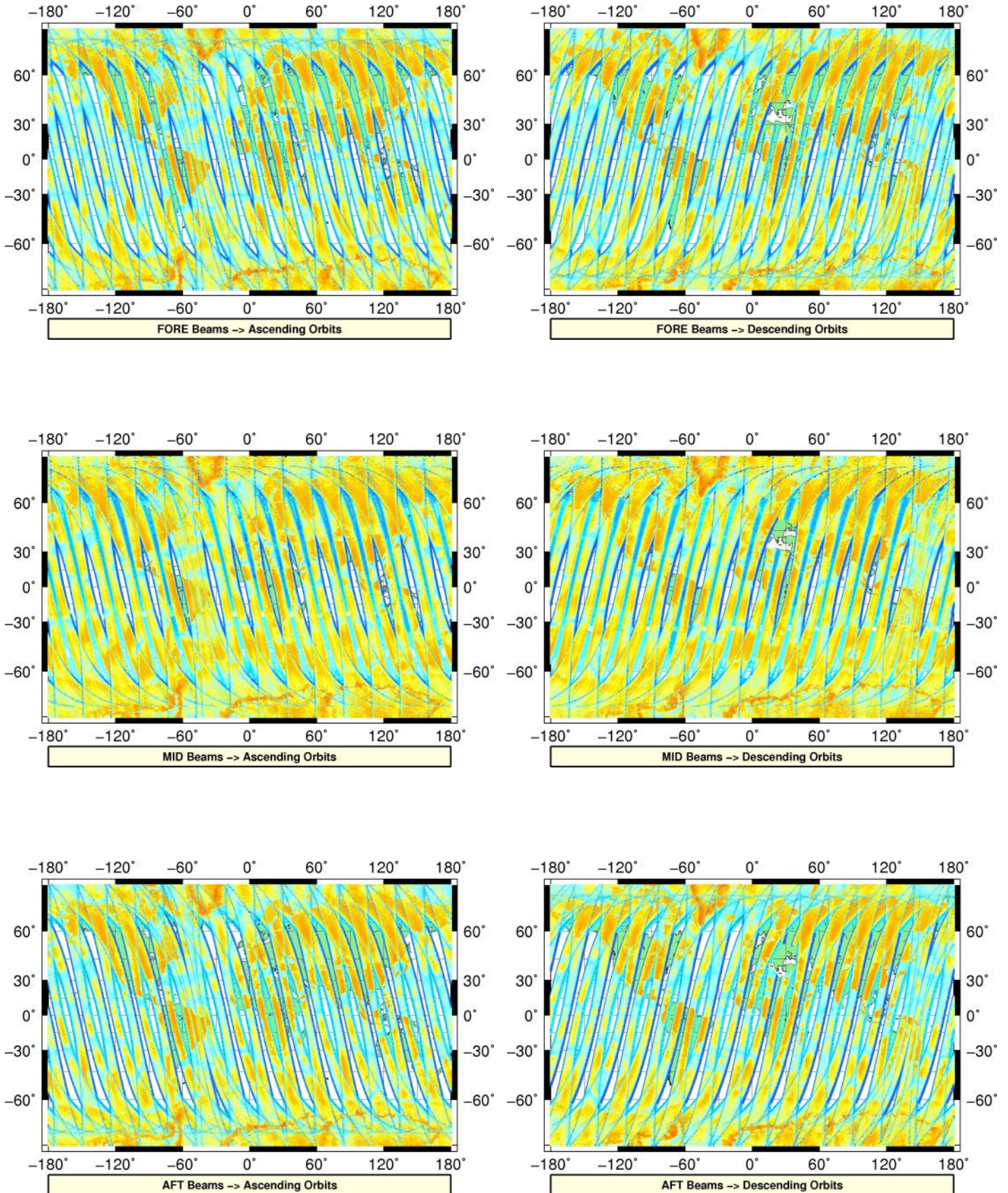
# Overview

## Configuration and SPHR content

Parameter	Value
SENSING START-STOP	20200829000000 - 20200829235959
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	606646
N_L1A_MDR_B0	101108
N_L1A_MDR_B1	101108
N_L1A_MDR_B2	101108
N_L1A_MDR_B3	101107
N_L1A_MDR_B4	101108
N_L1A_MDR_B5	101107
N_GAPS	24
TOTAL_GAPS_SIZE	8461392
N_HKTM_PACKETS_RECEIVED	16090
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	1048727
N_F_LAND	48772020
N_F_GEO	3259721
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

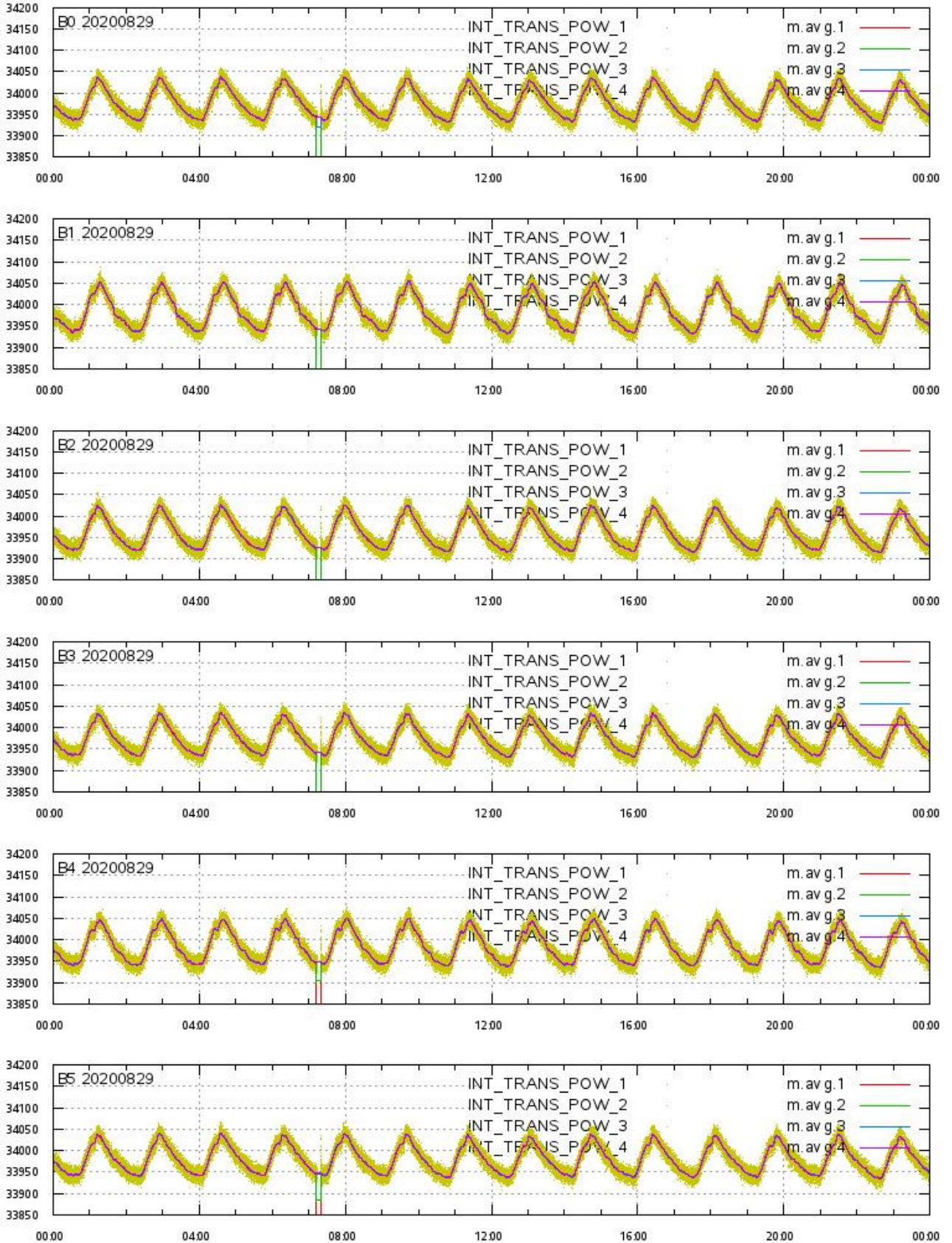
# L1A Product

## Echo Data Coverage maps



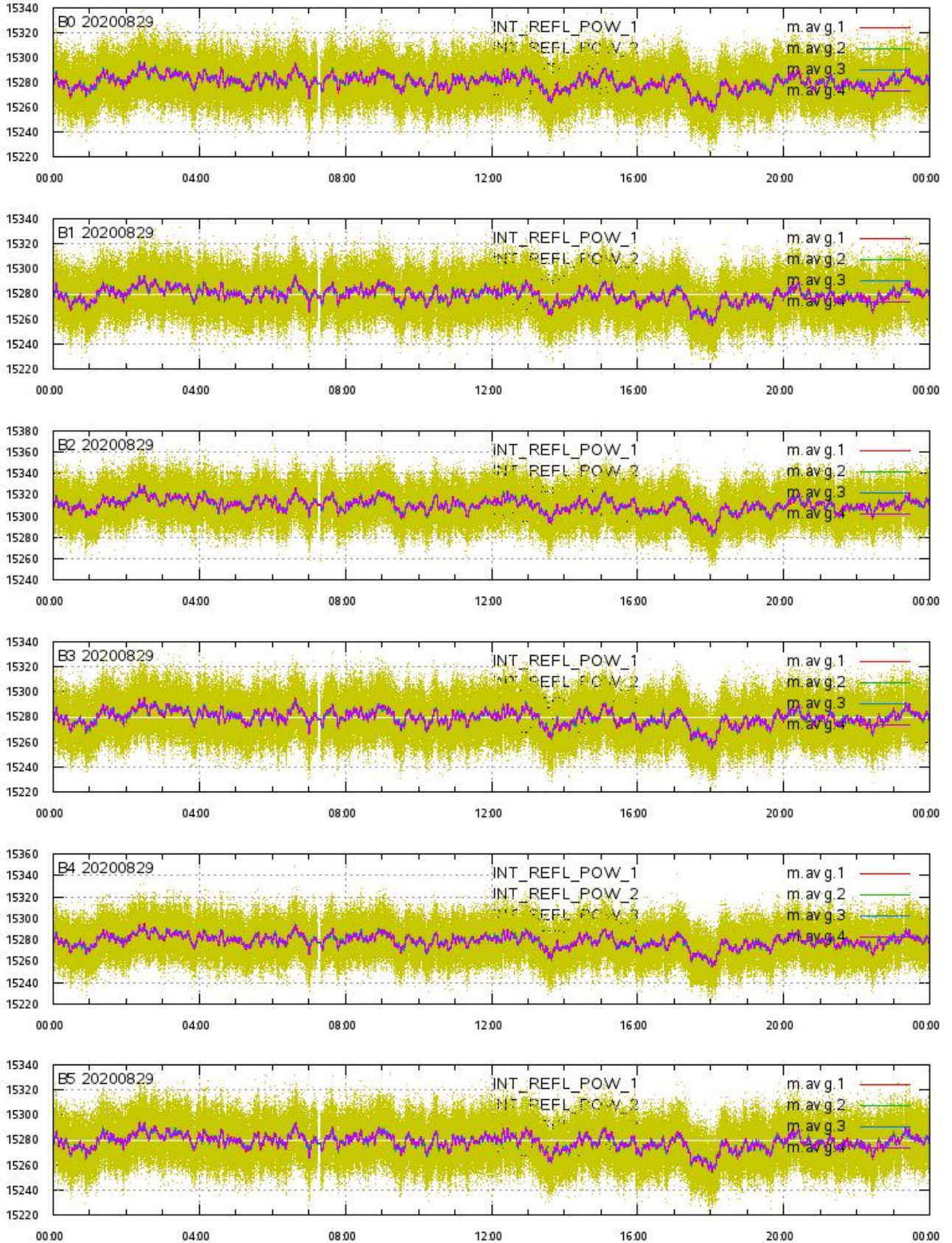
# L1A Product

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



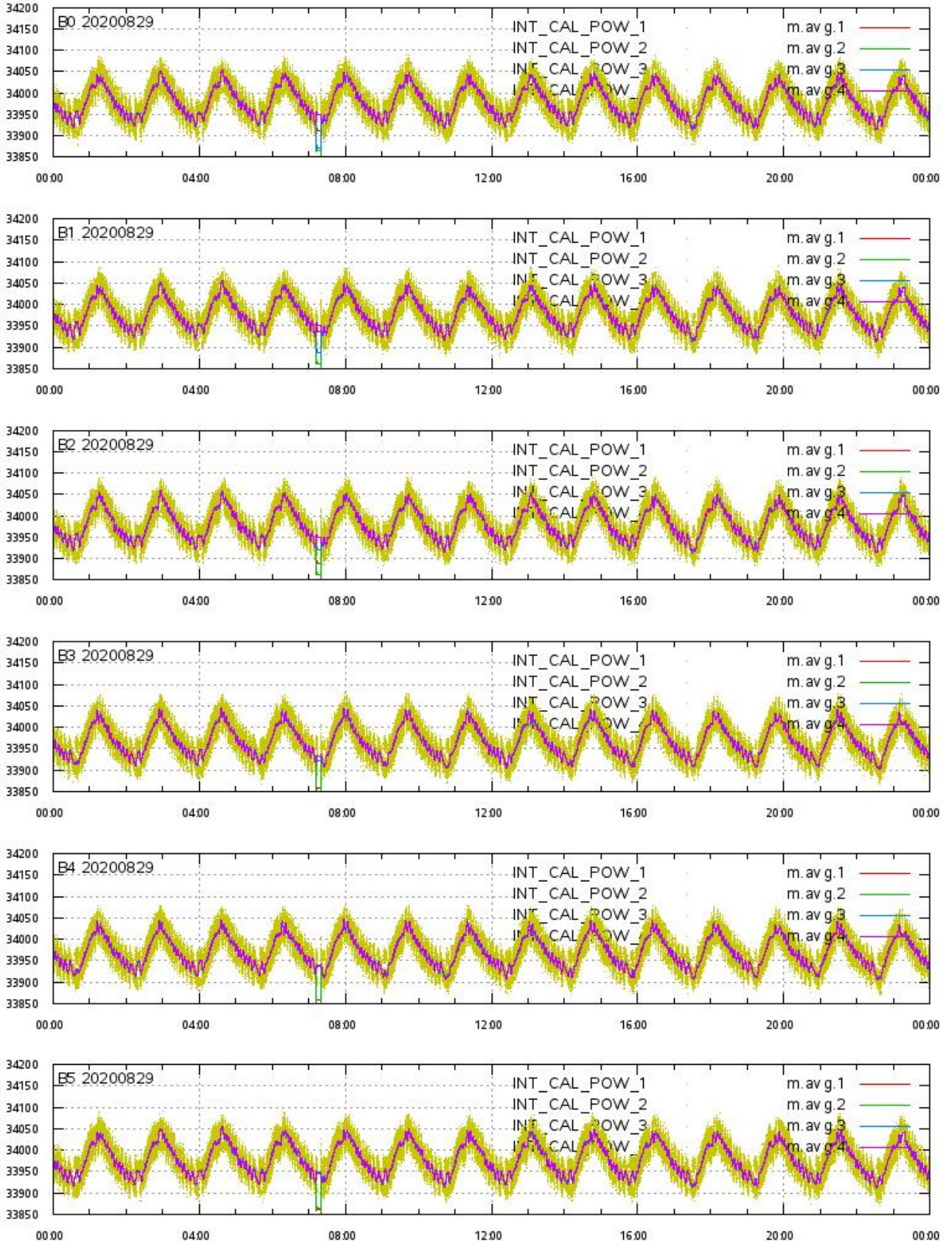
# L1A Product

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



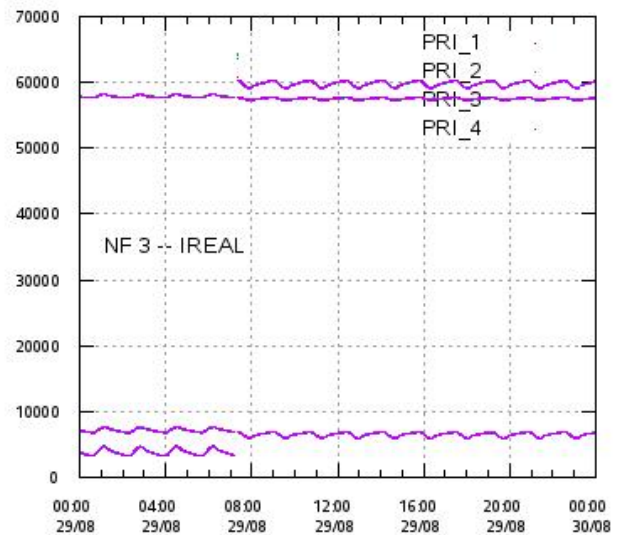
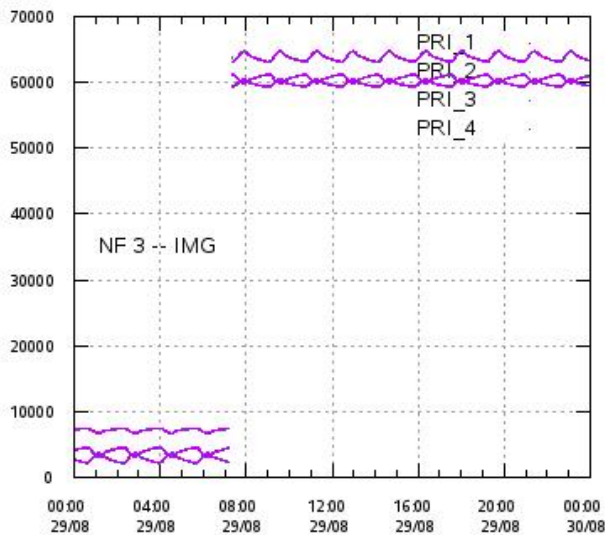
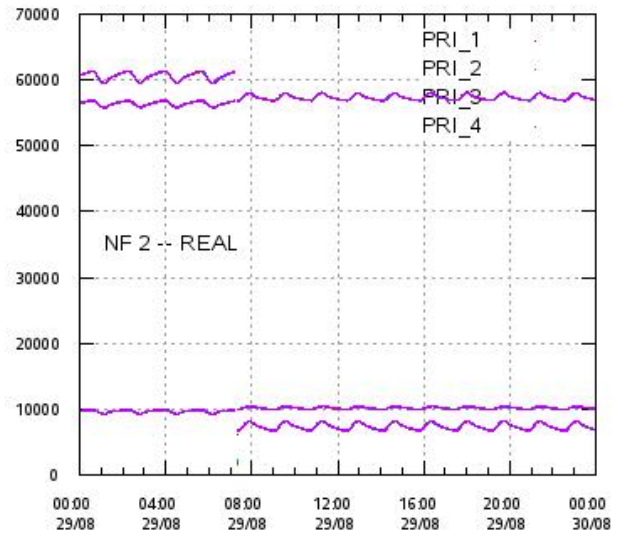
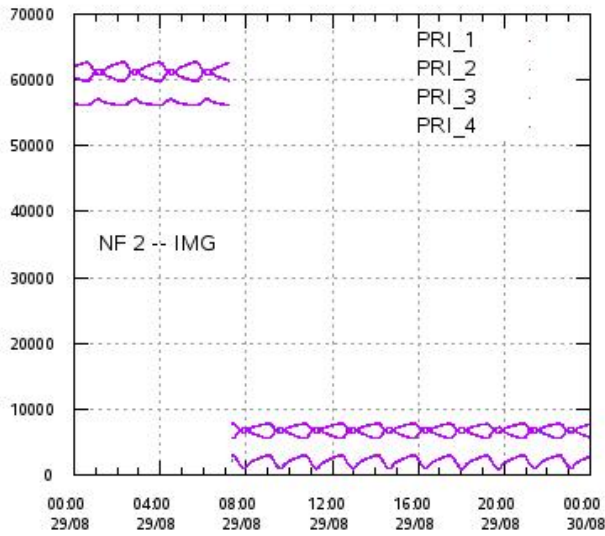
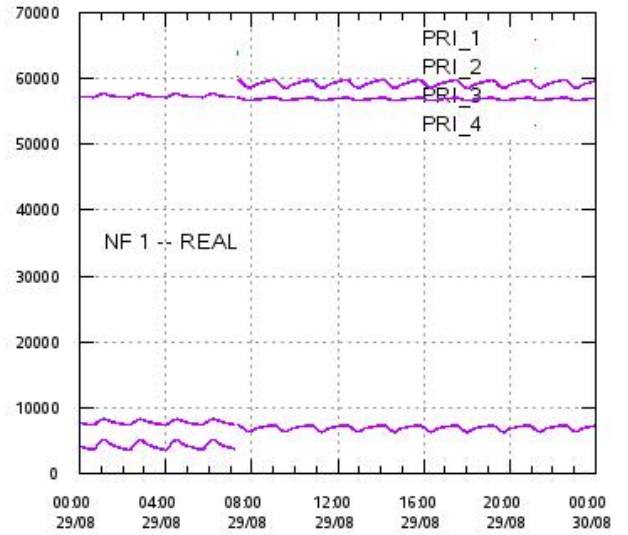
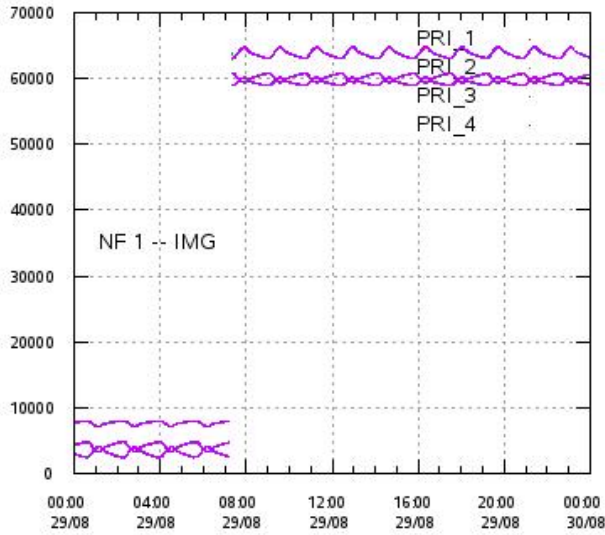
# L1A Product

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



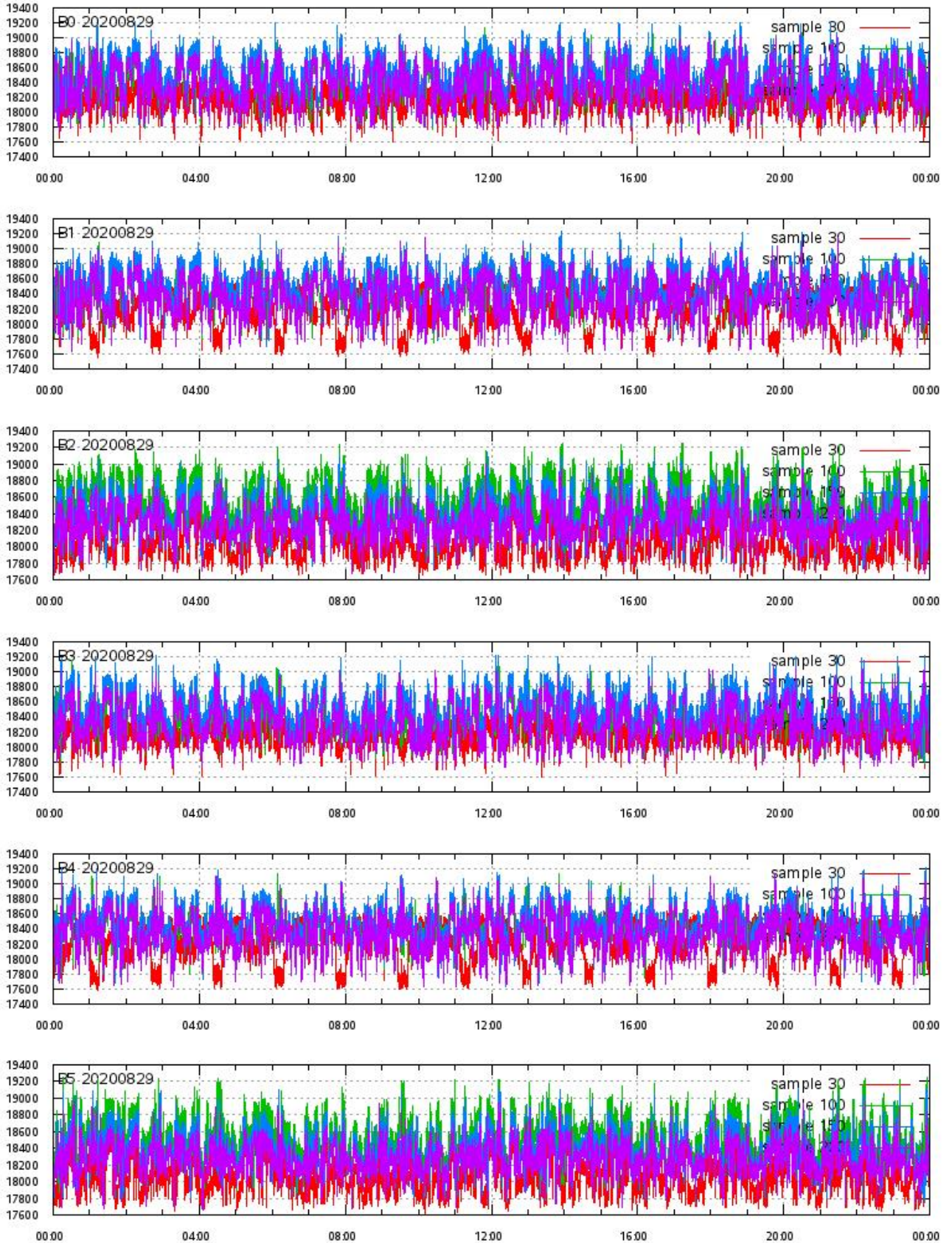
# L1A Product

## Calibration Powers vs. UTC\_LOCALISATION



# L1A Product

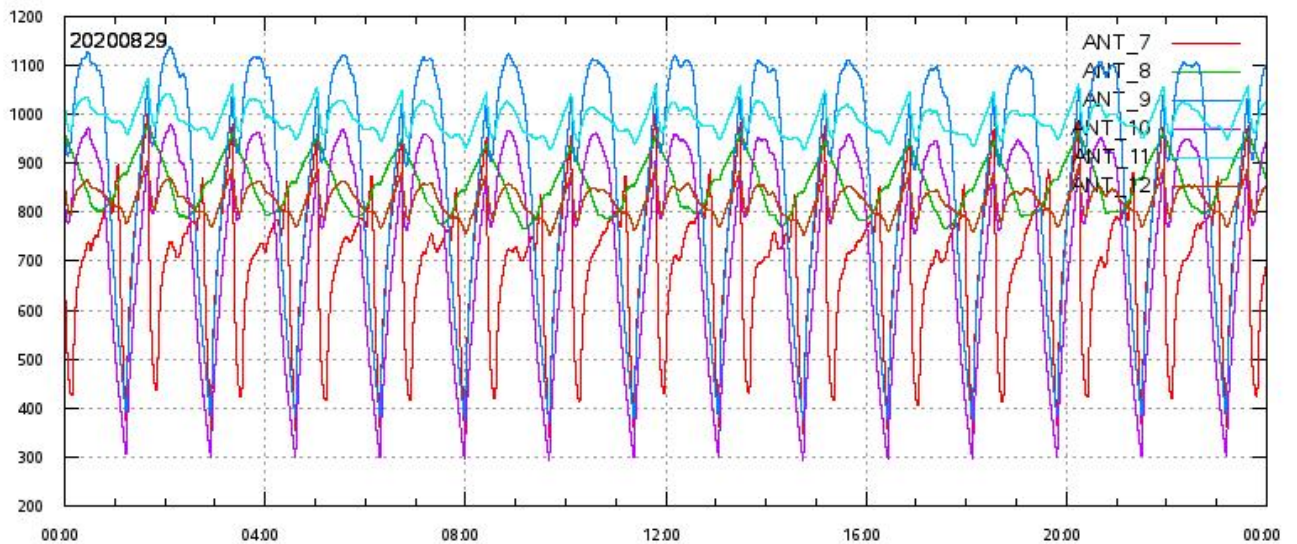
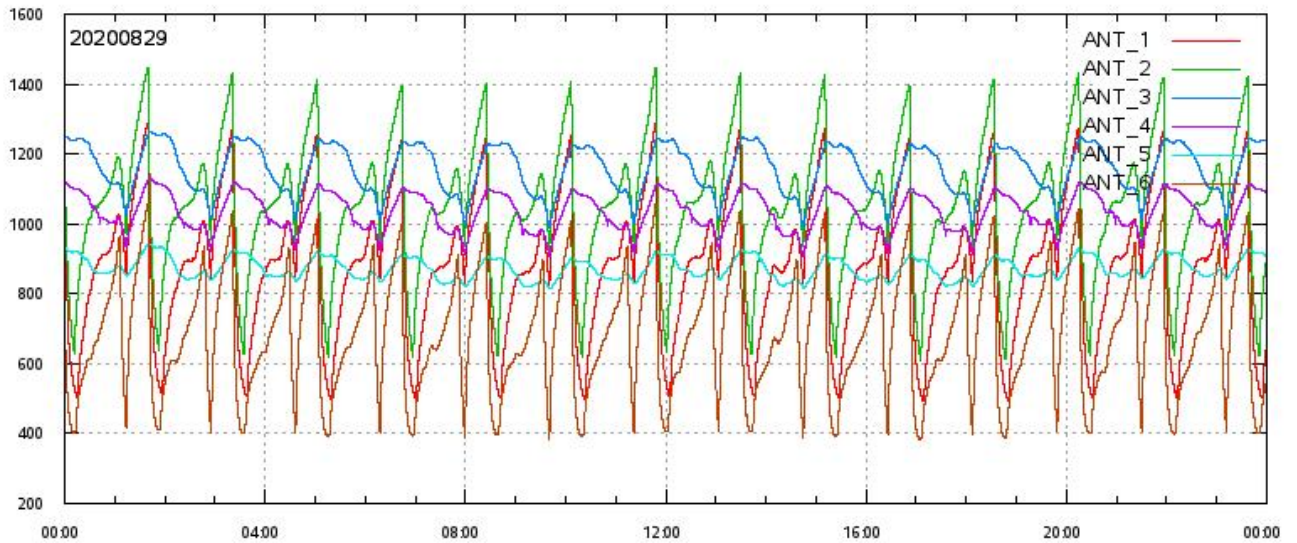
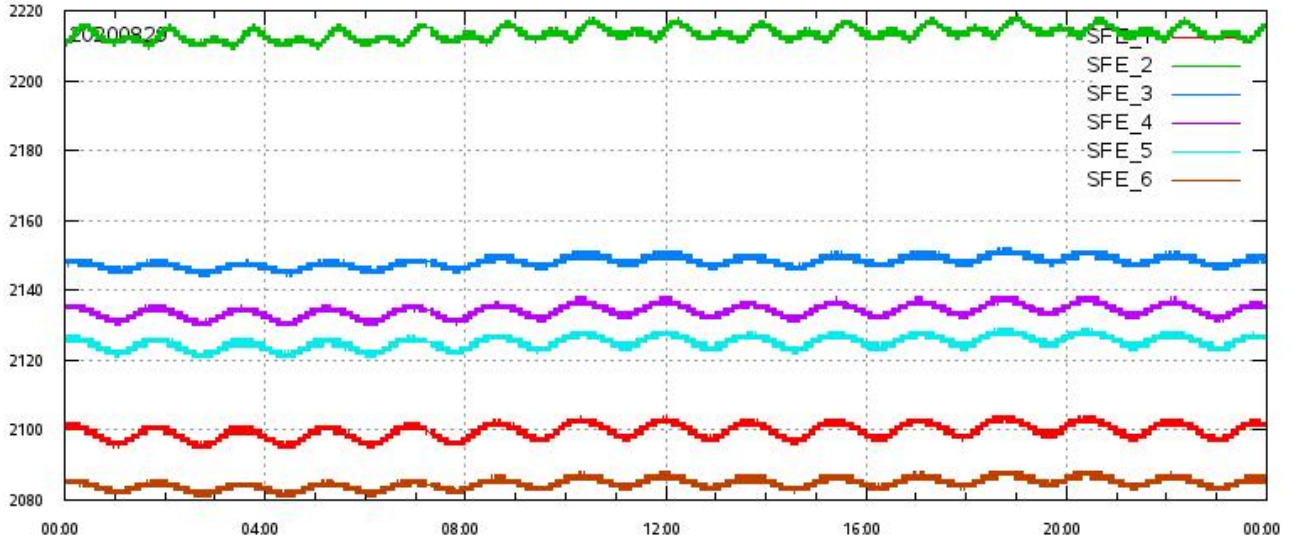
ECHO DATA (raw) for samples 30, 100, 150 and 200 vs. UTC\_LOCALISATION





# L1A Product

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

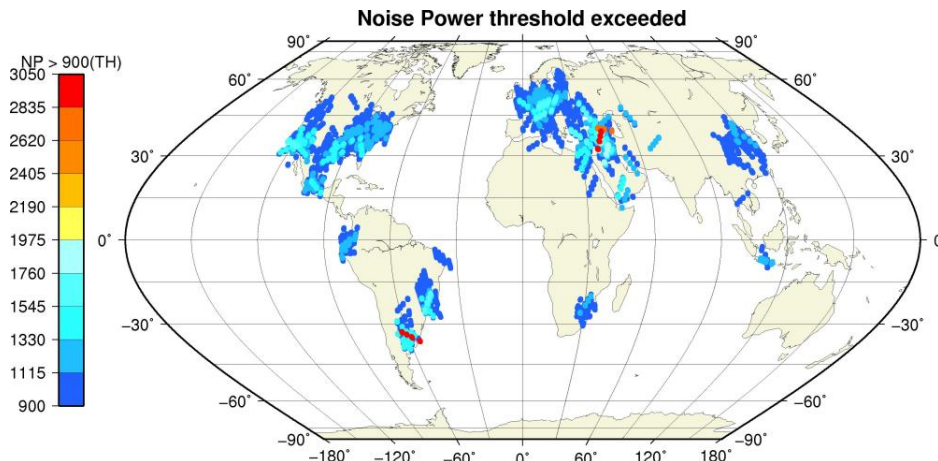
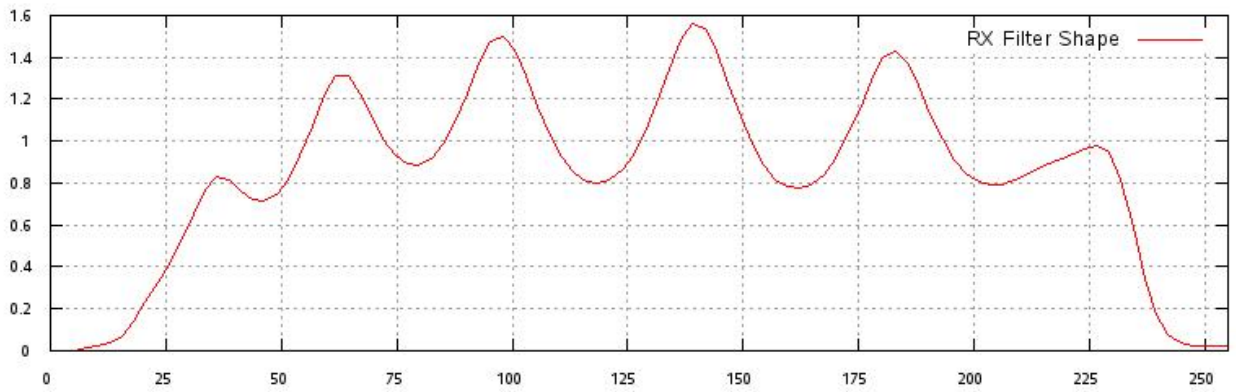
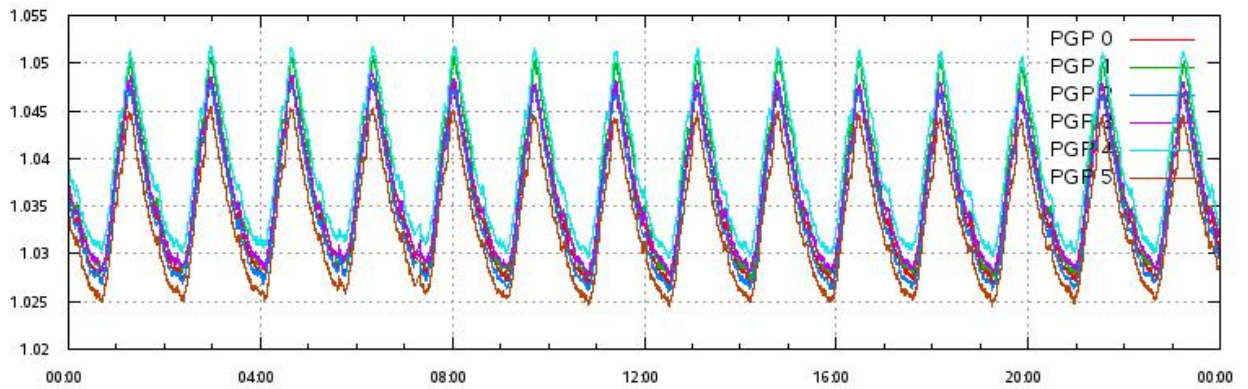
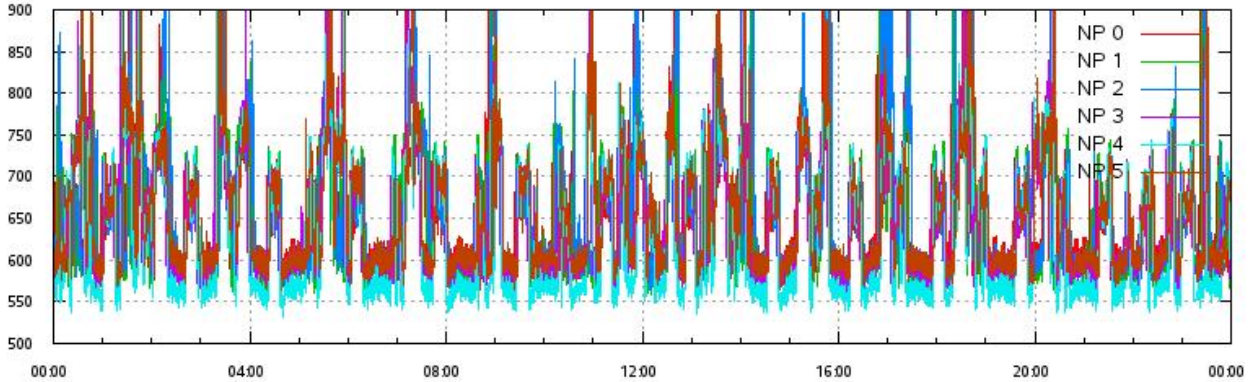


# L1A Product

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

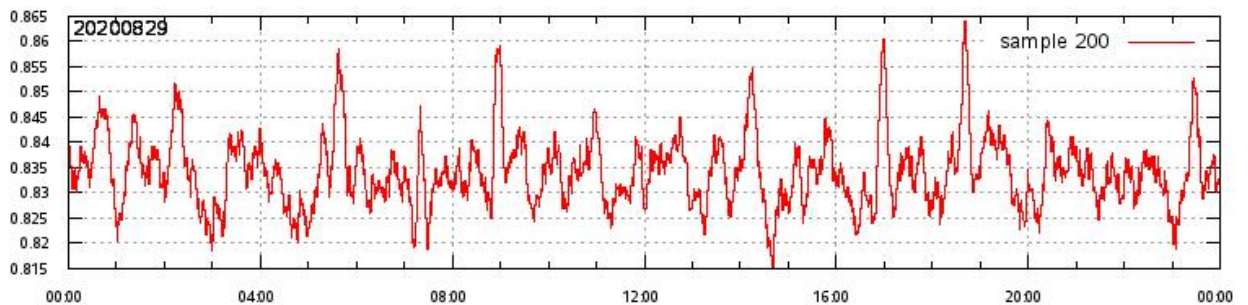
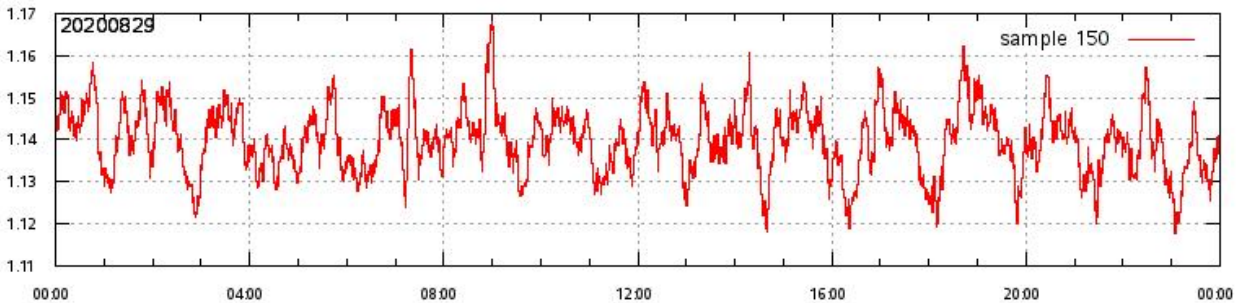
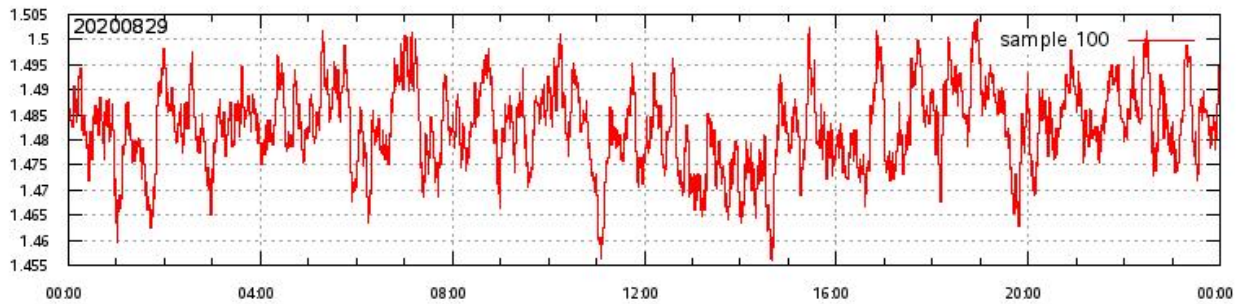
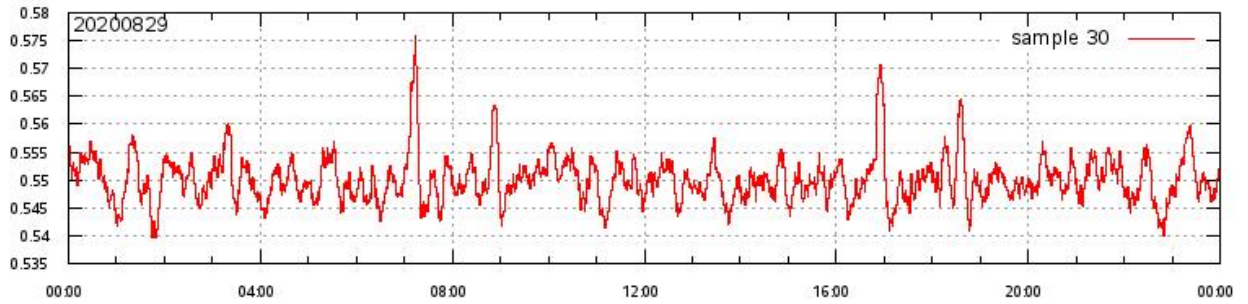
RX Filter Shape average over sample number

Noise Power threshold exceeded (TH=900) on map



# L1A Product

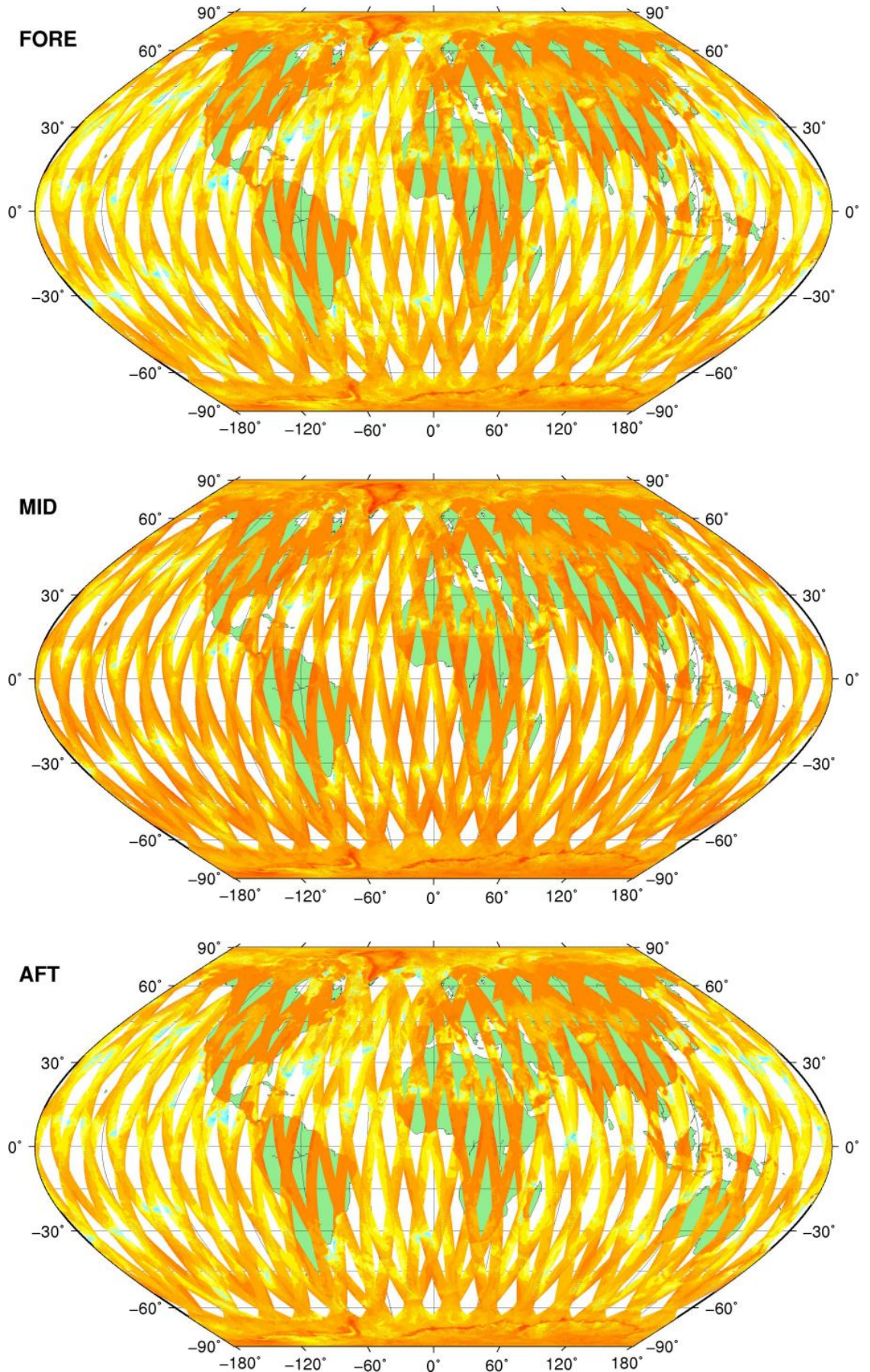
RX filter shape in detail for sample 30,100,150, 200 & max vs. UTC\_LOCALISATION



# SZO Product

Sigma0\_TRIP Coverage map

## SIGMA0\_TRIP Coverage

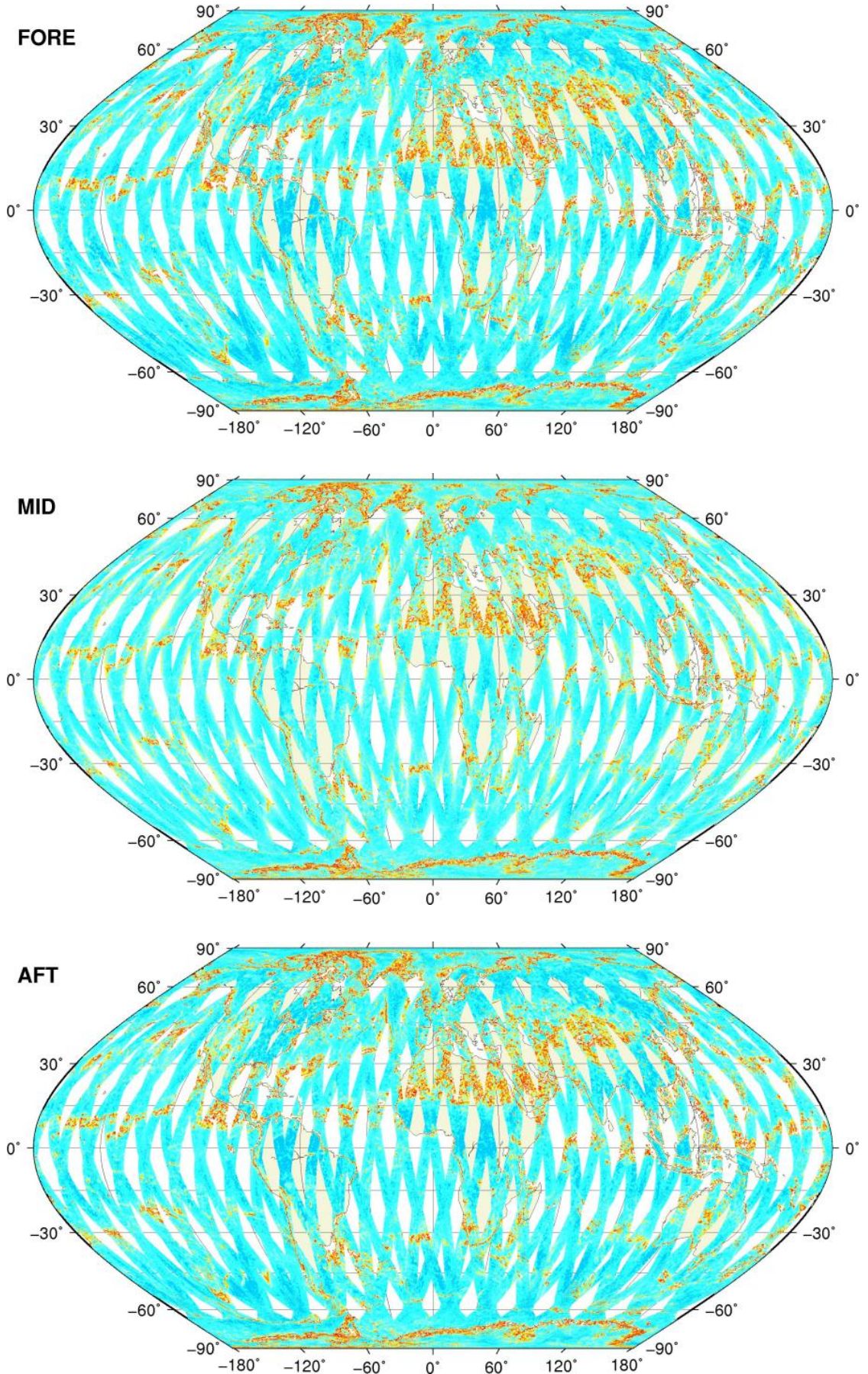


# SZO Product

## Kp Coverage map

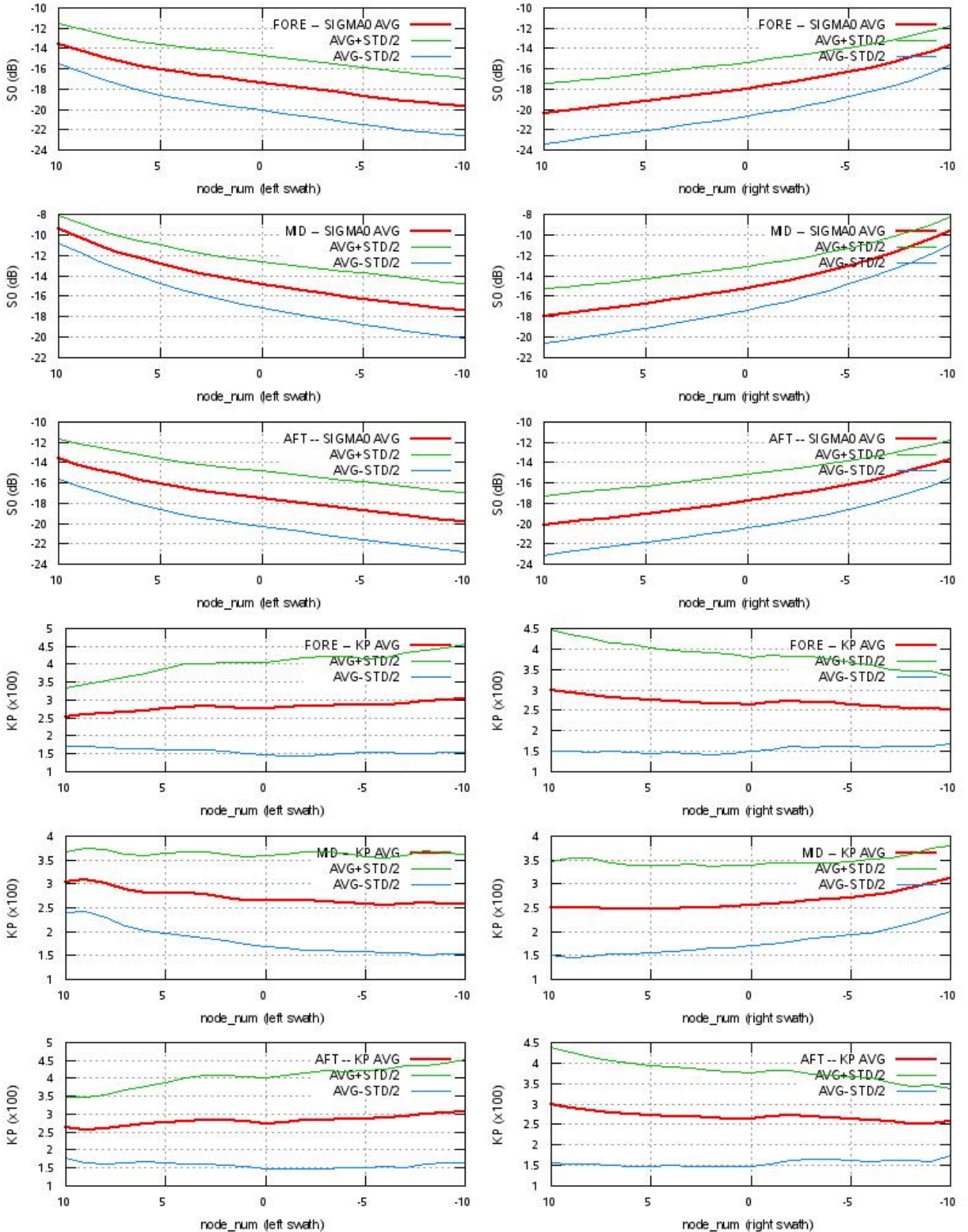
### Kp Coverage

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

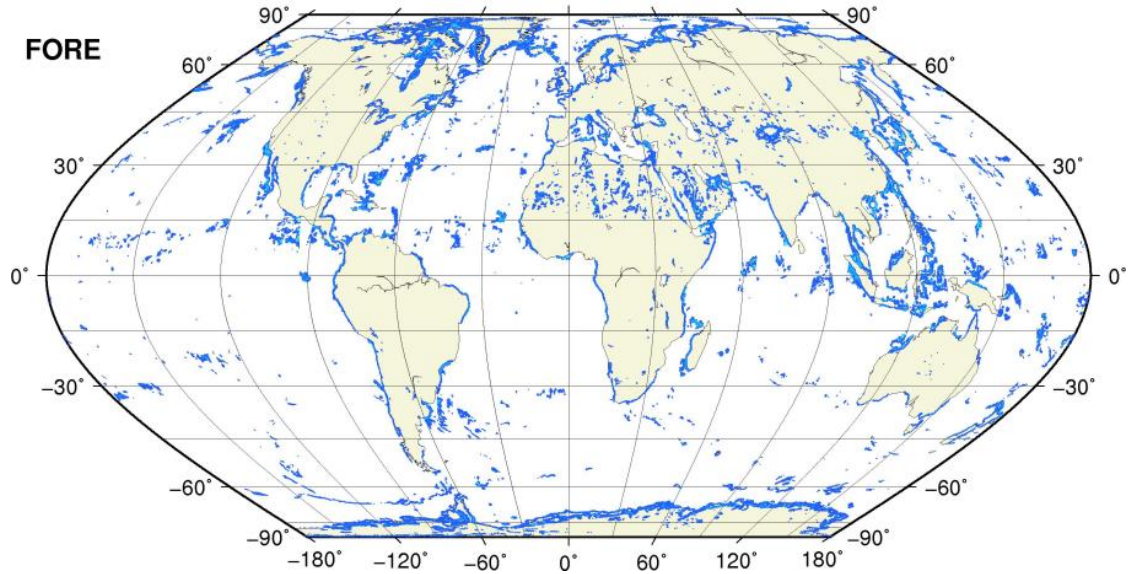
$0.06 < Kp < 1.0$

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0



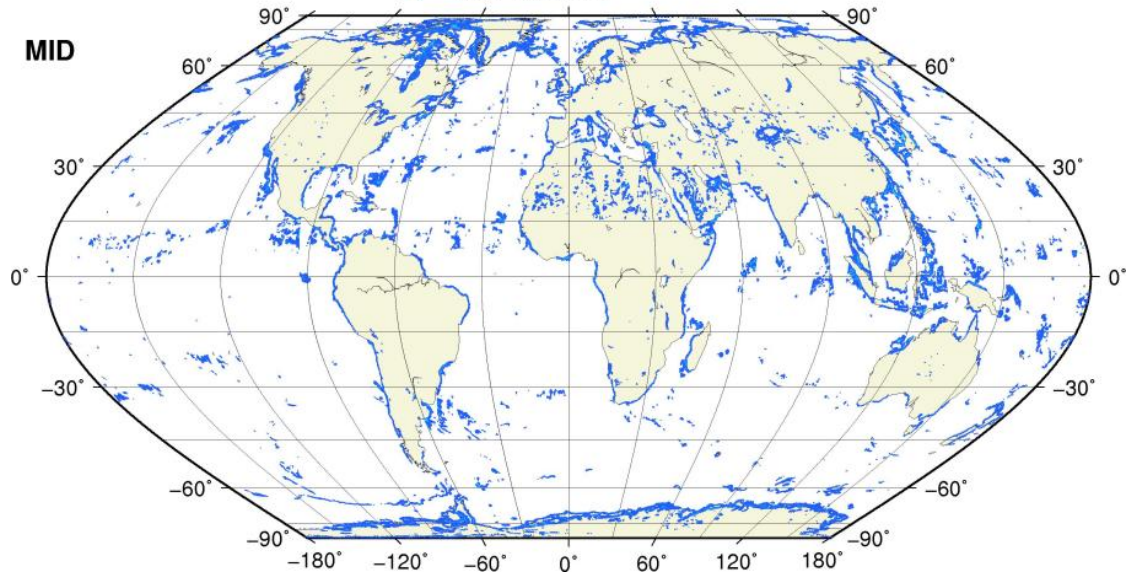
● KP = 1.0 #rec=0

**FORE**



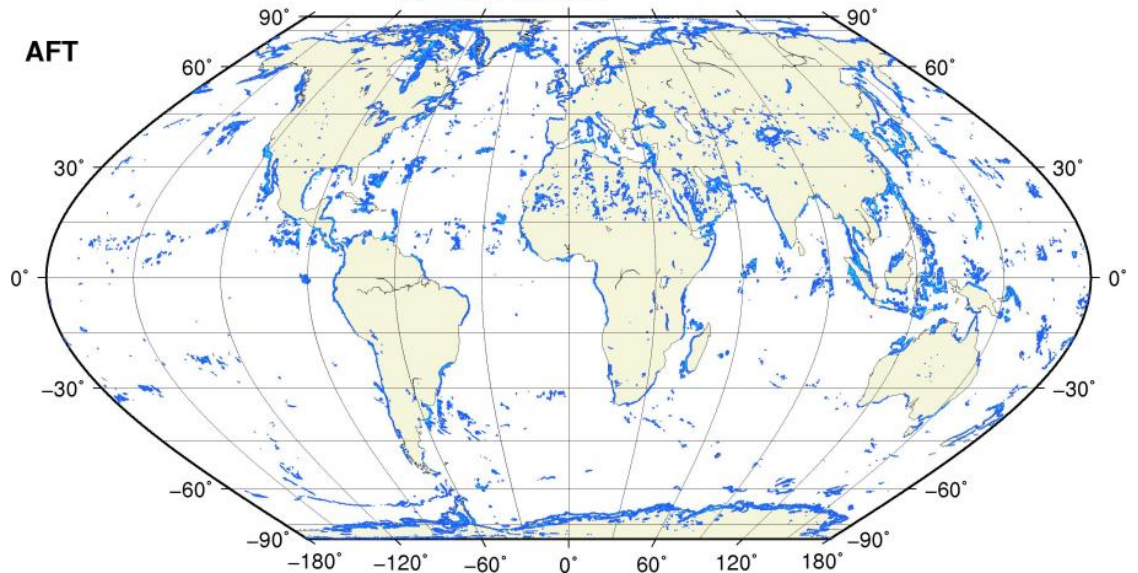
● KP = 1.0 #rec=0

**MID**



● KP = 1.0 #rec=0

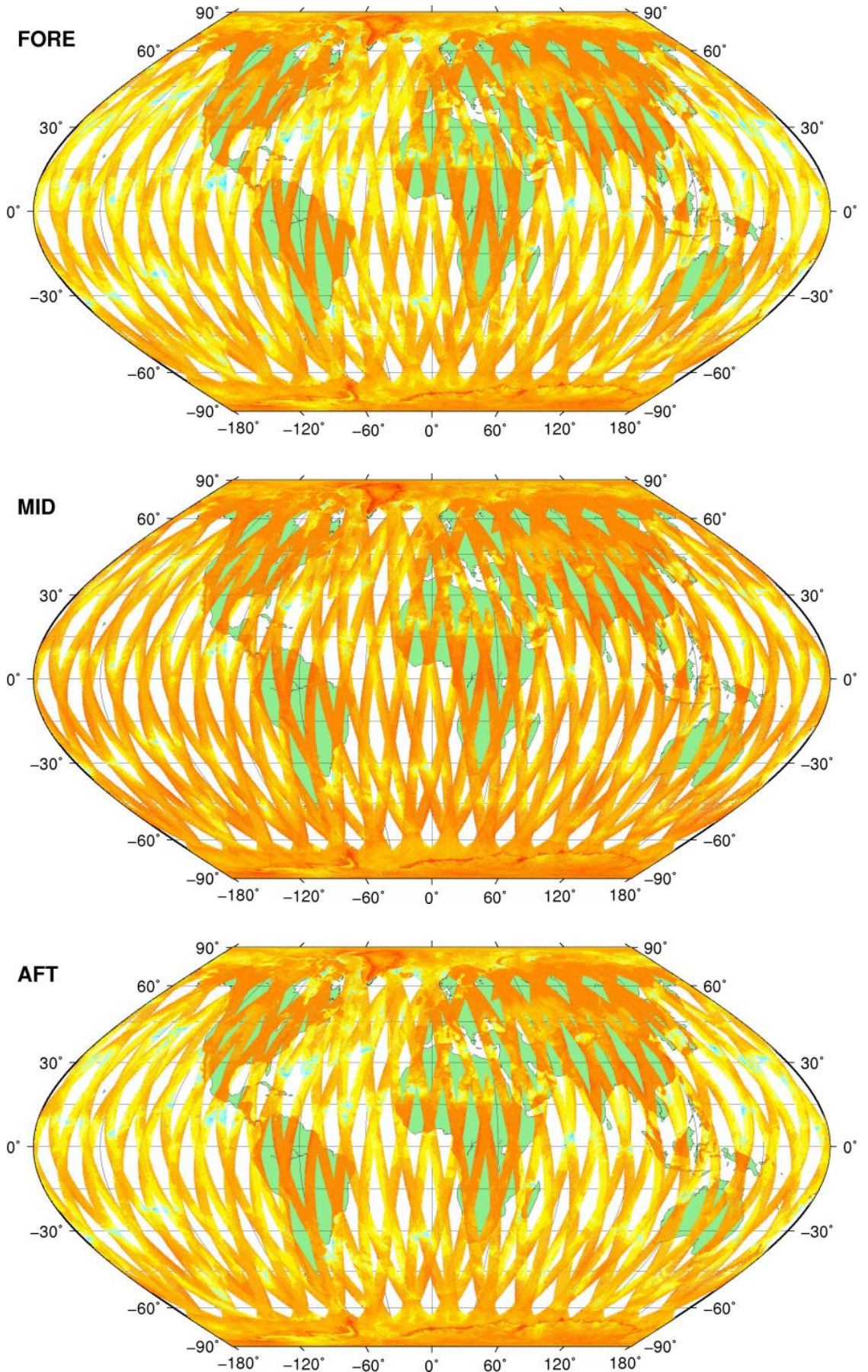
**AFT**



# SZR Product

Sigma0\_TRIP Coverage map

## SIGMA0\_TRIP Coverage



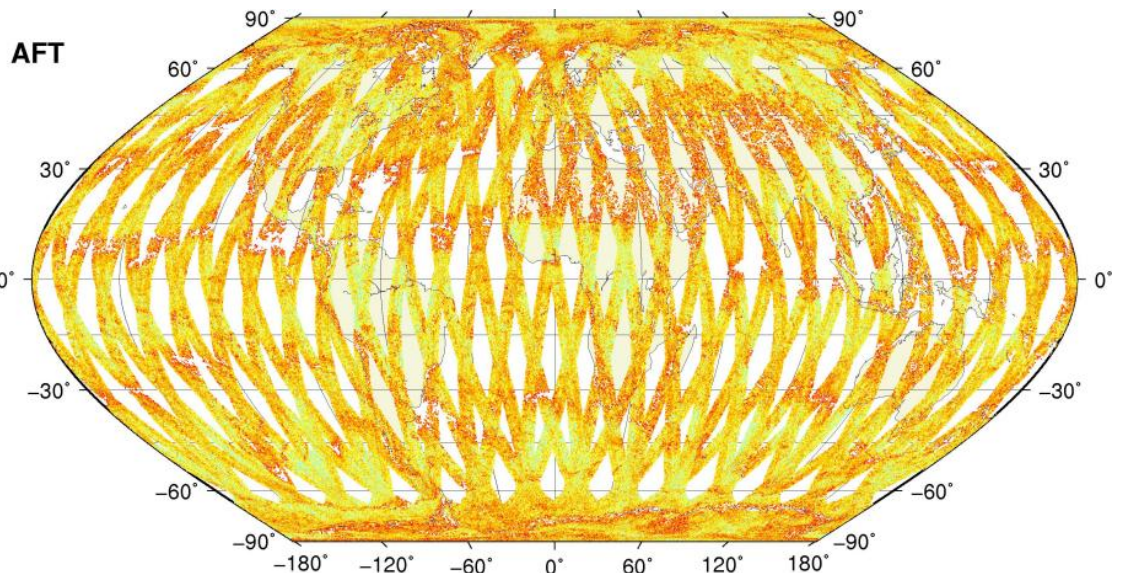
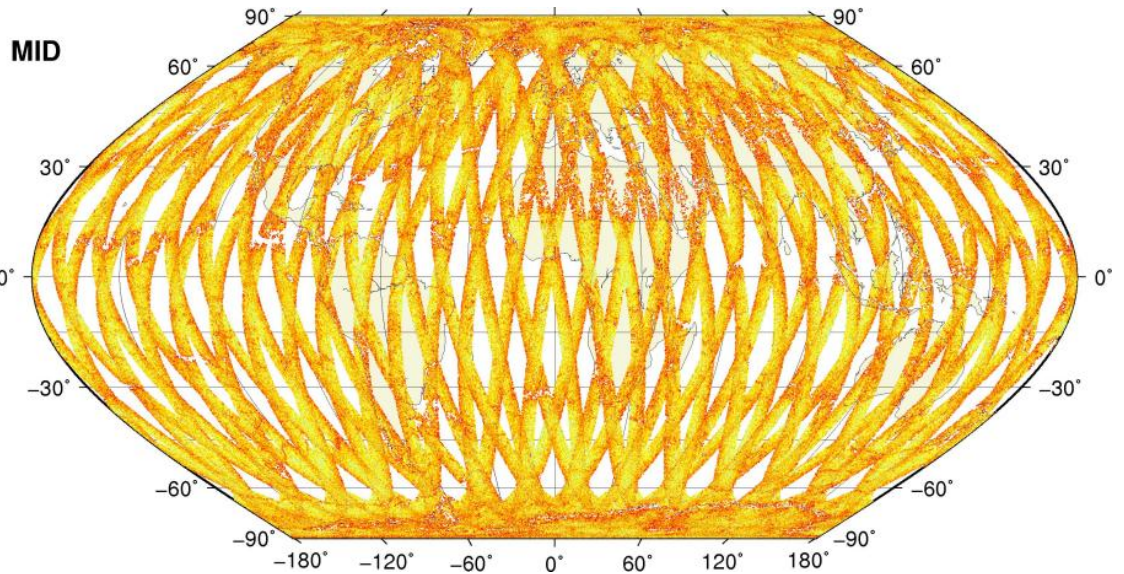
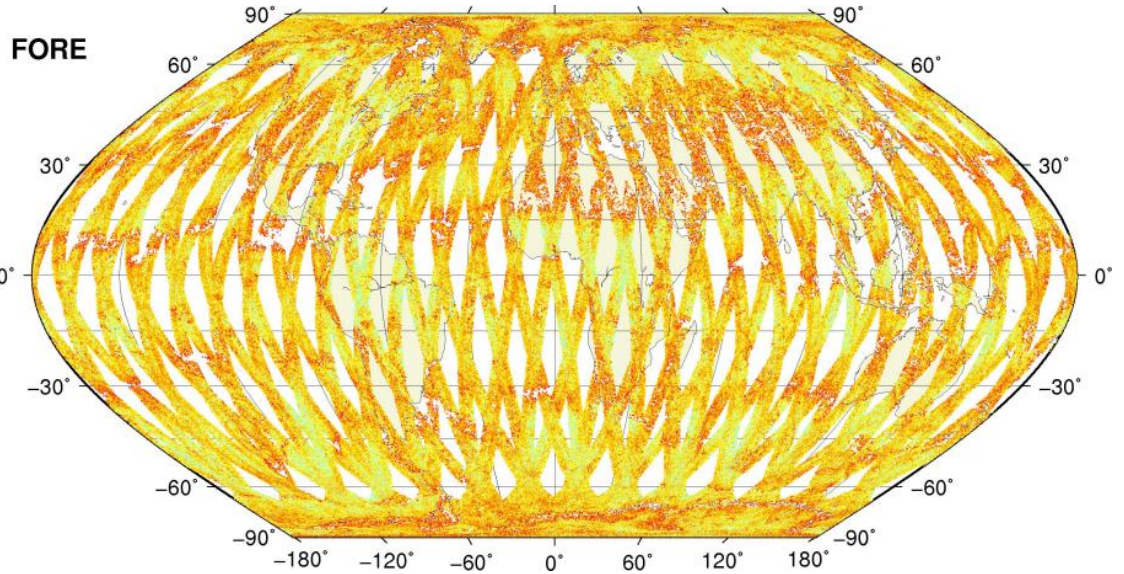


# SZR Product

Kp Coverage map

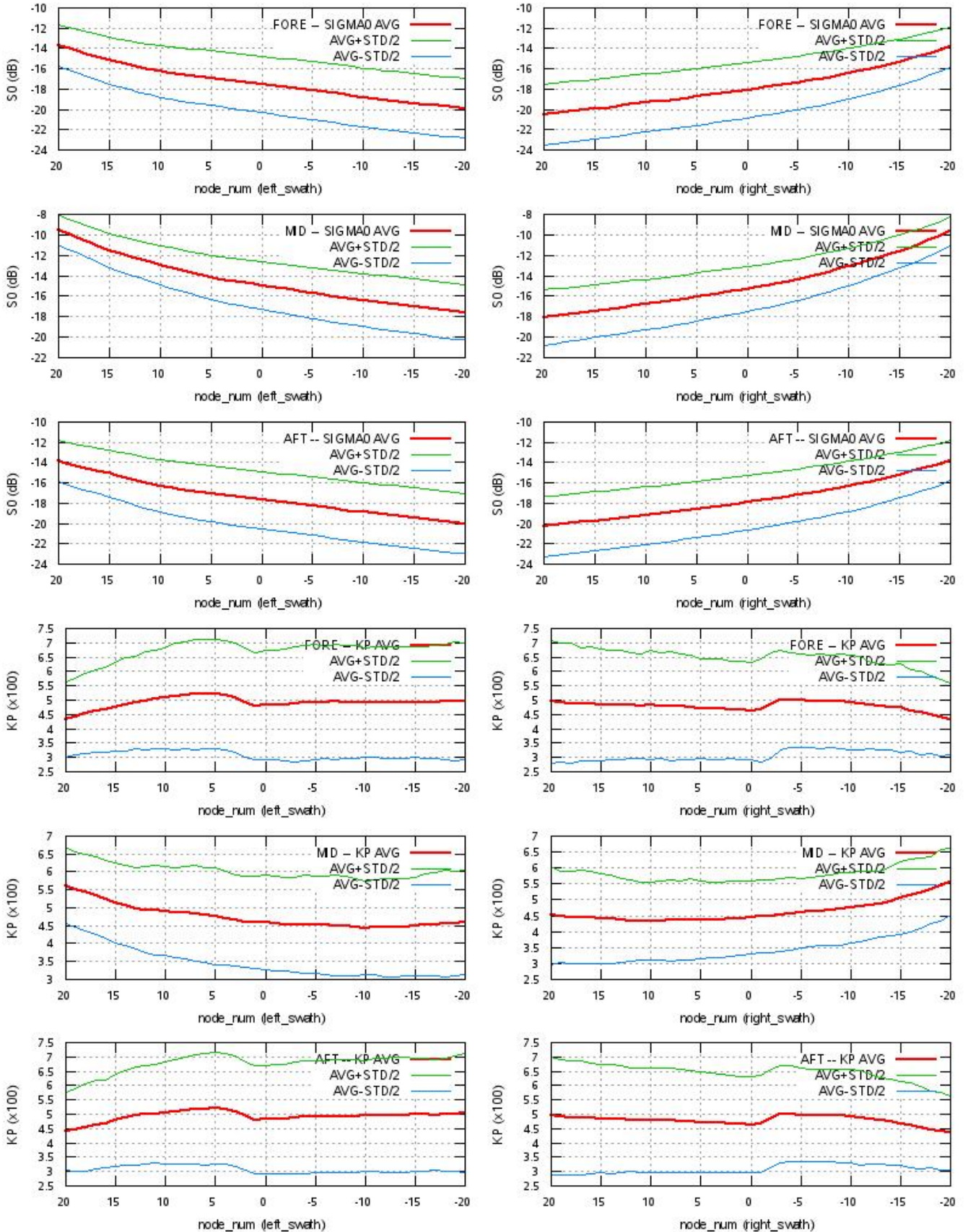
## Kp Coverage

0.00 0.01 0.02 0.03 0.04 0.05 0.06



# SZR Product

## S0 - Kp Statistics



# SZR Product

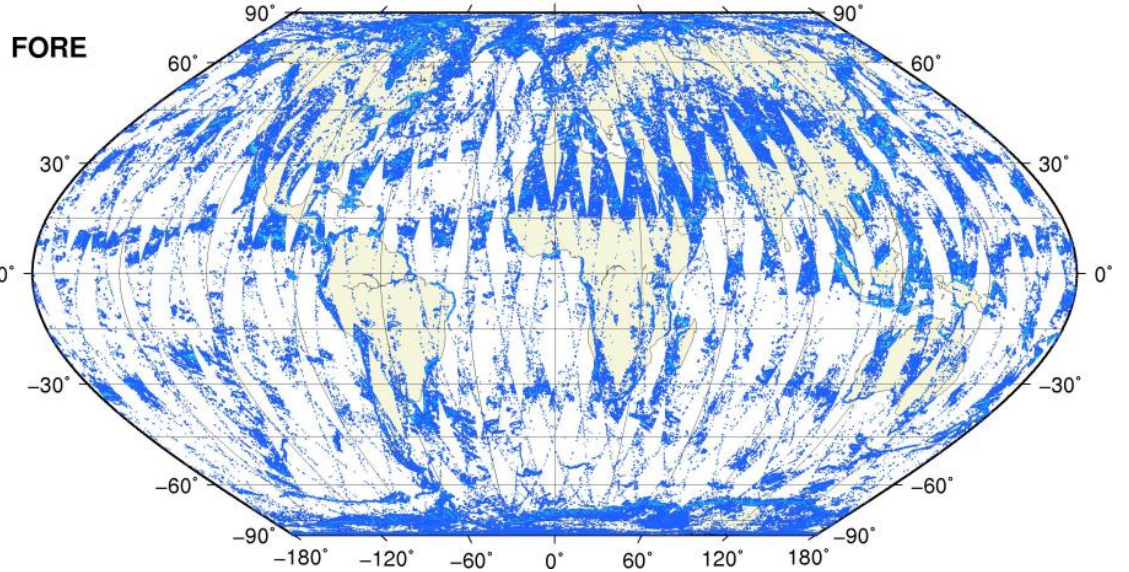
Kp Outliers on map

$0.06 < Kp < 1.0$

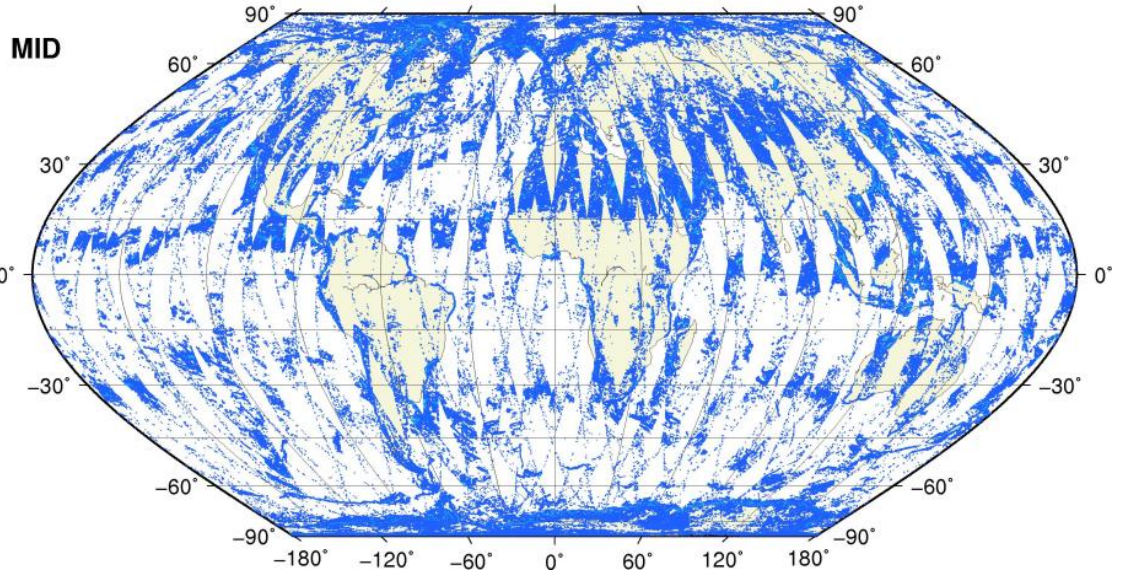
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0



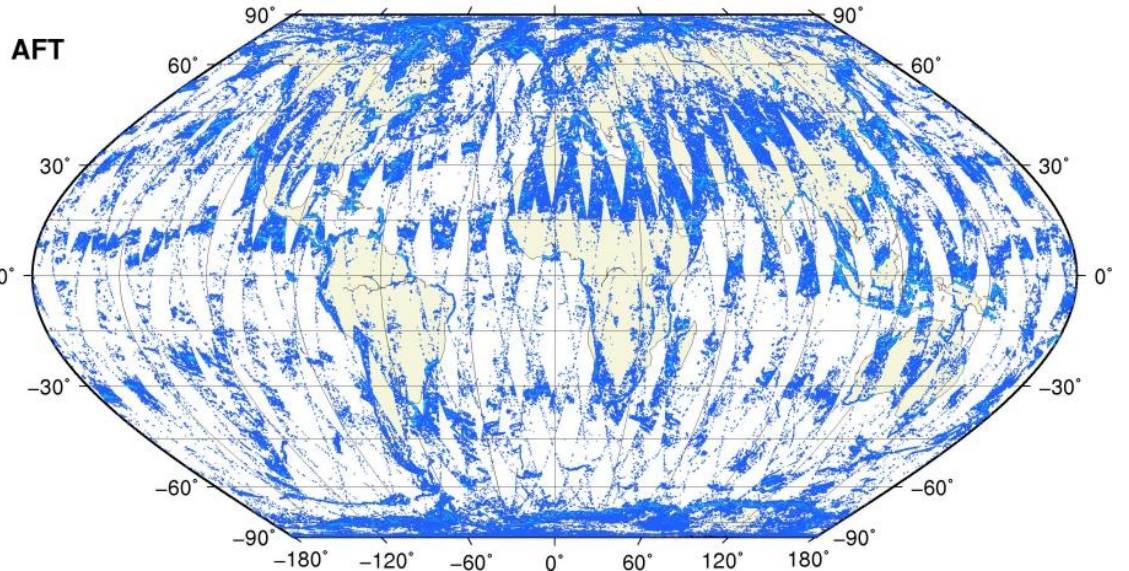
● KP = 1.0 #rec=0



● KP = 1.0 #rec=0

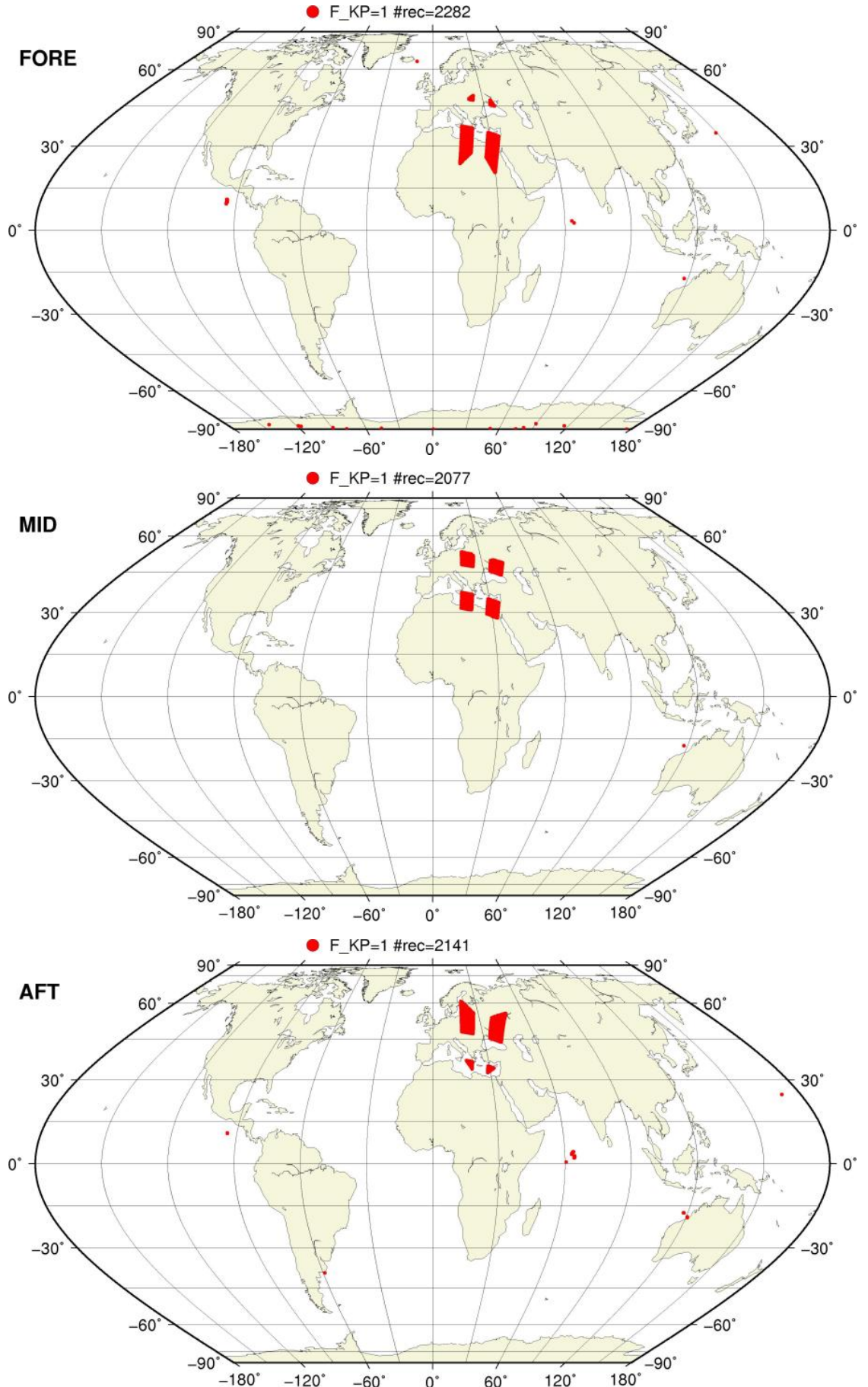


● KP = 1.0 #rec=0



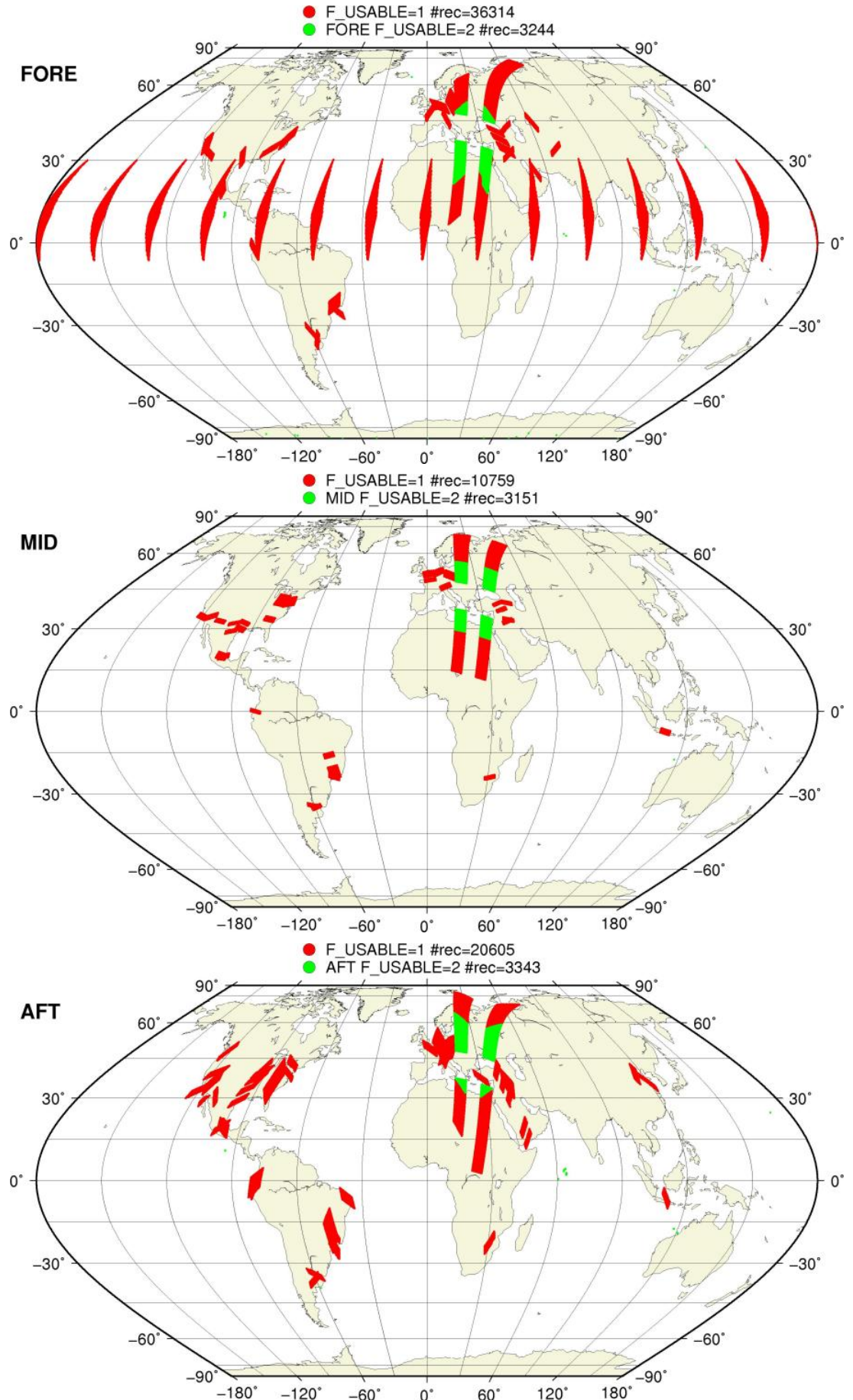
# SZO Flagged Data Coverage

F\_KP = 1 on map



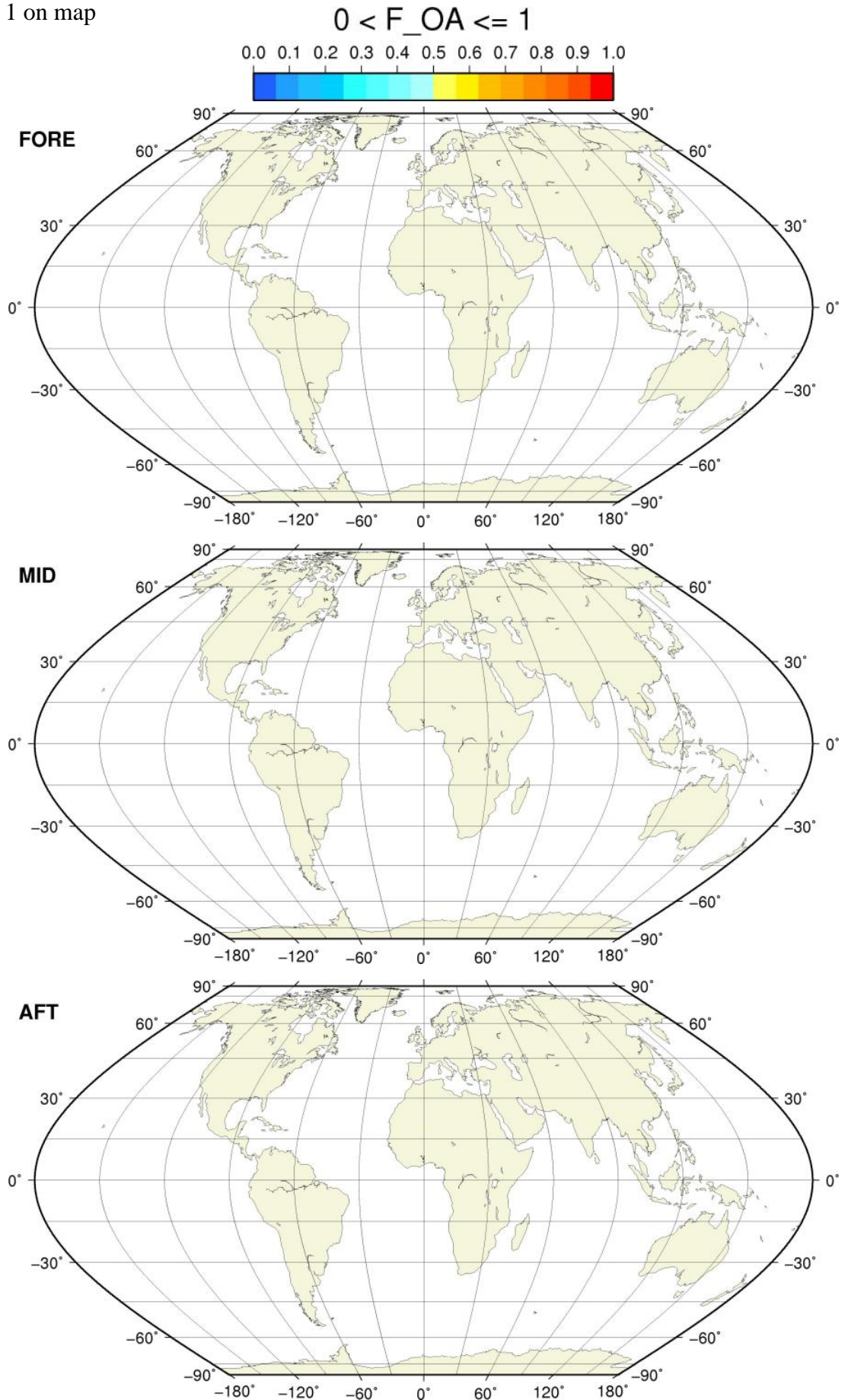
# SZO Flagged Data Coverage

F\_USABLE = 1 or 2 on map



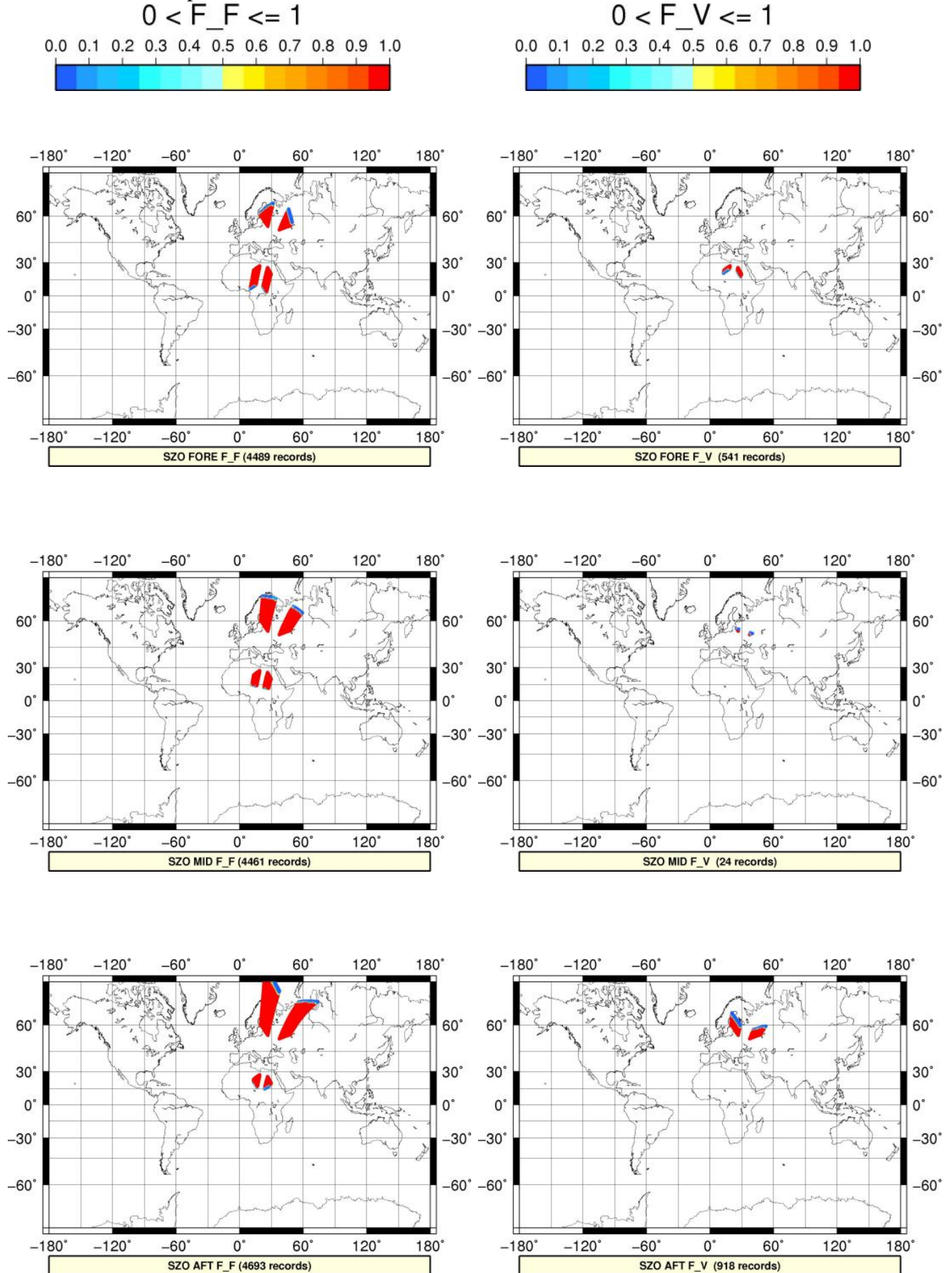
# SZO Flagged Data Coverage

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



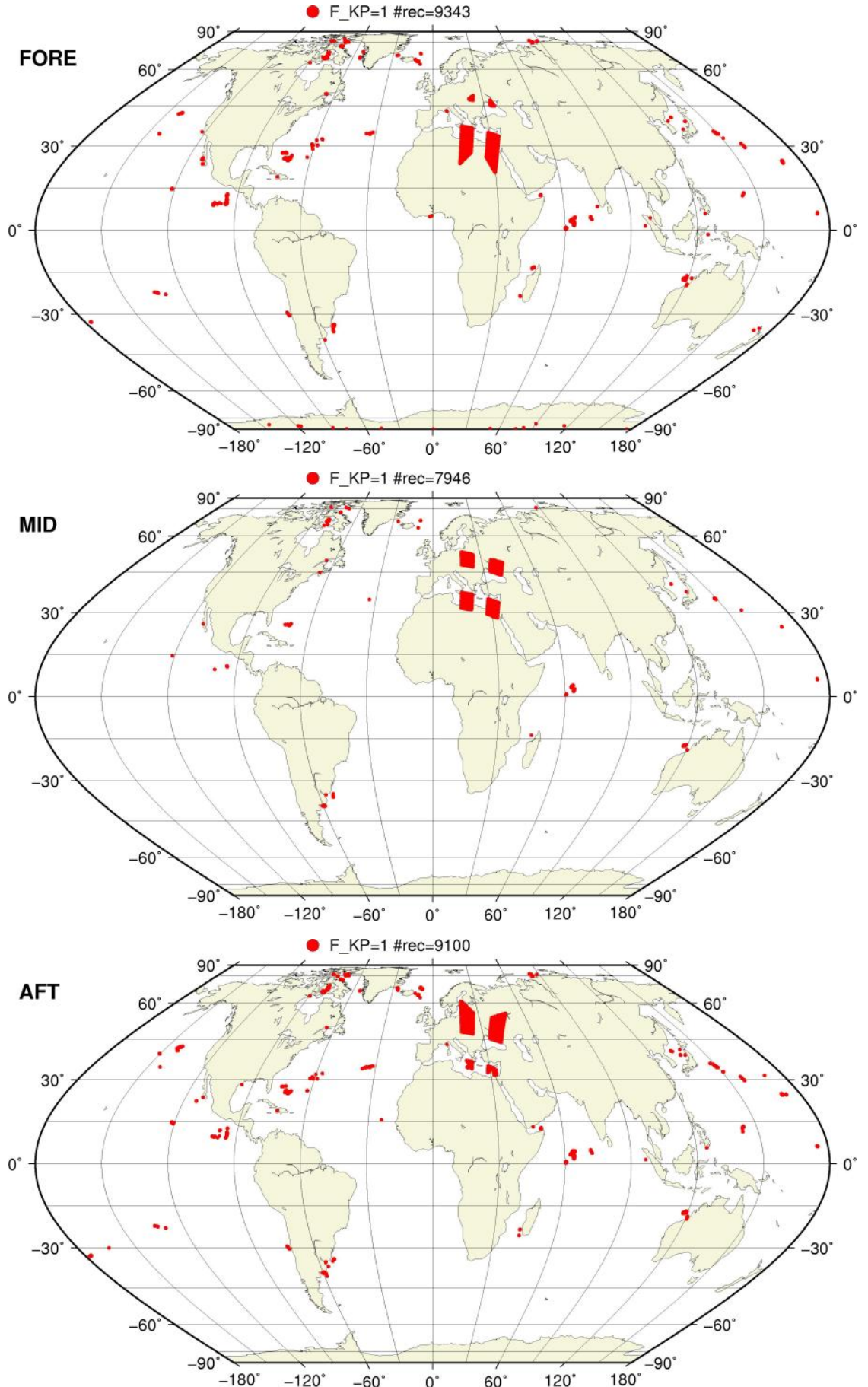
# SZO Flagged Data Coverage

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



# SZR Flagged Data Coverage

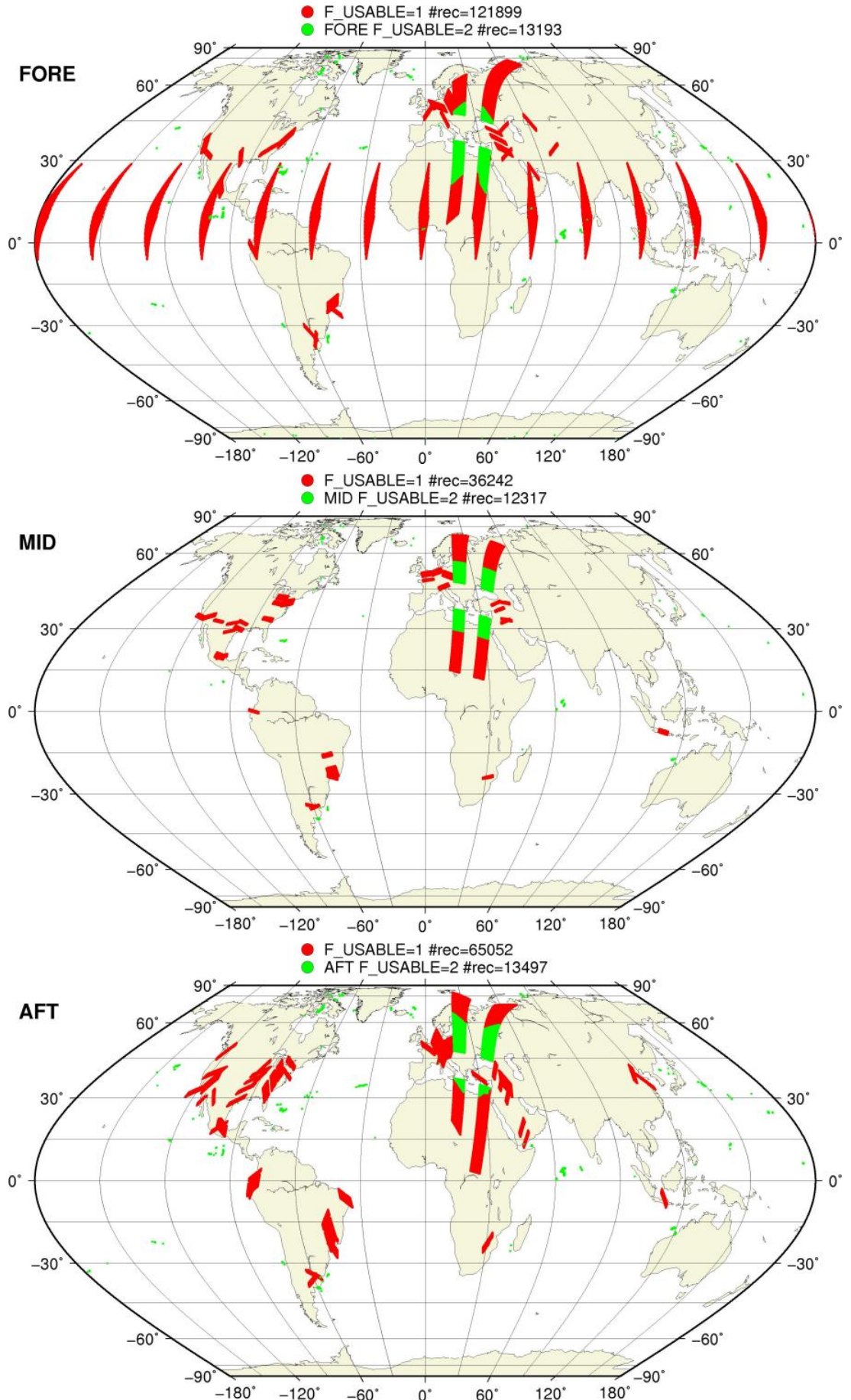
F\_KP = 1 on map





# 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

