

# 1. MIPAS Daily Report for level 1 products

## [1.1. General Info](#)

## [1.2 Product Quality Indicators](#)

## [1.3 Physical Quality Indicators](#)

## [1.4 ADF monitoring](#)

### 1.1 General Info

This report contains a daily analysis on parameters extracted from MIPAS level 1 data (The MIP\_NL\_\_1P product).

#### 1.1.1 Report summary

The table below shows general characteristics of the data that are included into this report.

Item	Value
Report version	v1.31 02-08-2006
Time of report generation	02AUG2006 10:20:20
Data source version	MIPAS/4.65-P
Processing scope for products	24JUN2006 00:00:00 to 25JUN2006 00:00:00
Start time of first product within scope	24JUN2006 09:35:57
Stop time of last product within scope	24JUN2006 09:36:07
Total number of level 1 products	1
Number of level 1 products with errors	1

#### 1.1.2 Summary per product

The following table shows a summary for each product used in this report.

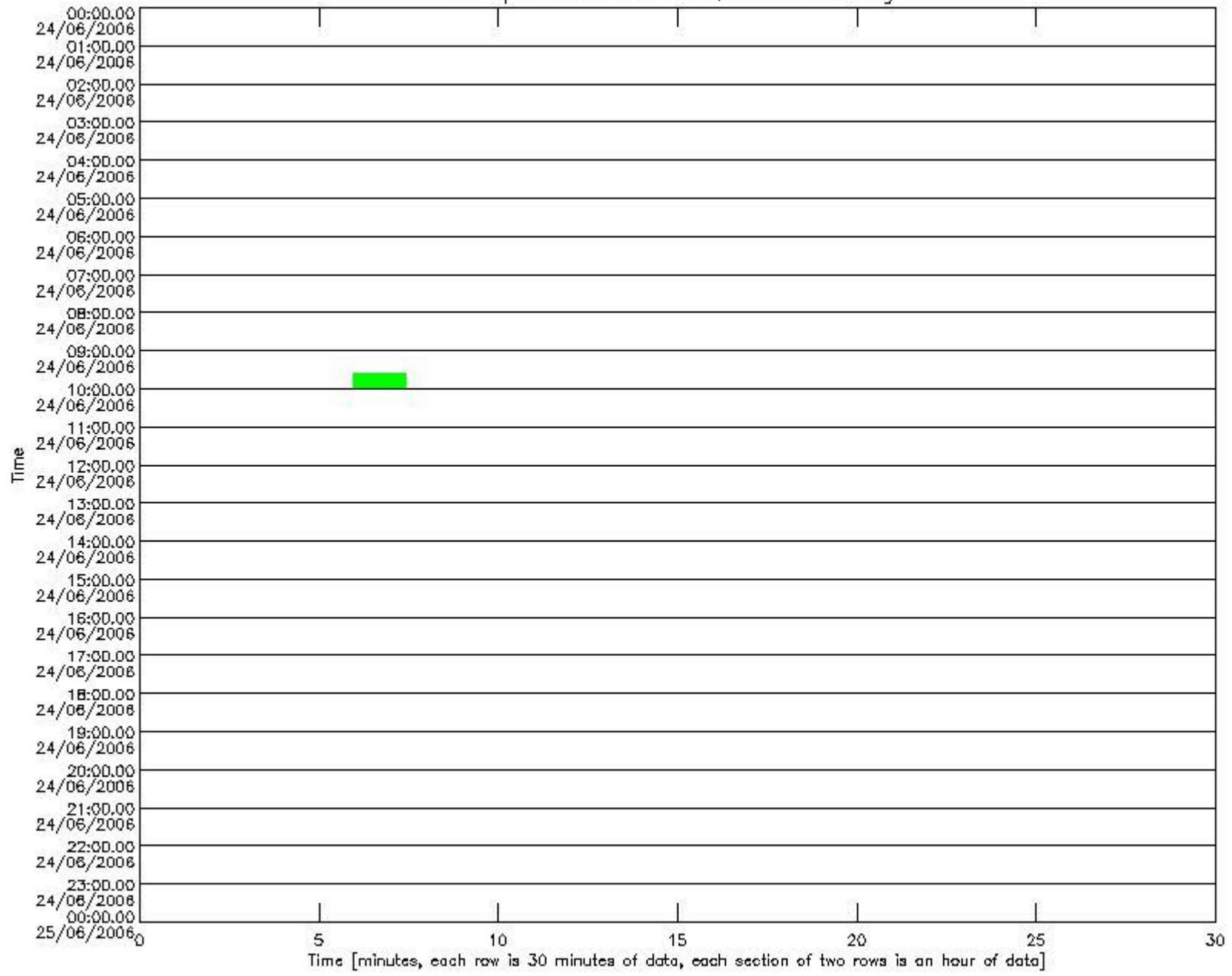
#	Product name	Start time	Stop time	Prod err	Slice position (prod/tot)
0	MIP_NL__1PPDPA20060624_093557_000000112048_00465_22563_0194.N1	24JUN2006 09:35:57	24JUN2006 09:36:07	1	0/0

### 1.2 Product Quality Indicators

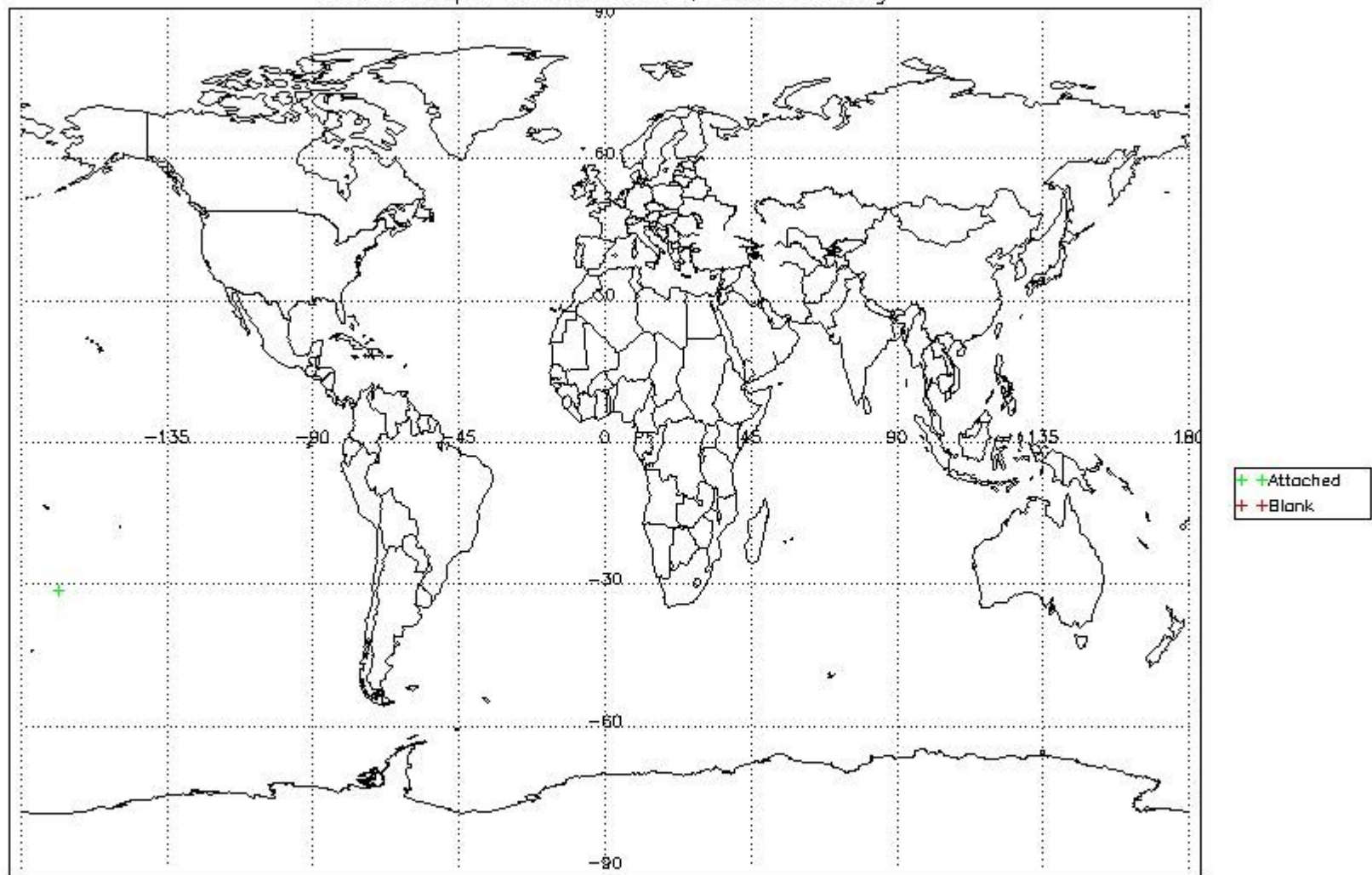
This report contains an analysis on product quality related parameters within the MIP\_NL\_\_1P product.

#### 1.2.1 Trends and geolocation of Summary Quality ADS

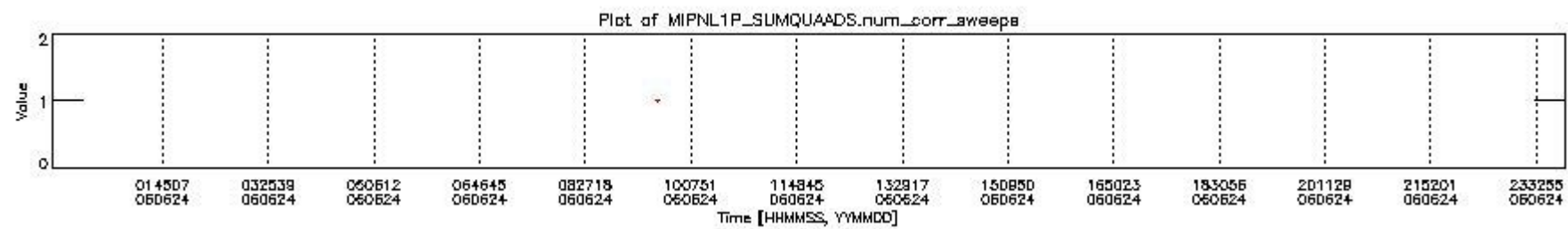
Bar plot of MIPNL1P\_SUMQUAADS.attach\_flag



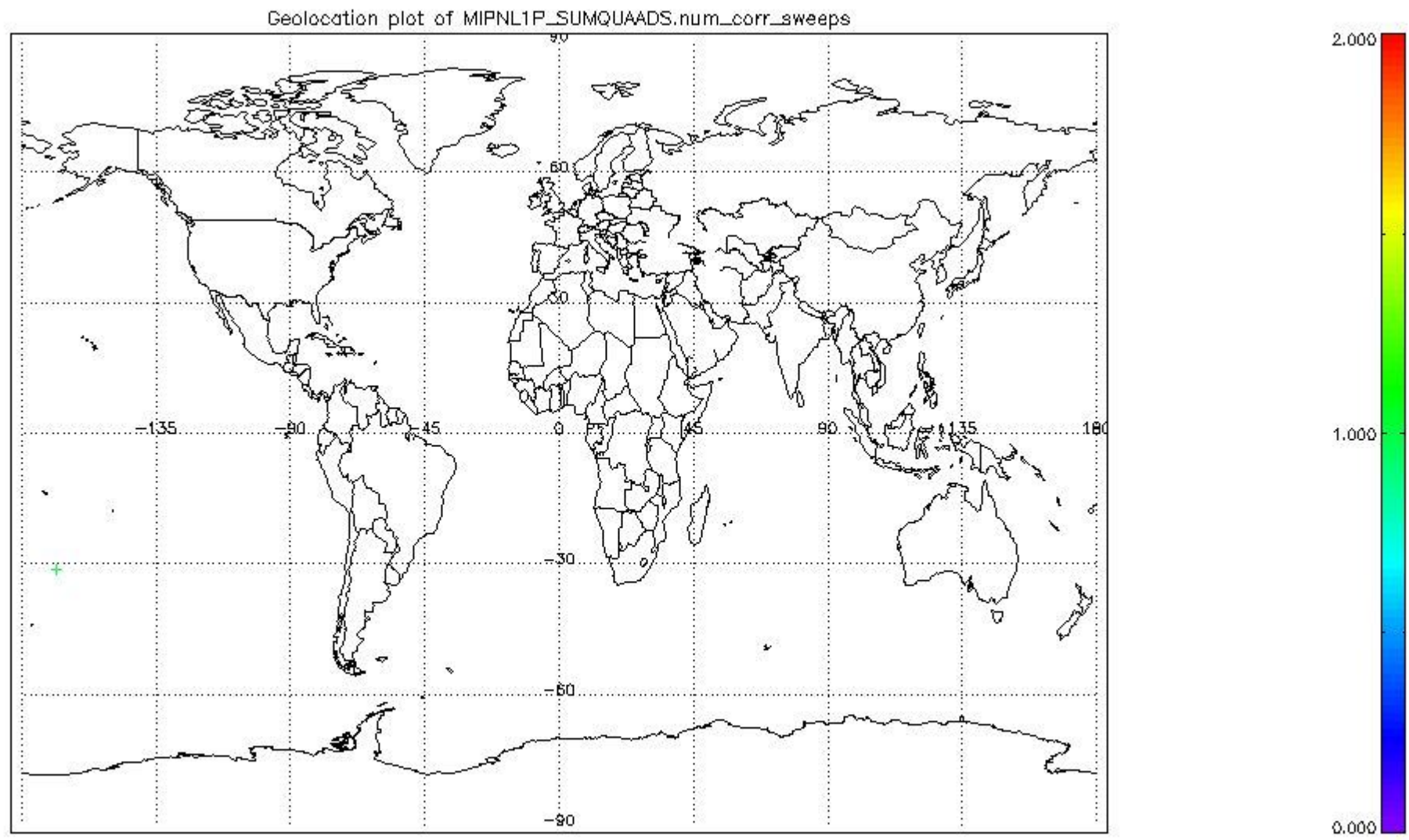
Geolocation plot of MIPNL1P\_SUMQUAADS.attach\_flag



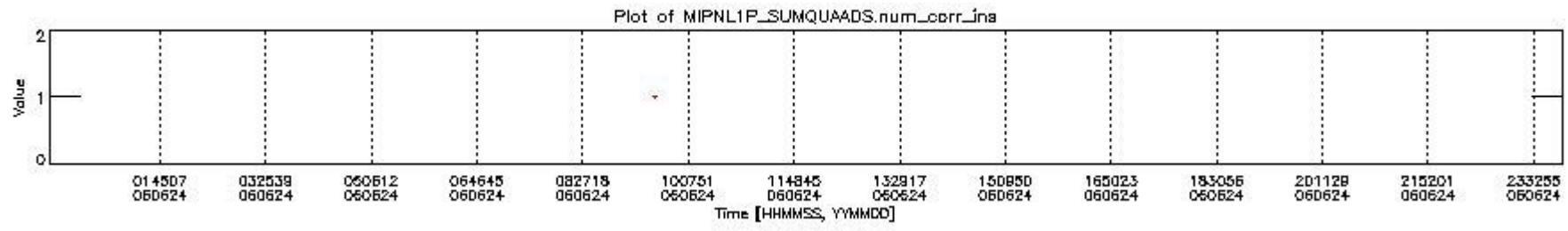
mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_1.PNG



mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_2.PNG



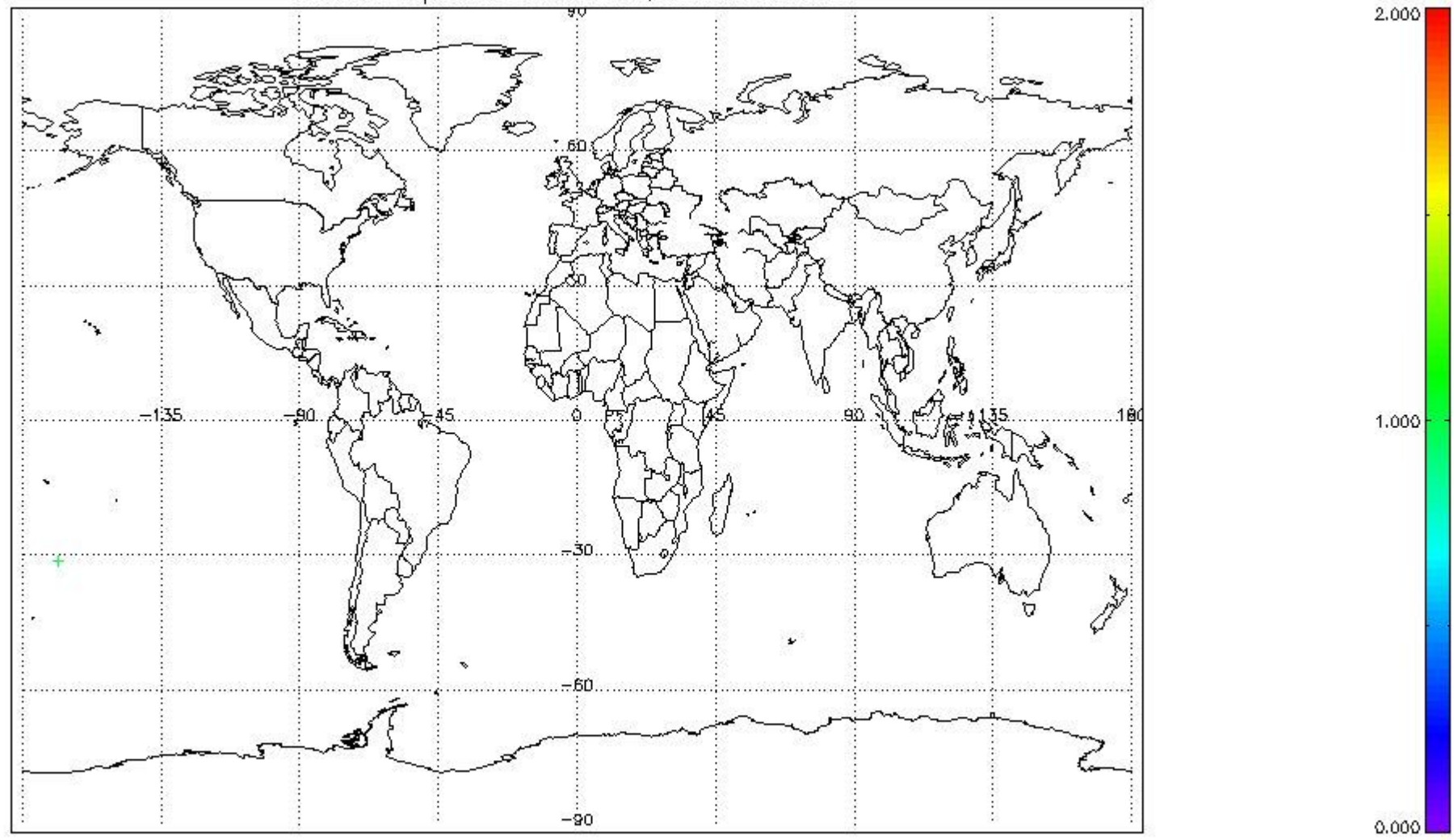
mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_3.PNG



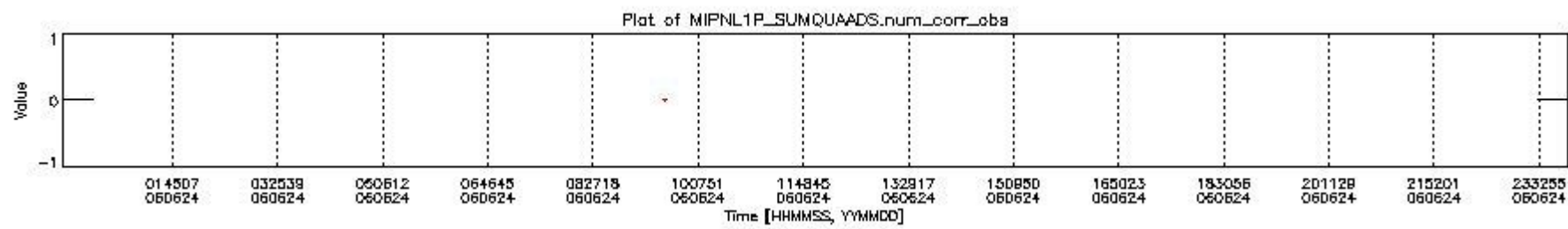
mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_4.PNG



Geolocation plot of MIPNL1P\_SUMQUAADS.num\_corr\_ins

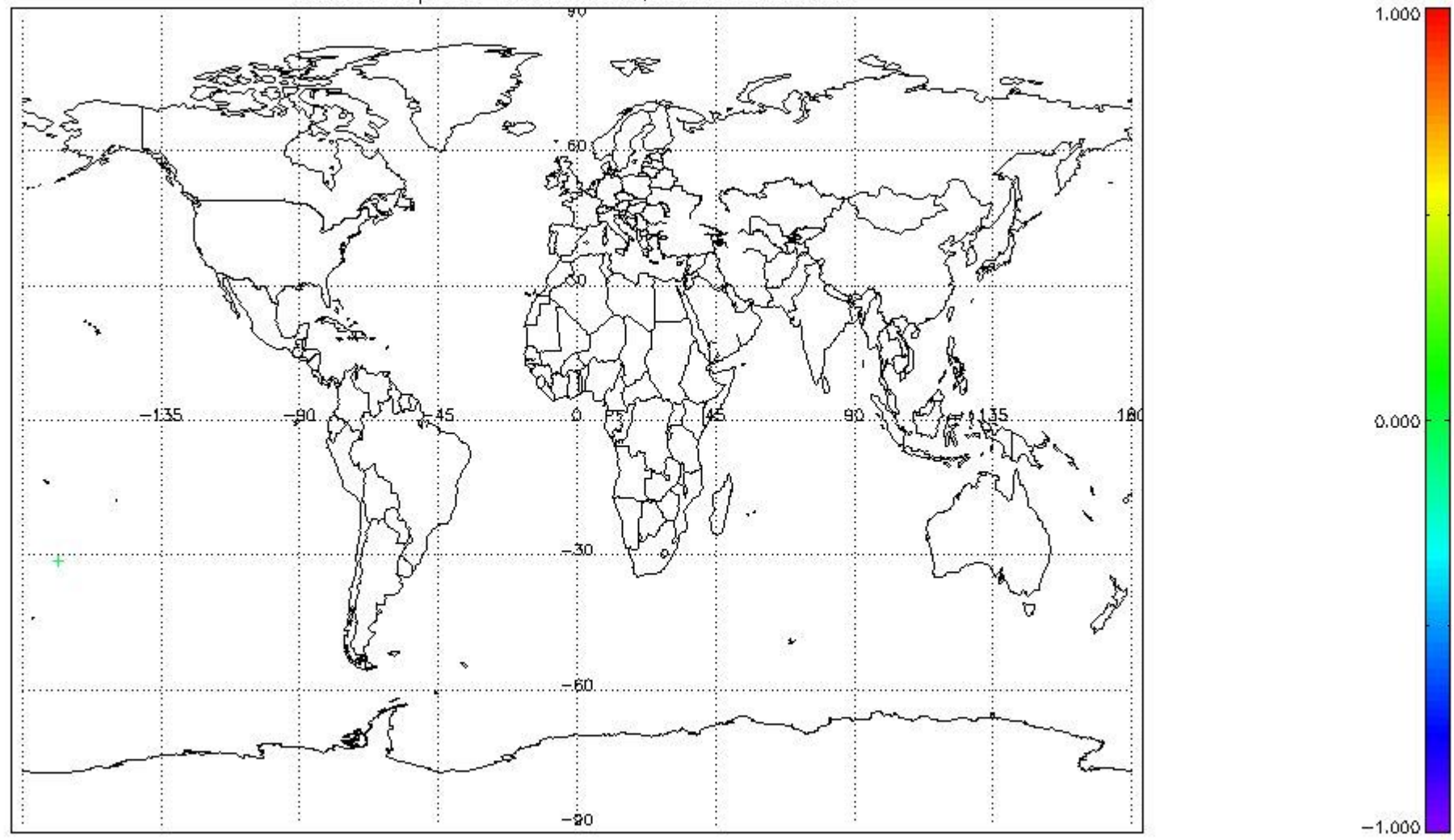


mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_5.PNG

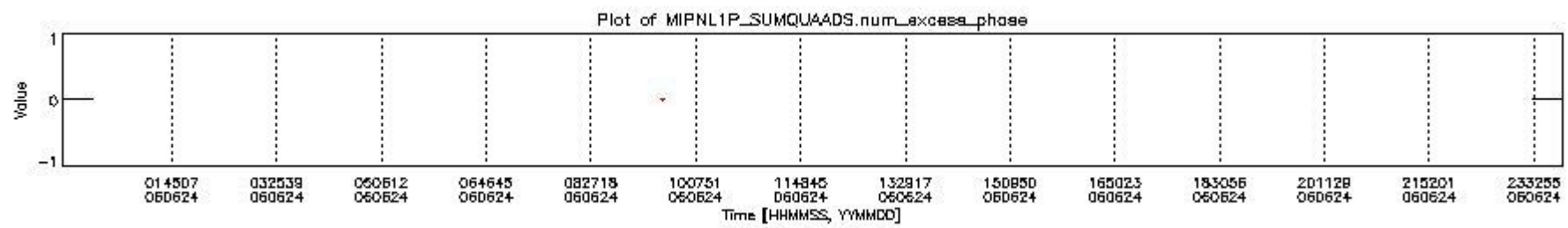


mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_6.PNG

Geolocation plot of MIPNL1P\_SUMQUAADS.num\_corr\_obs

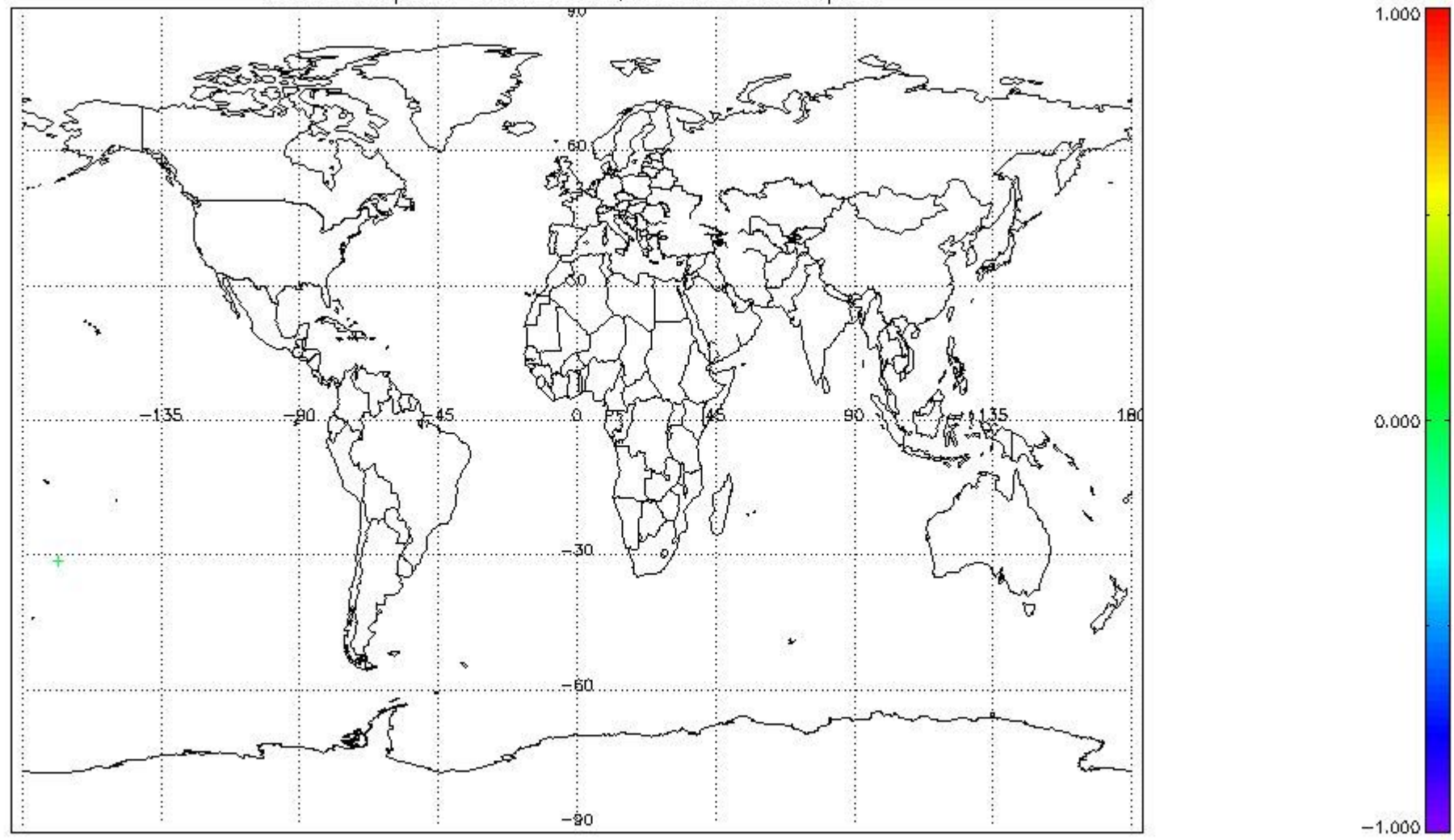


mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_7.PNG

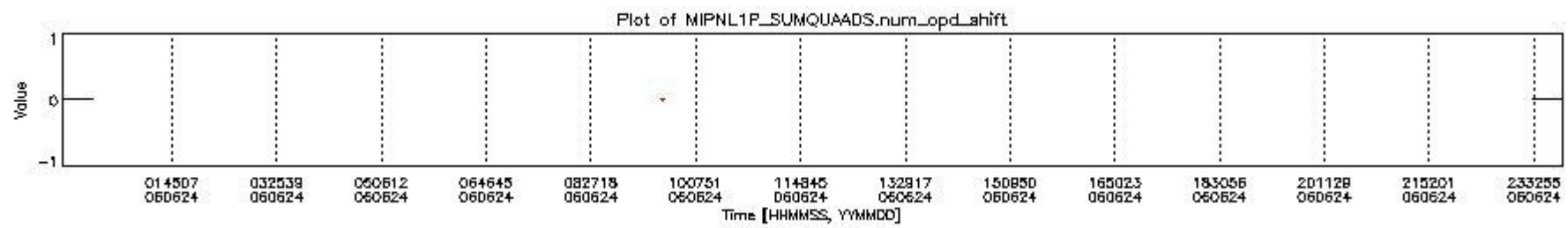


mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_8.PNG

Geolocation plot of MIPNL1P\_SUMQUAADS.num\_excess\_phase



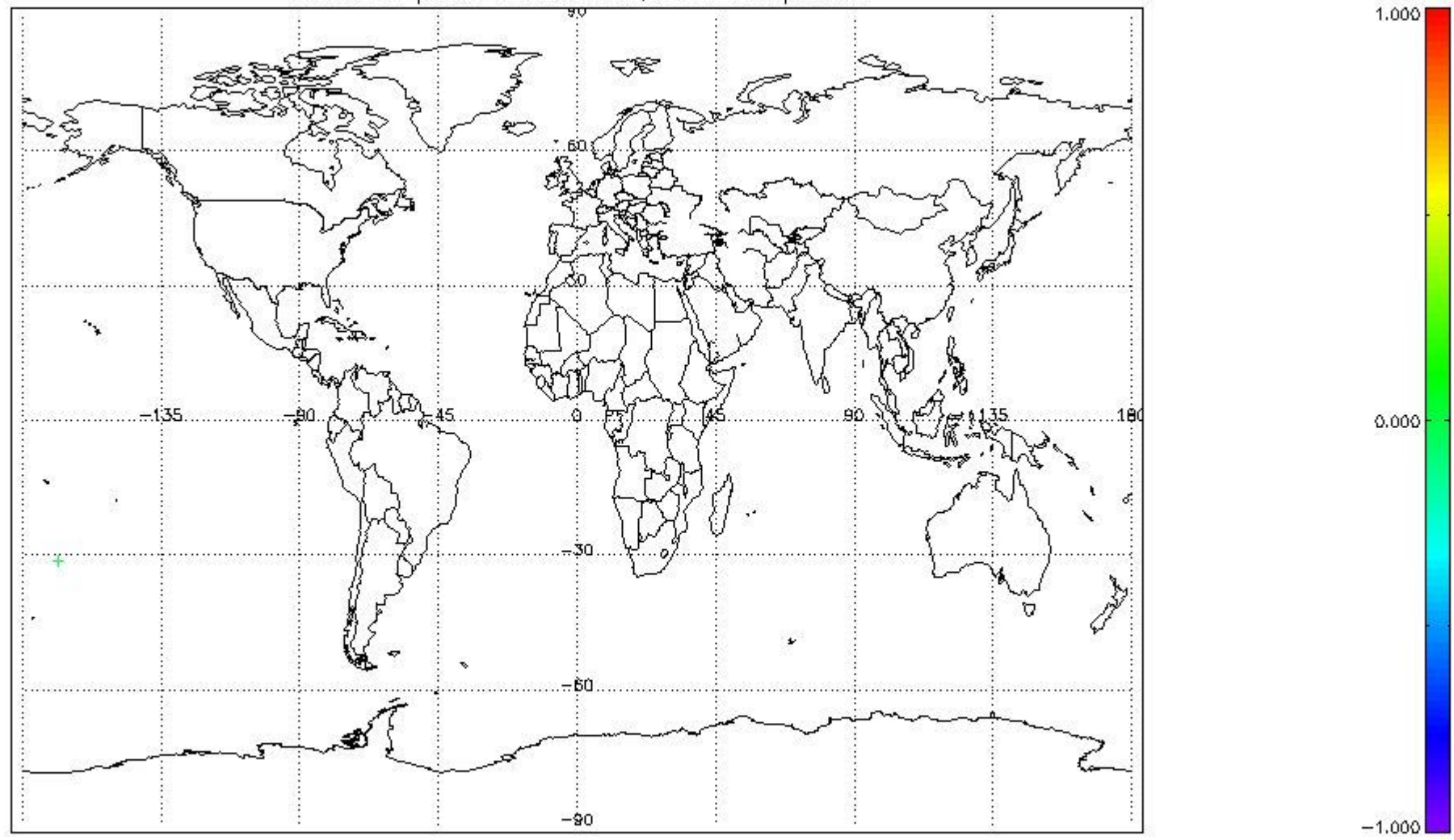
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_9.PNG



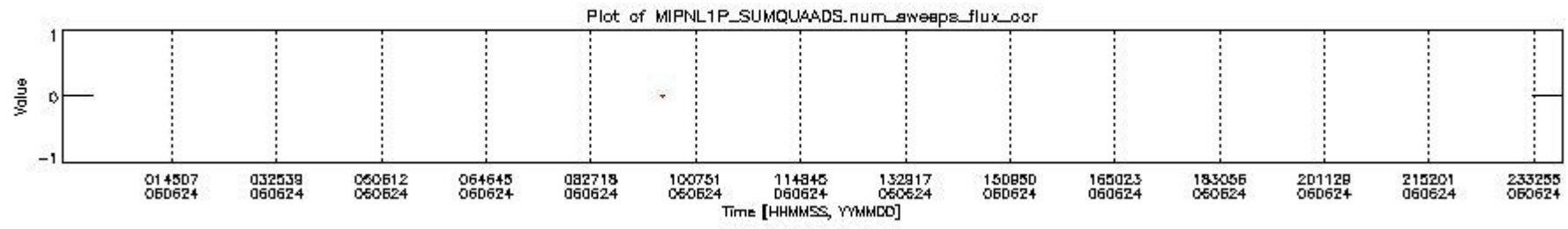
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_10.PNG



Geolocation plot of MIPNL1P\_SUMQUAADS.num\_0pd\_shift

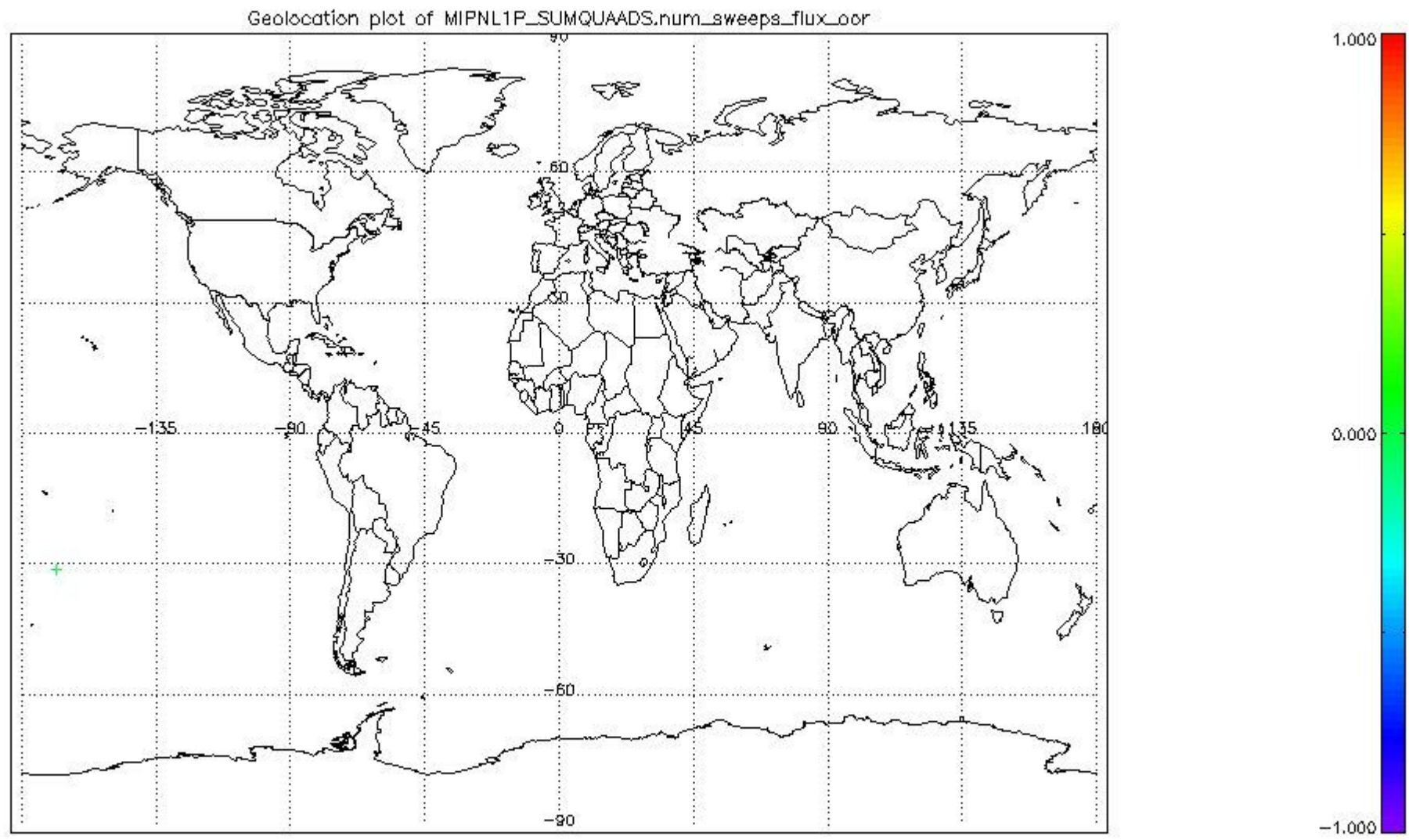


mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_11.PNG



mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_12.PNG

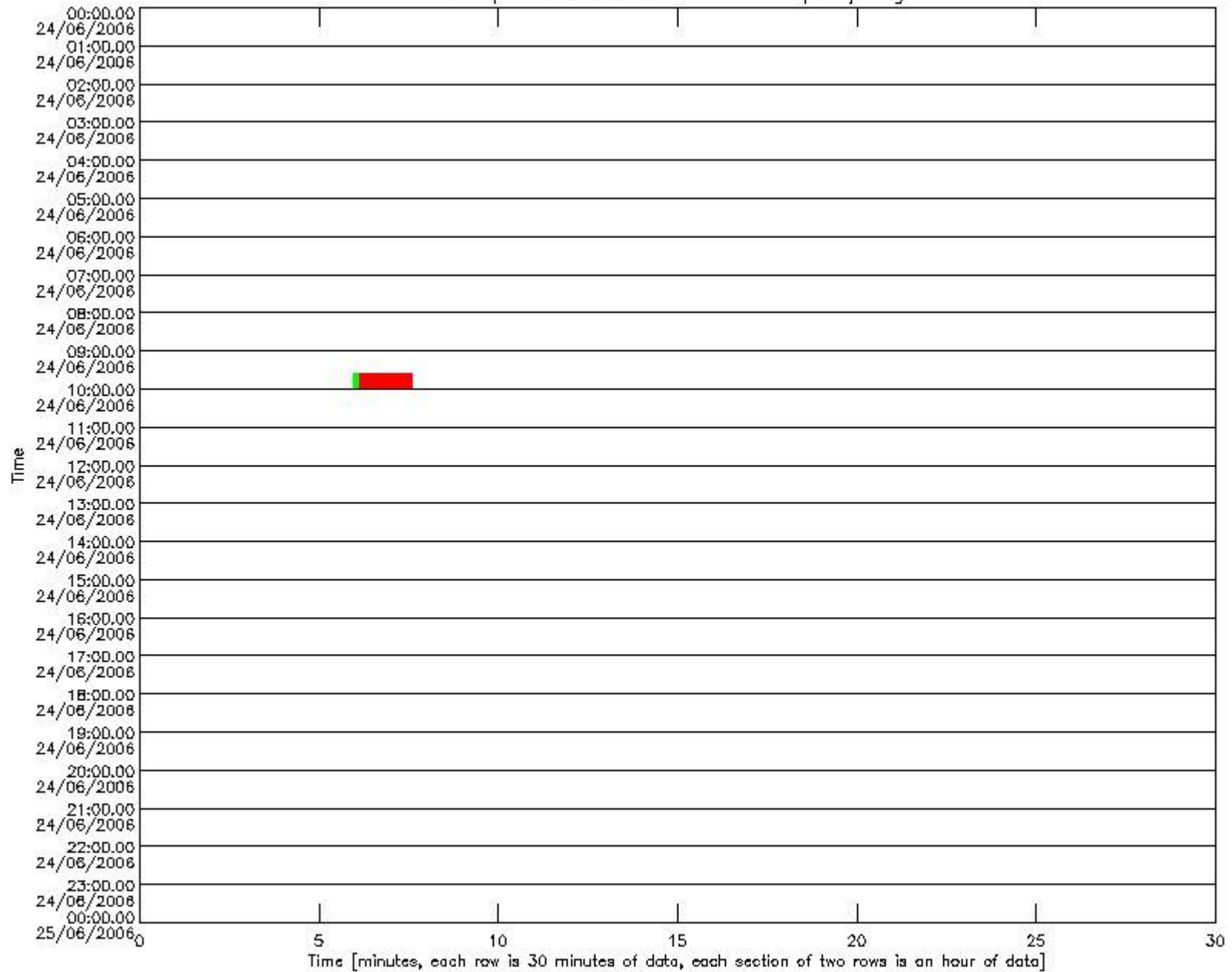




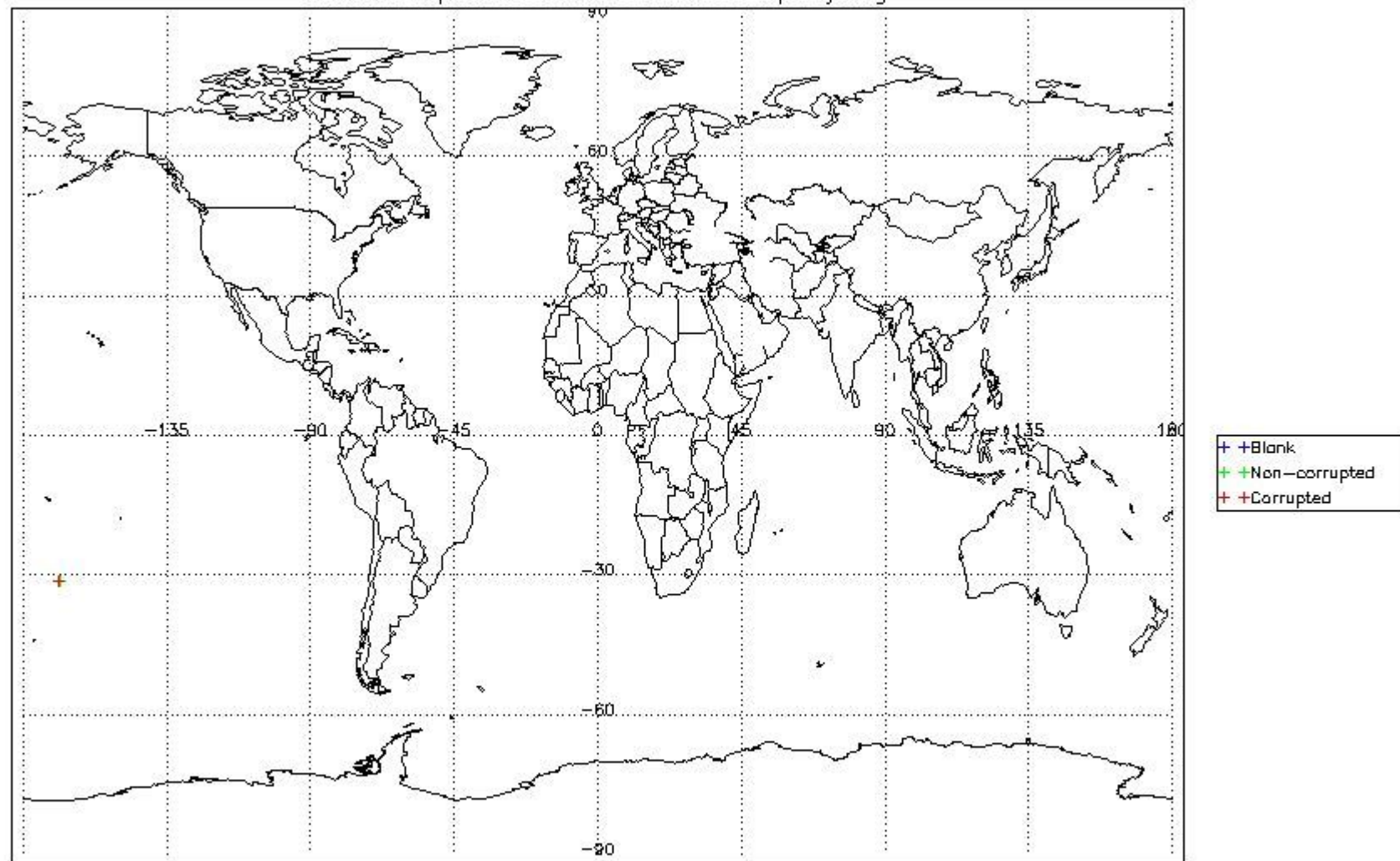
mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_13.PNG

### 1.2.2 Trends and geolocation of MIPAS LEVEL 1 MDS

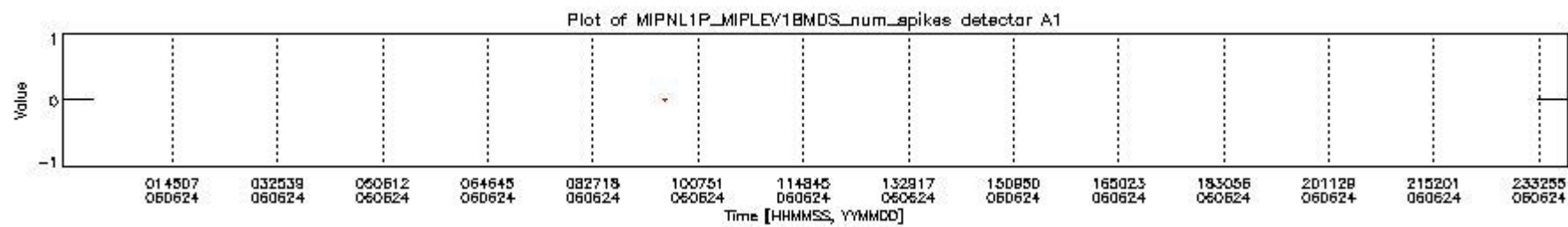
Bar plot of MIPNL1P\_MIPLEV1BMDS\_quality\_flag



Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_quality\_flag

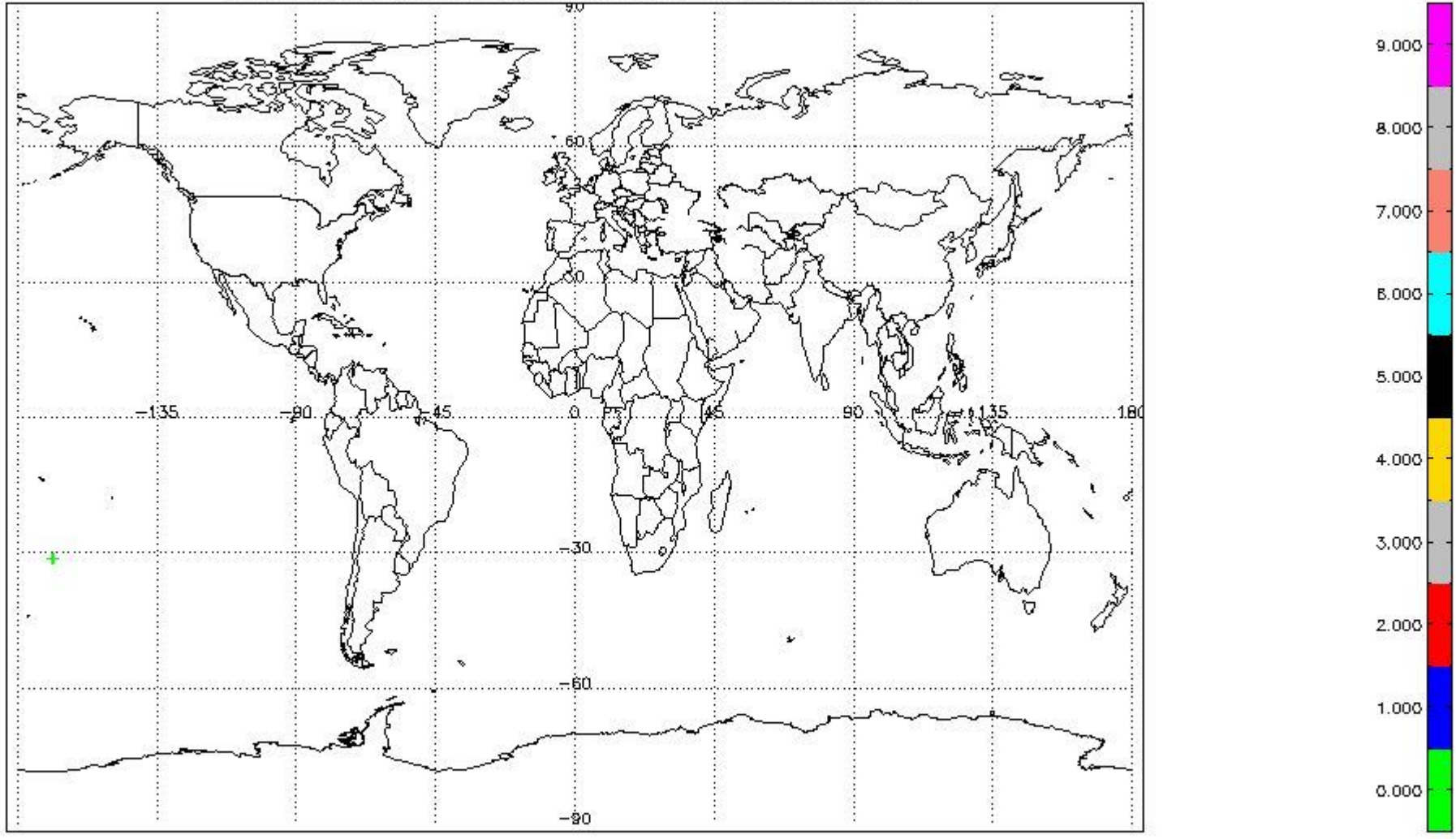


mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_15.PNG

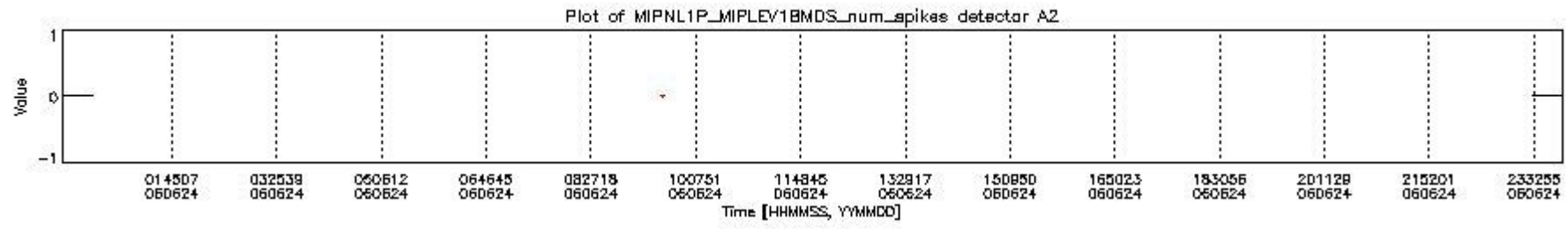


mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_16.PNG

Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector A1



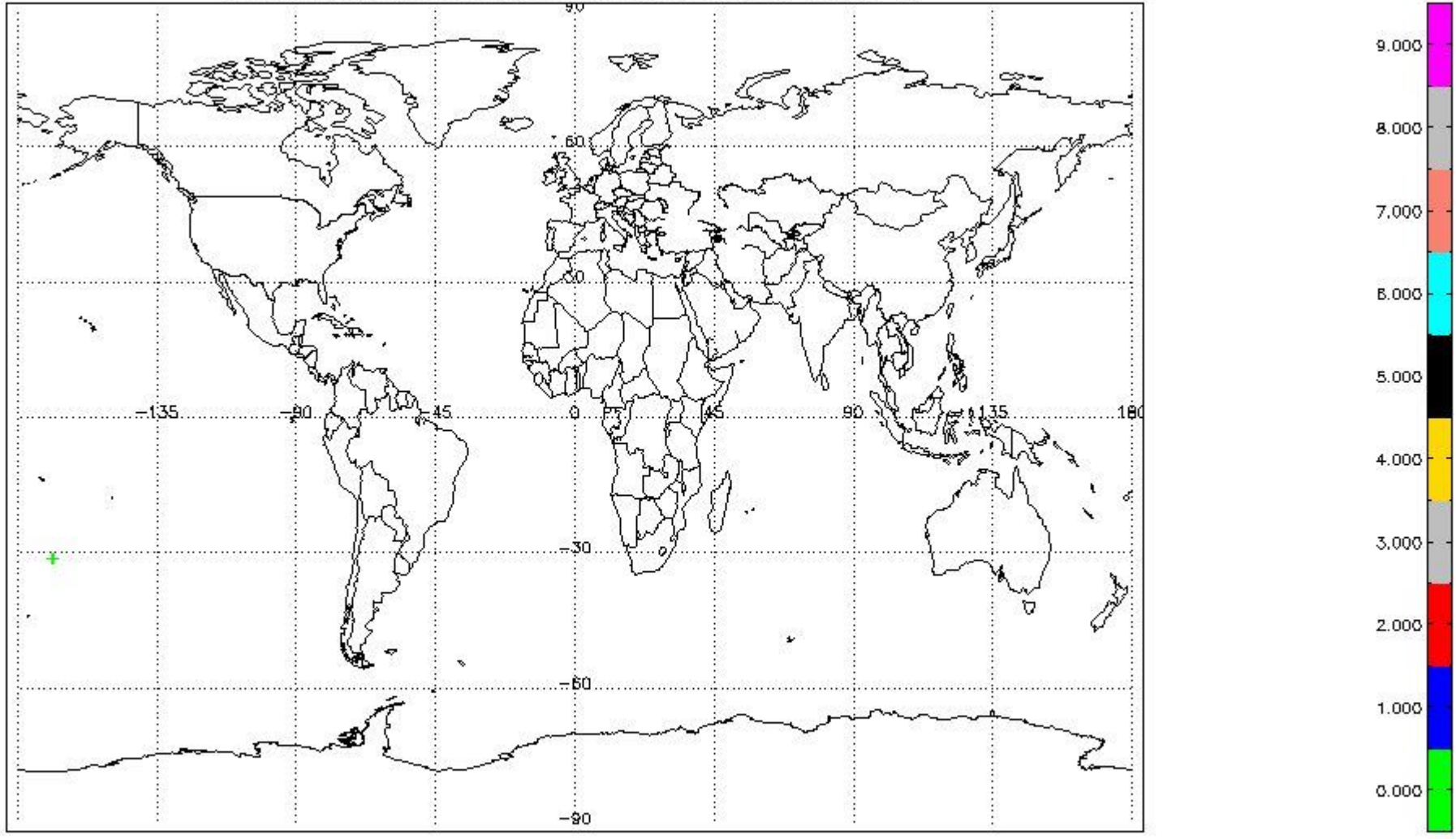
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_17.PNG



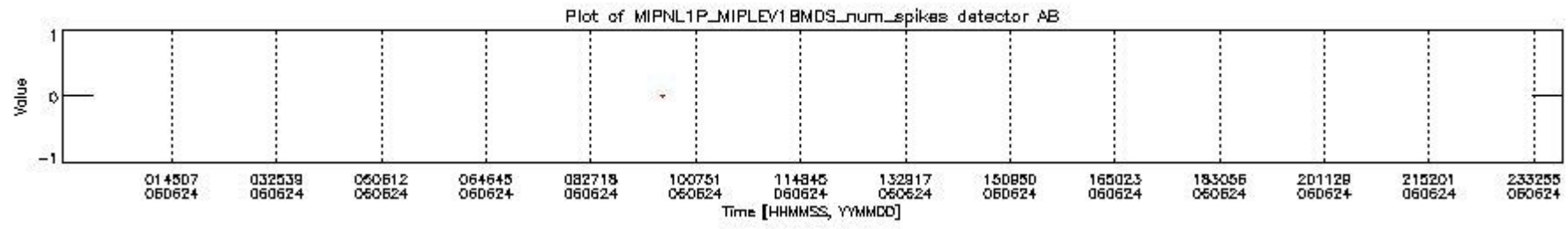
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_18.PNG



Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector A2

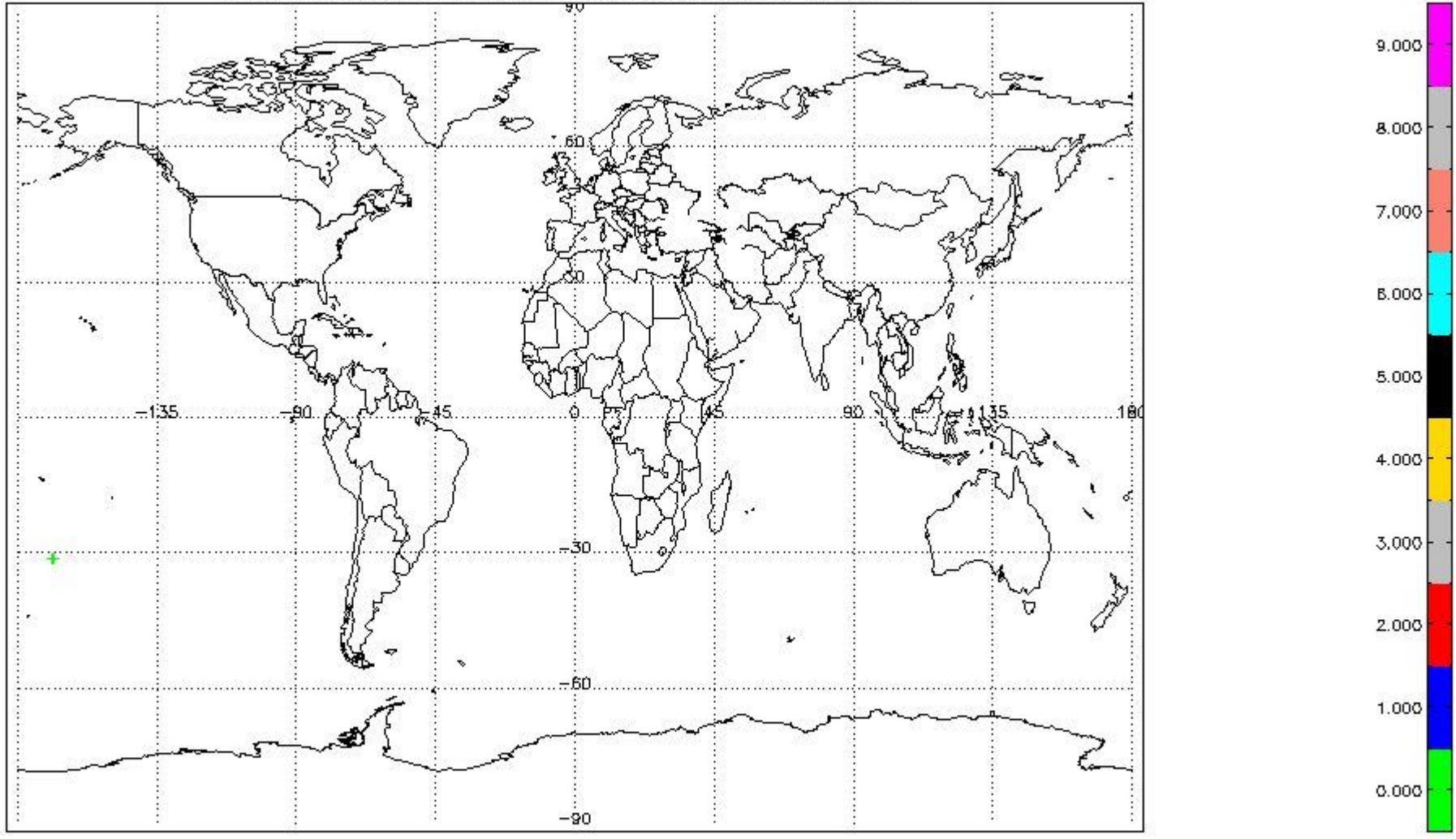


mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_19.PNG

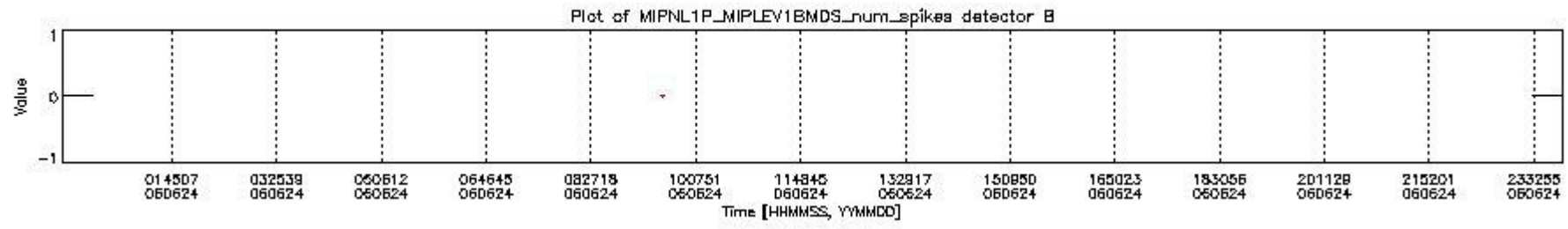


mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_20.PNG

Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector AB

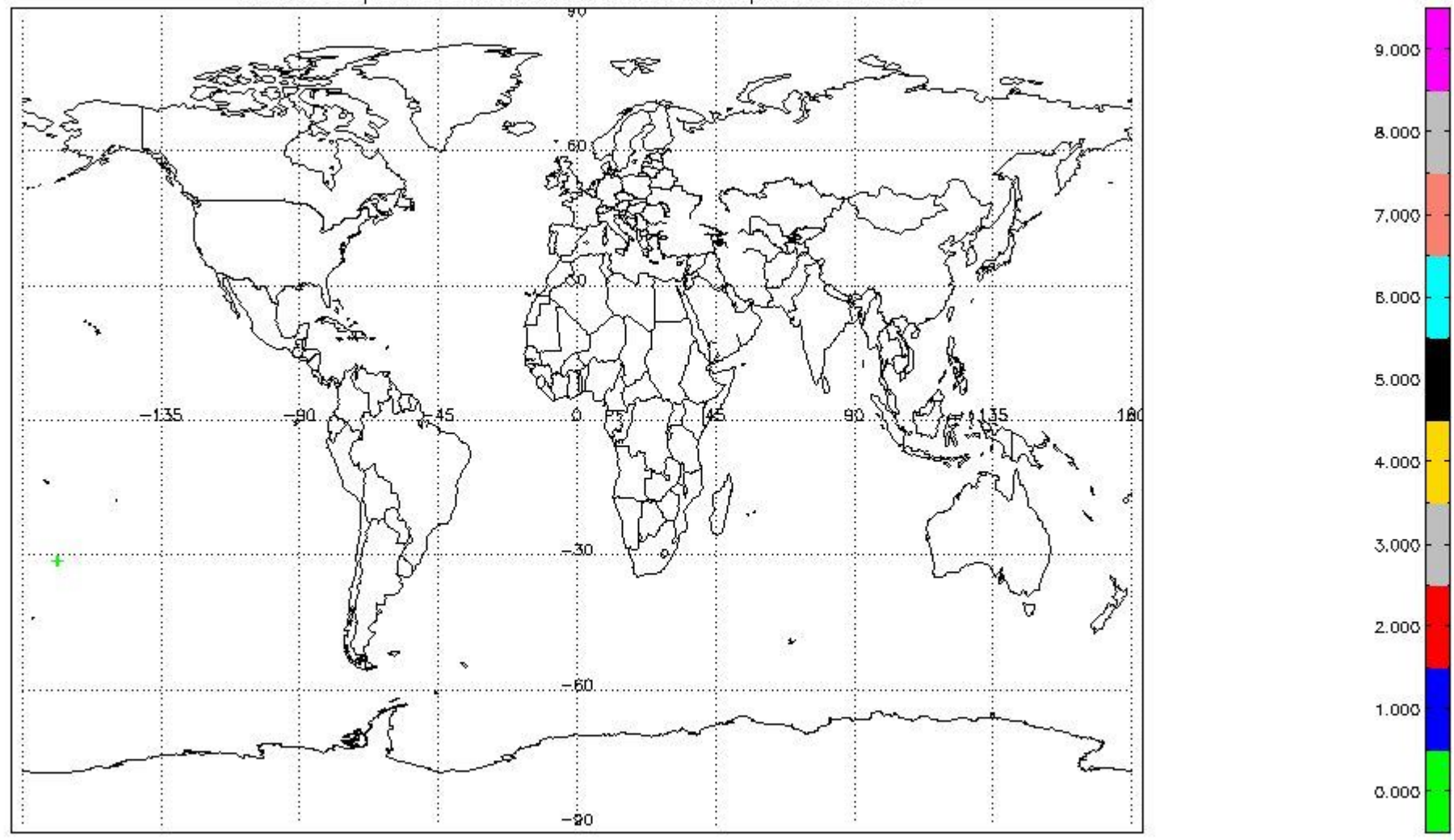


mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_21.PNG



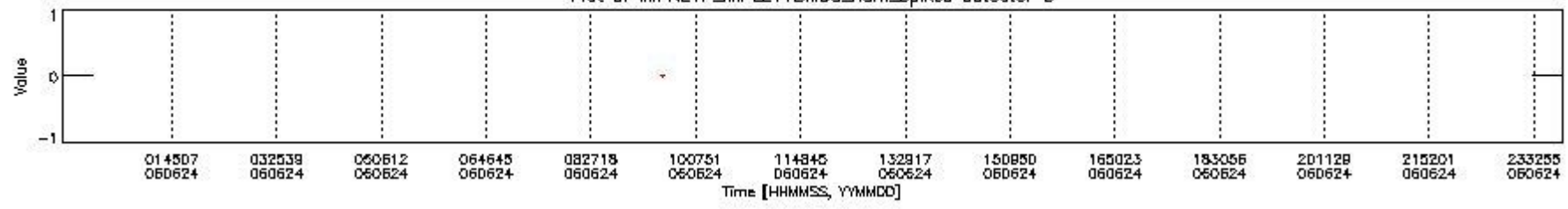
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_22.PNG

Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector B



mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_23.PNG

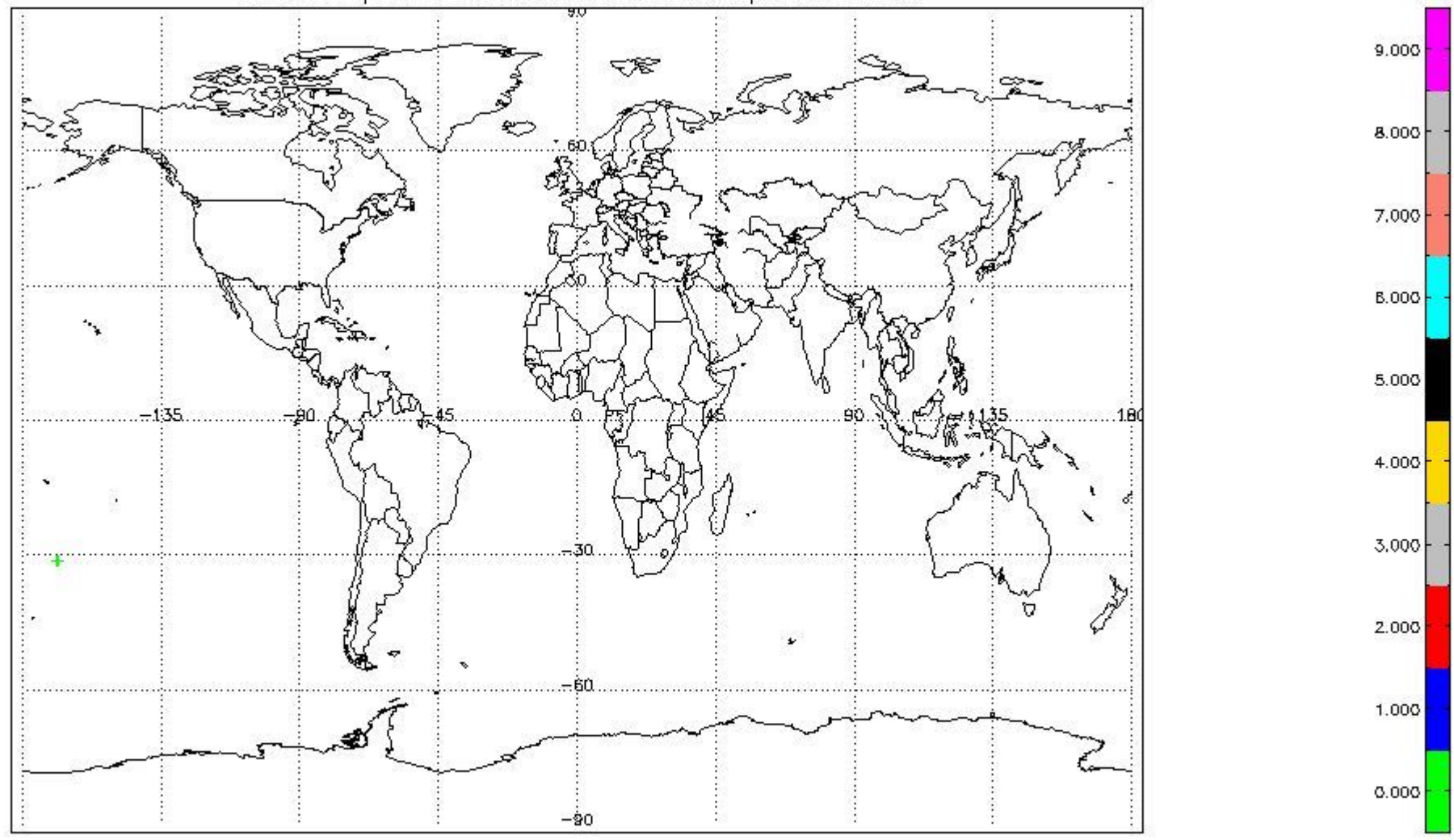
Plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector C



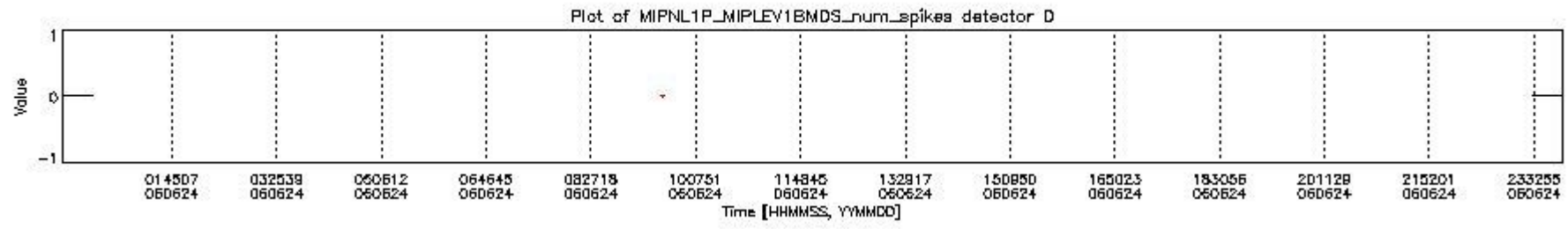
mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_24.PNG



Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector C



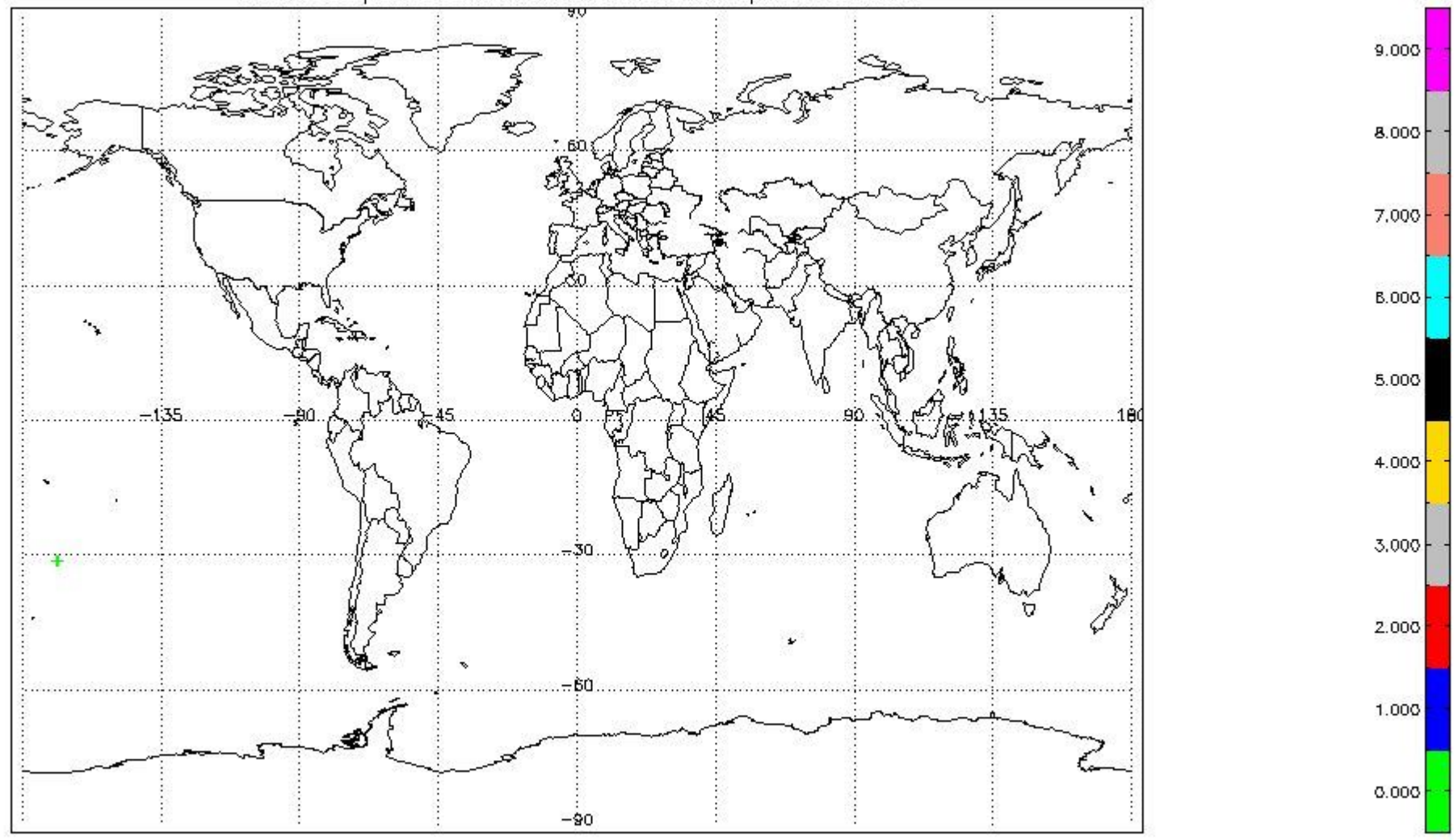
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_25.PNG



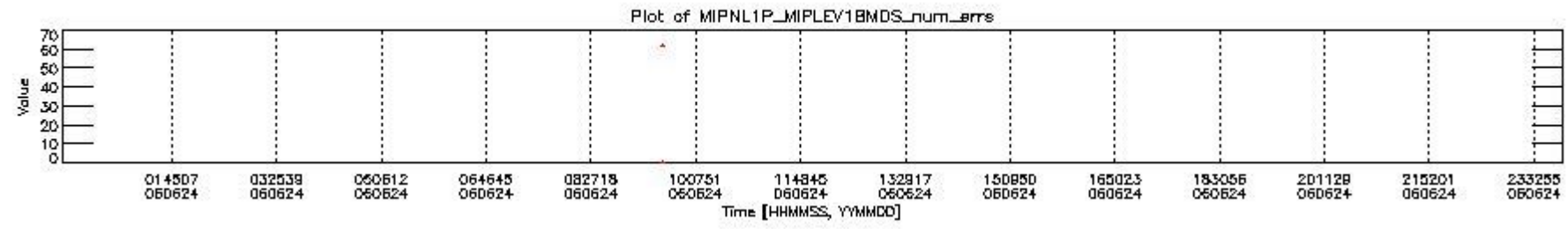
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_26.PNG



Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector D

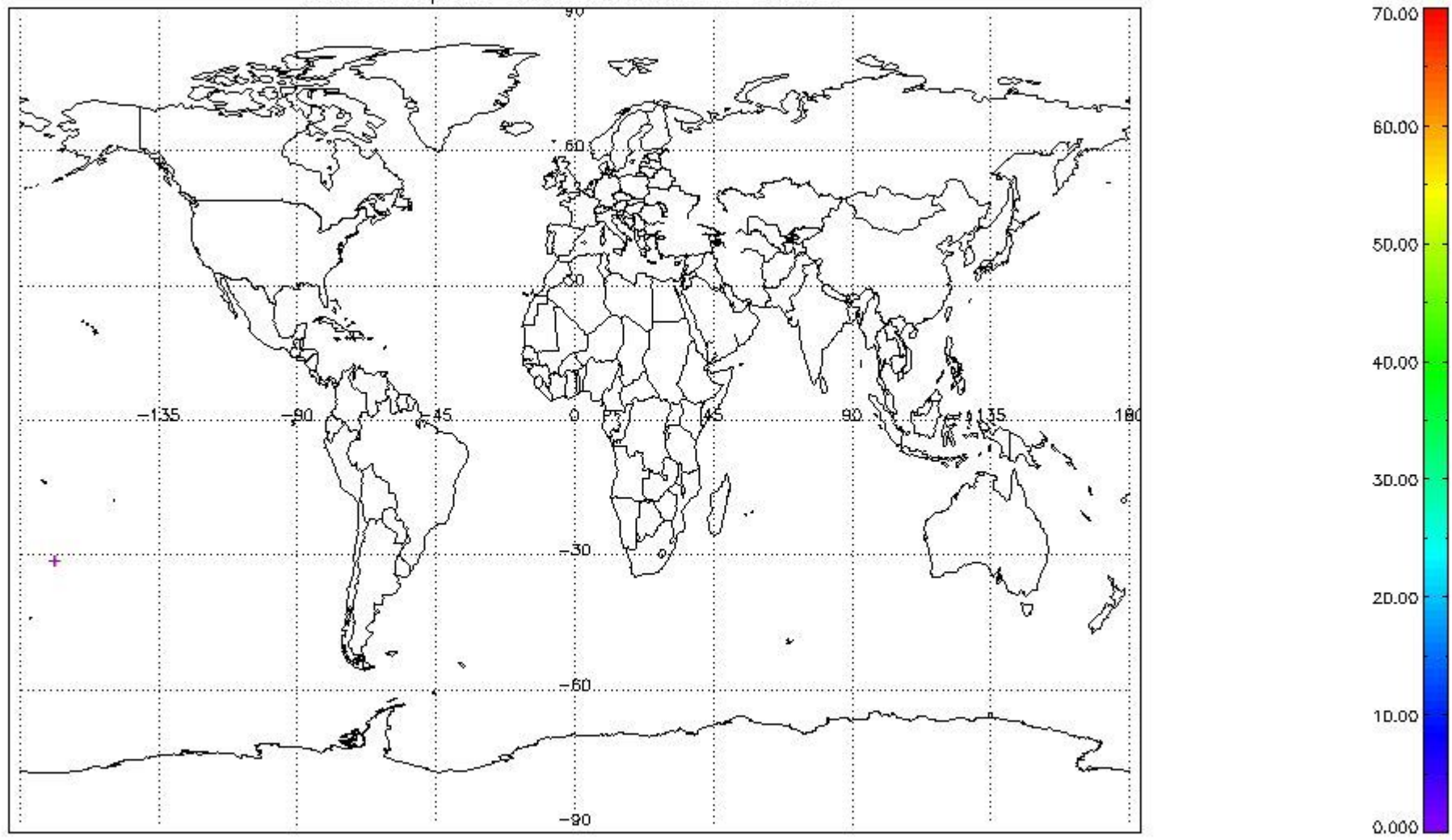


mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_27.PNG

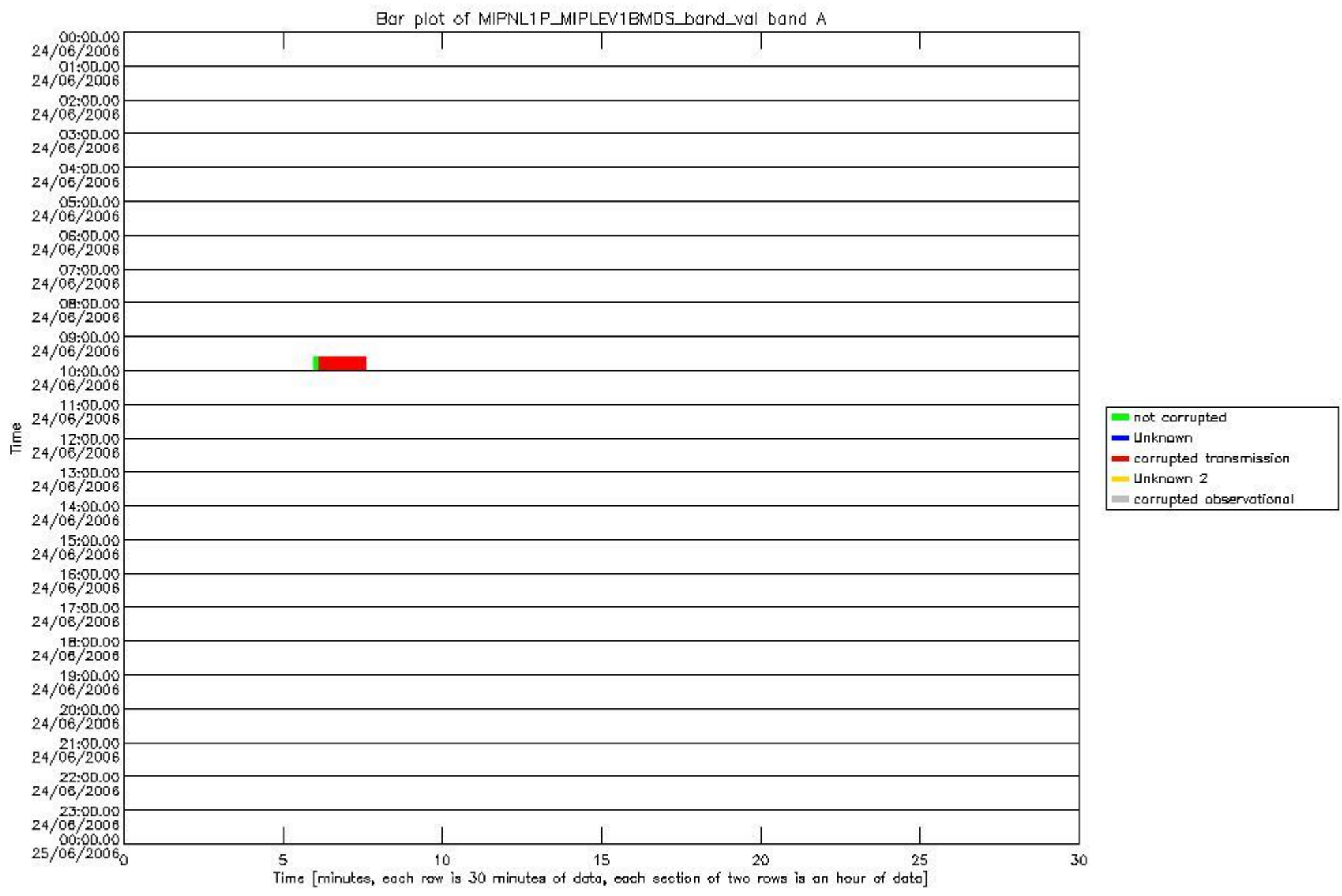


mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_28.PNG

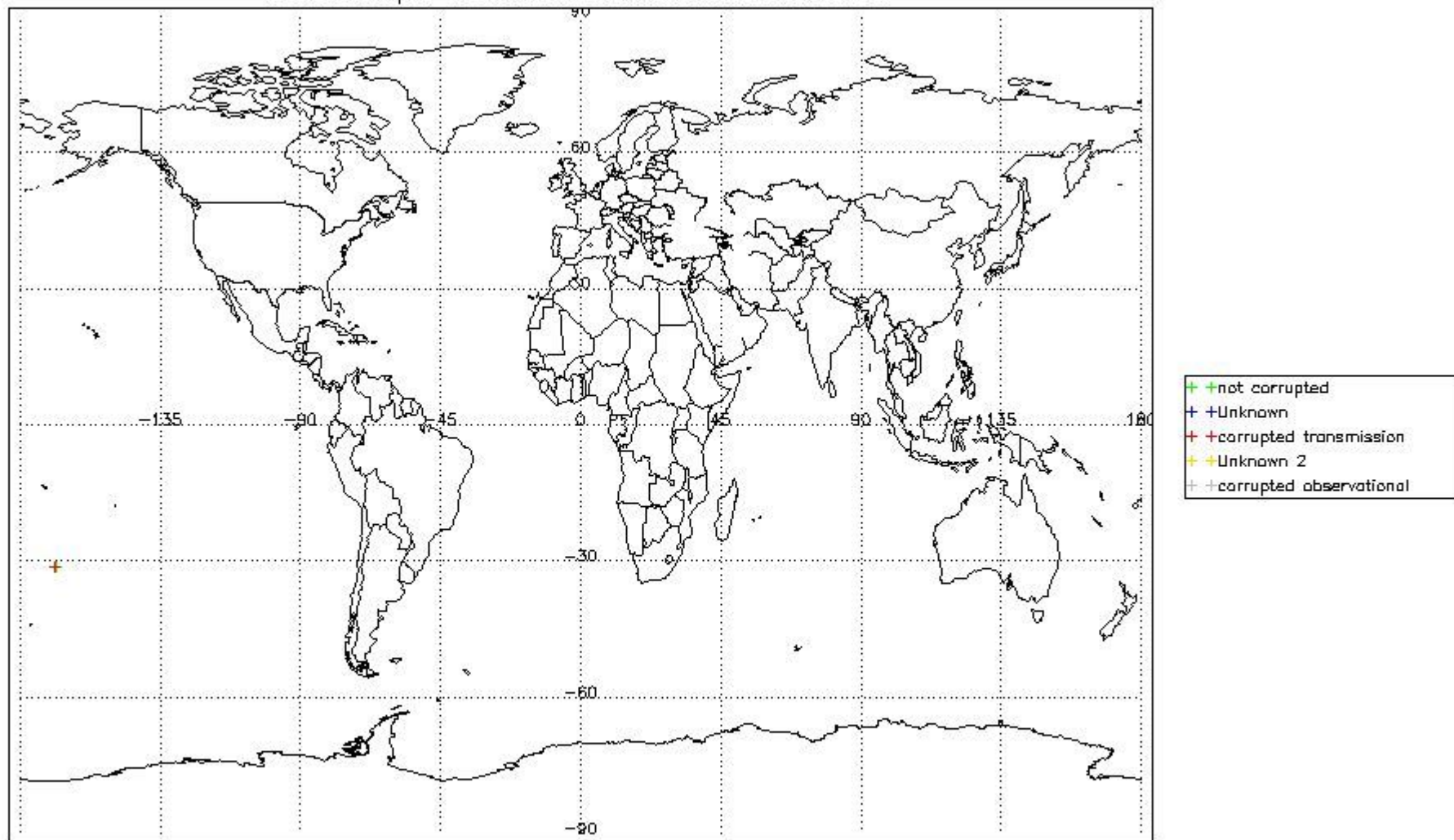
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_errs



mipas\_daily\_report\_level1\_OFI\_MIPAS\_4\_65\_P\_20060624\_29.PNG

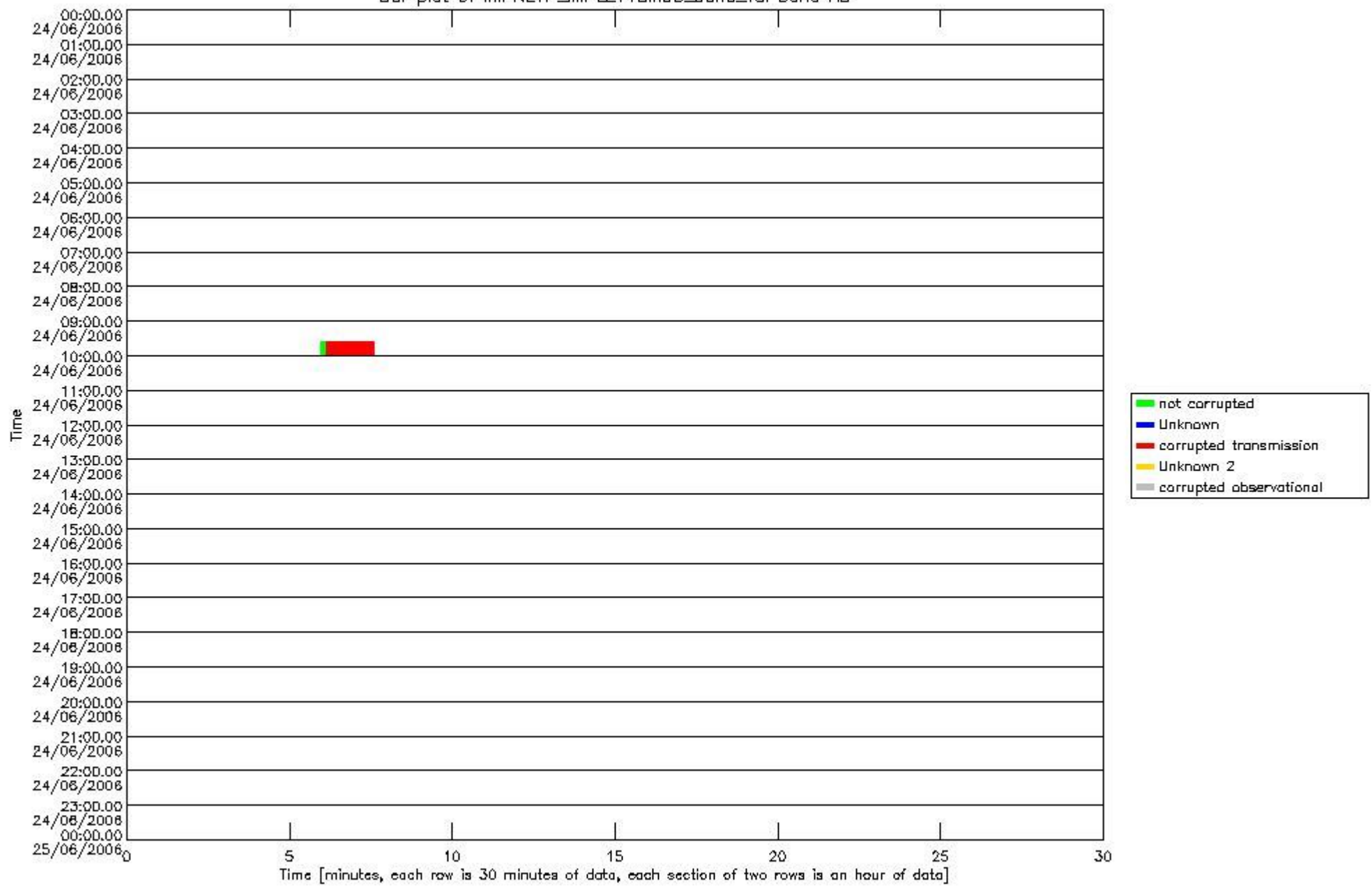


Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band A

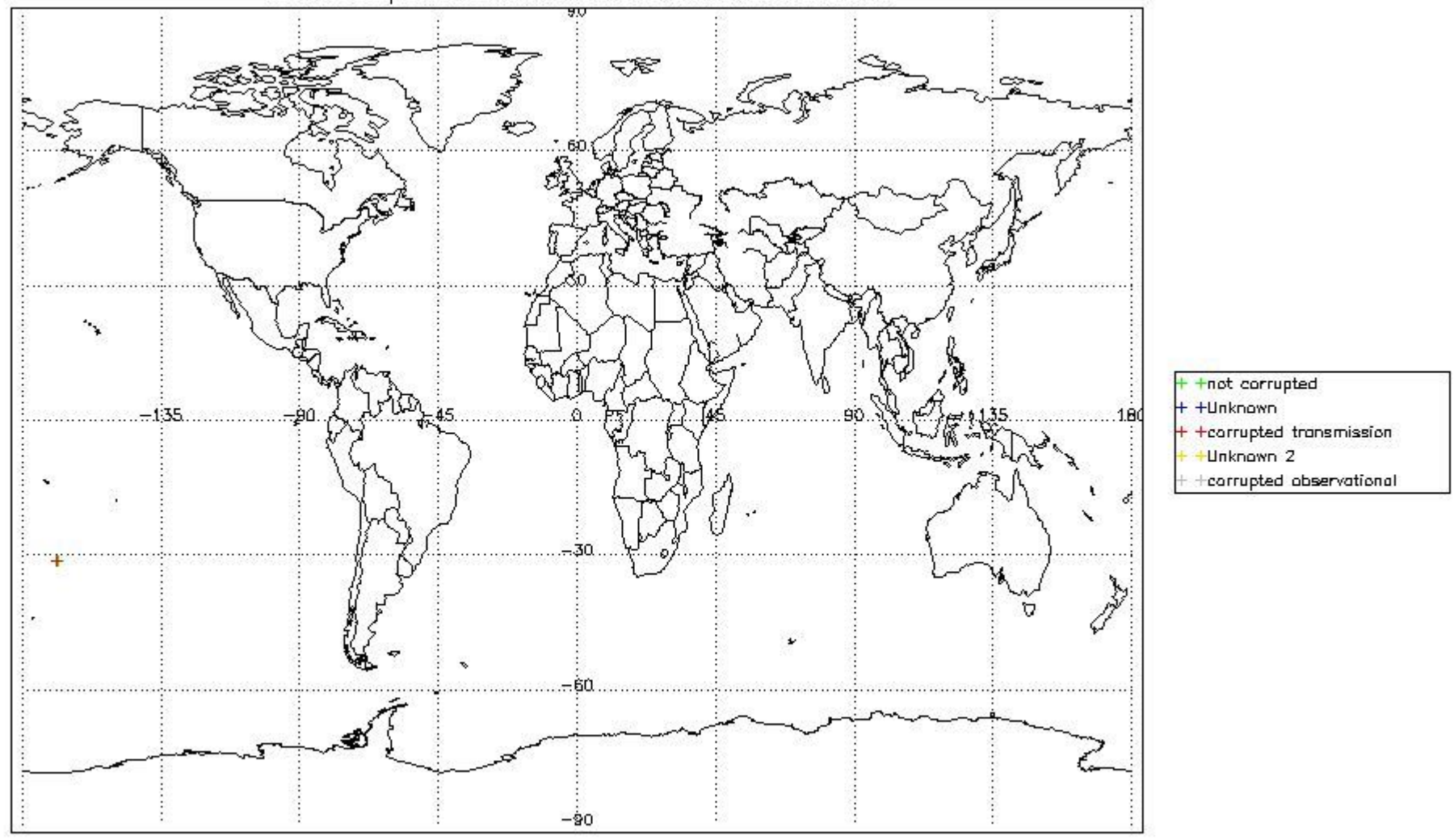


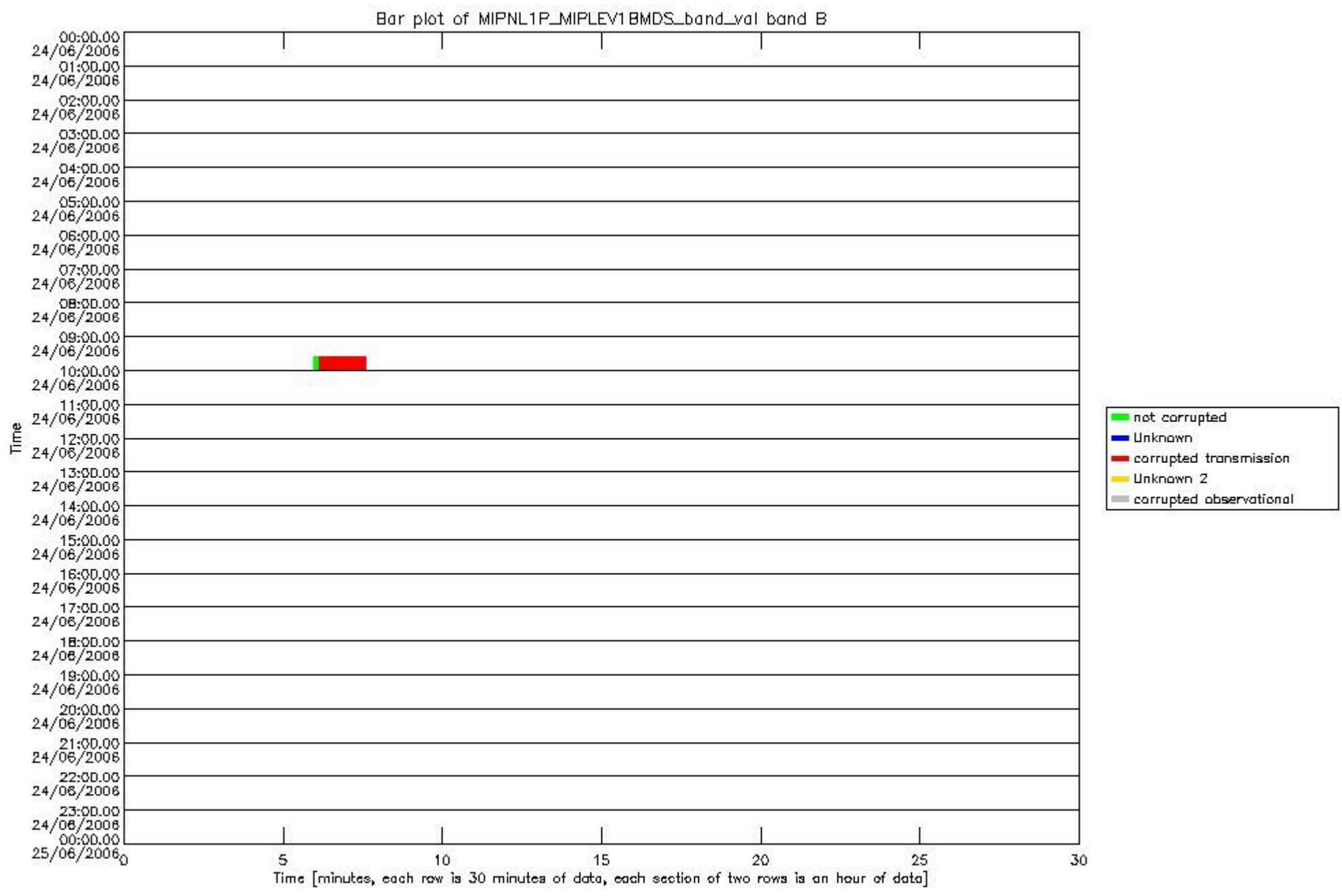


Bar plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band AB

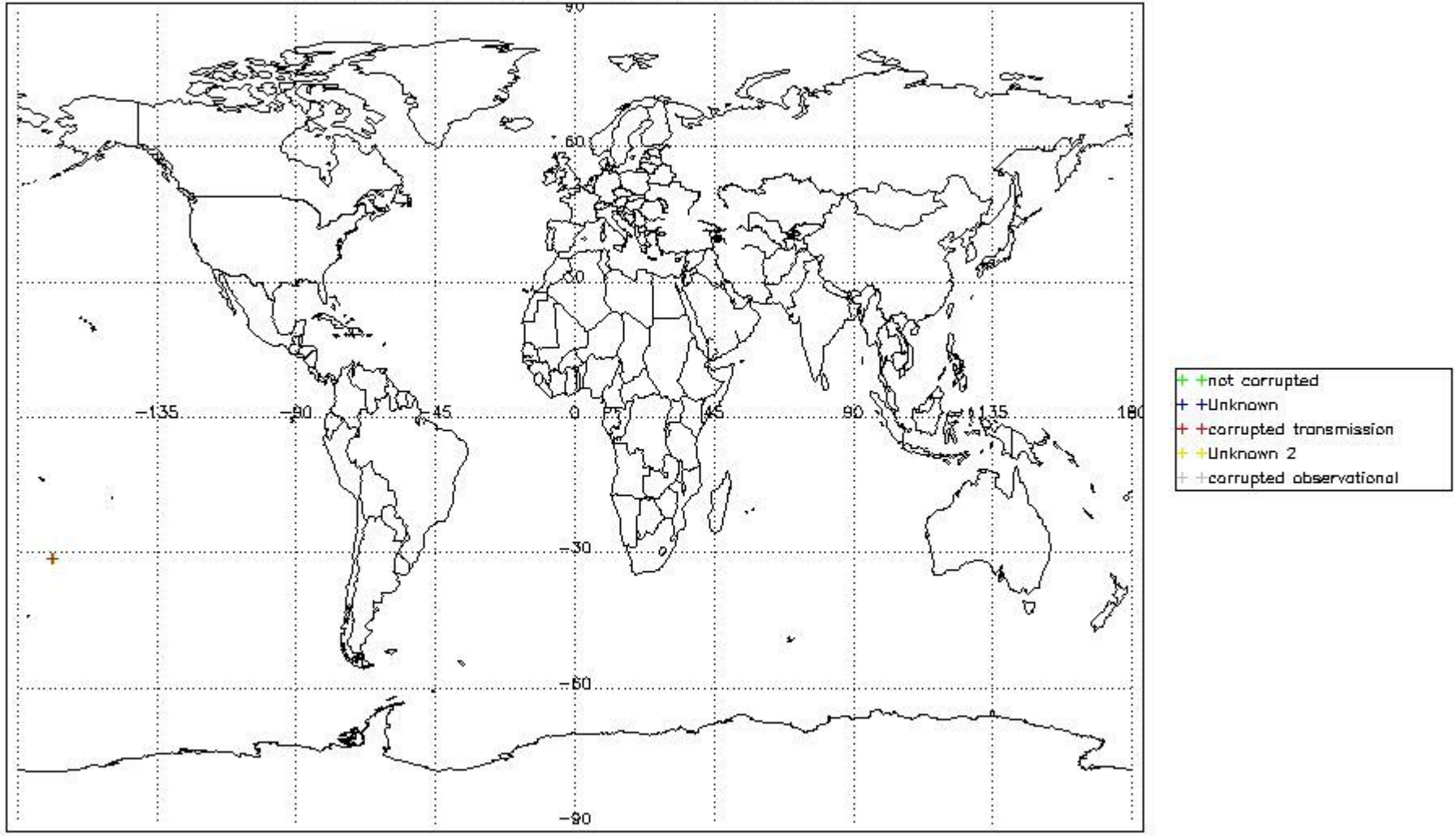


Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band AB

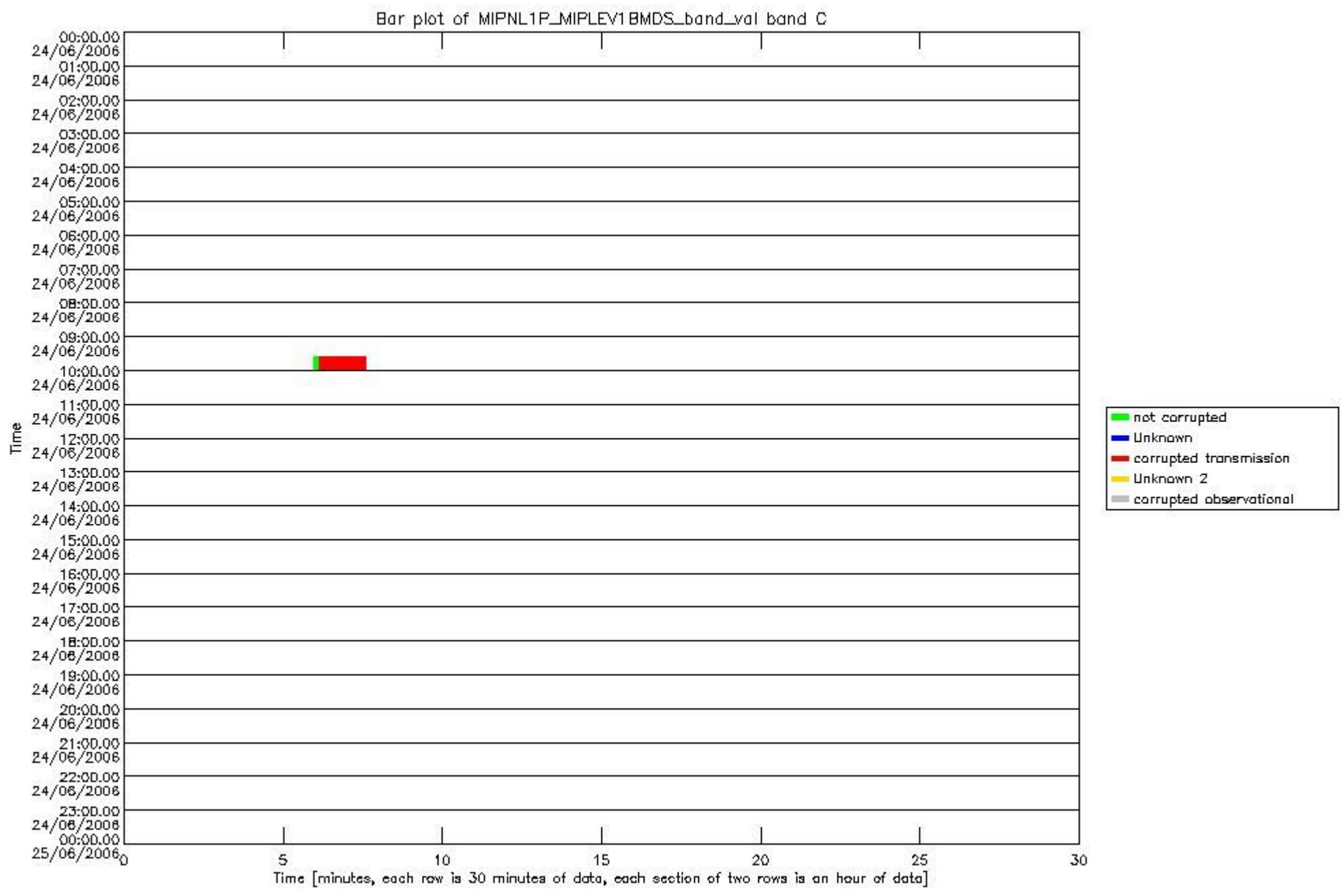




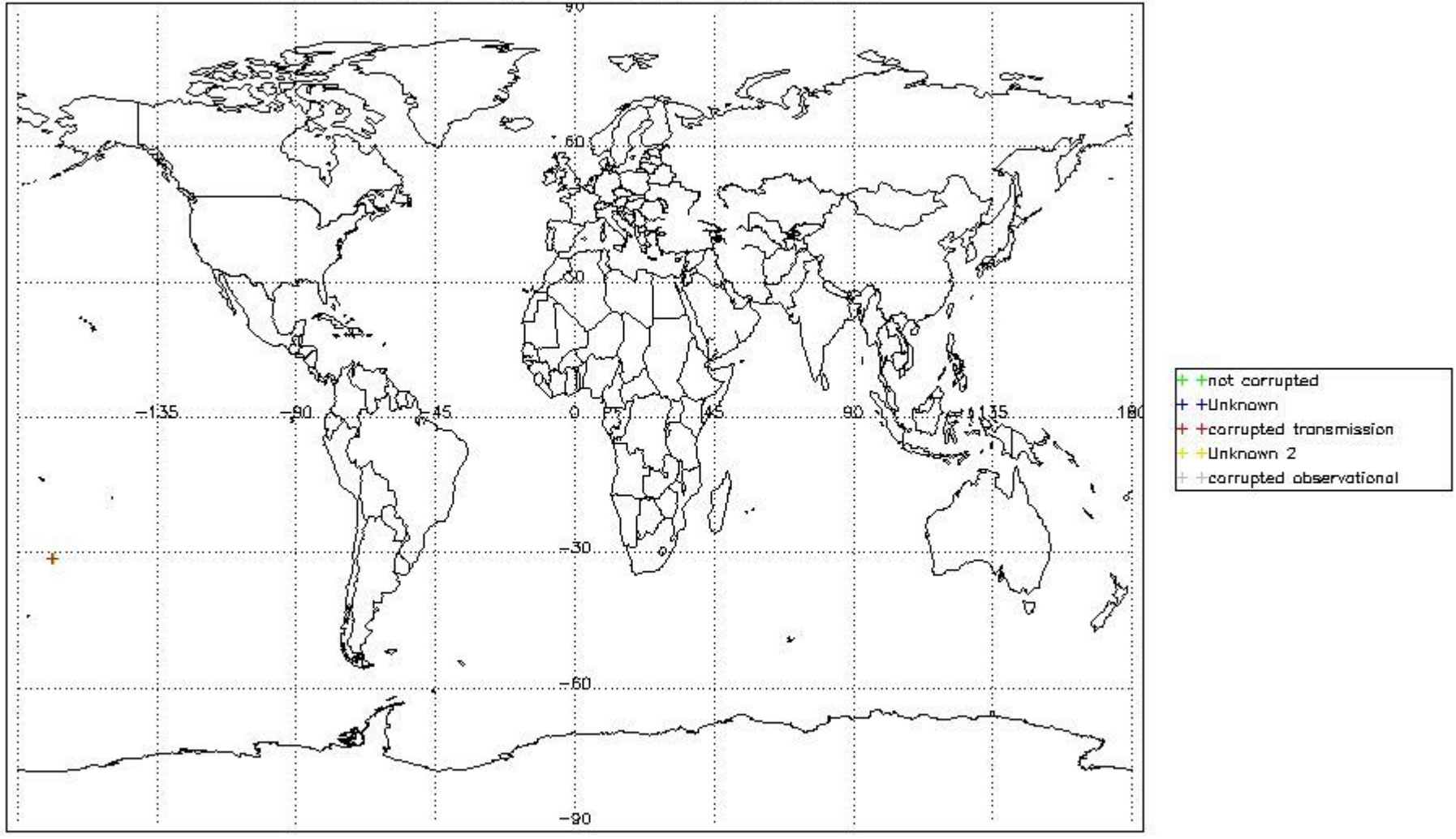
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band B

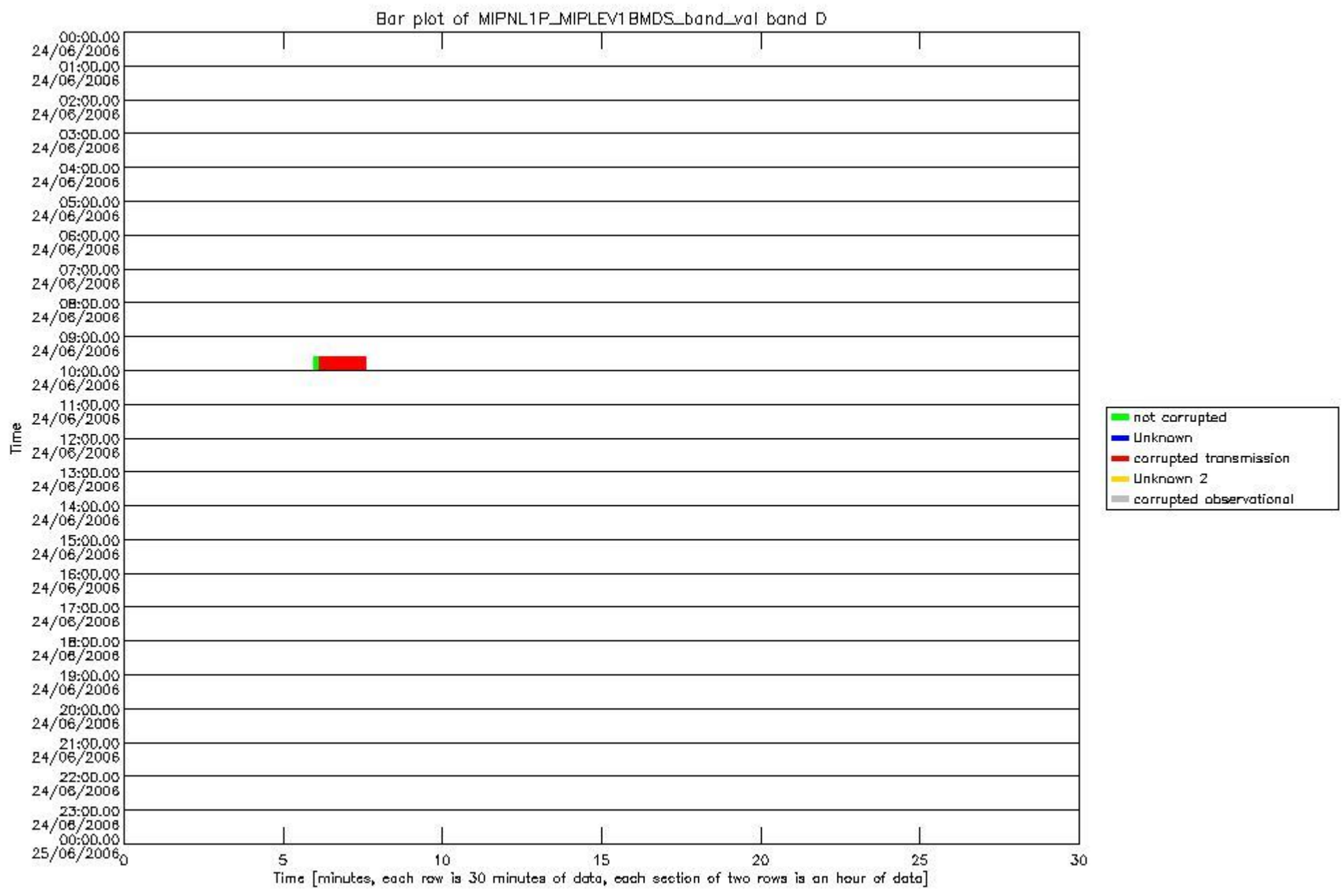




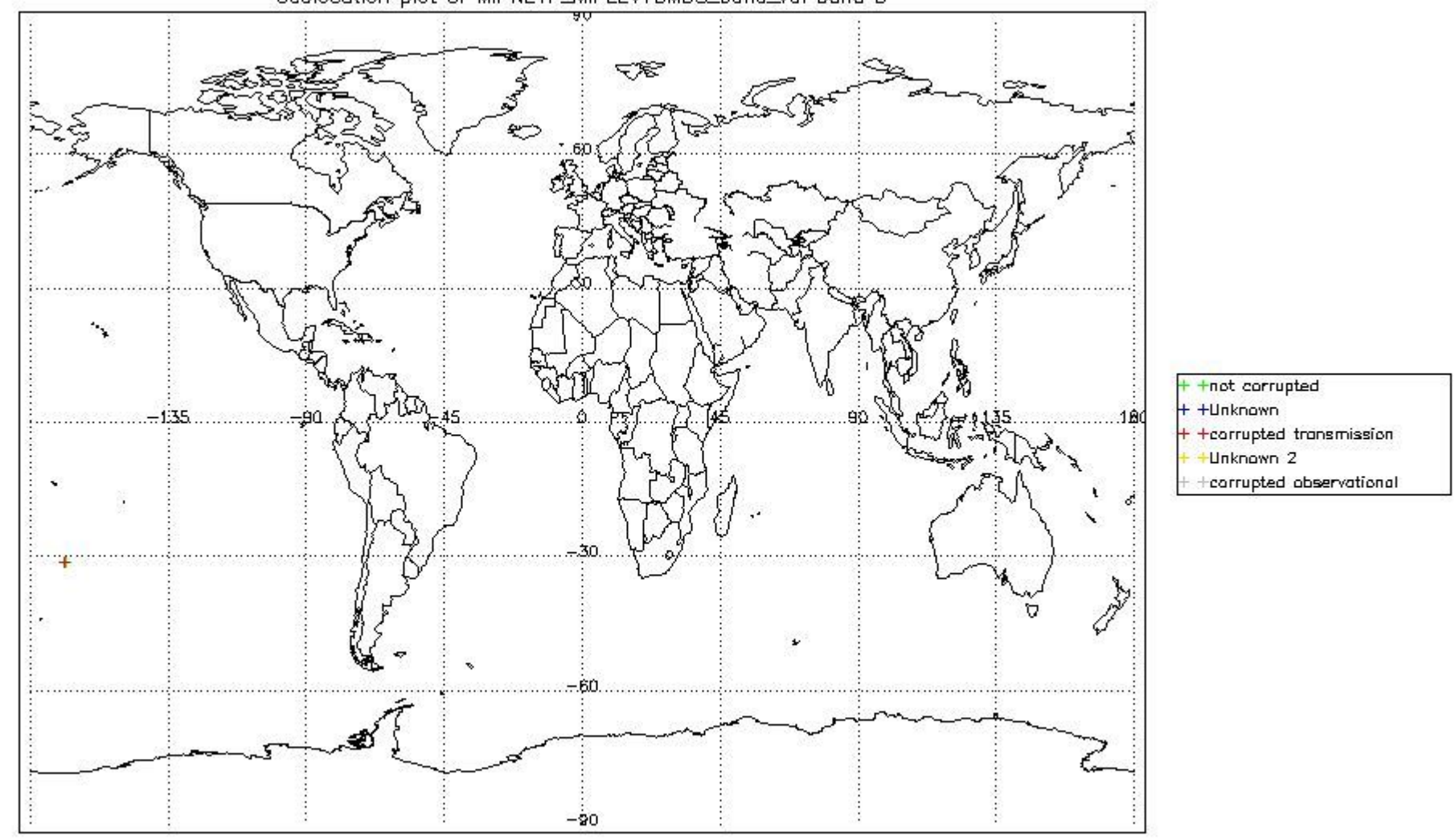


Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band C



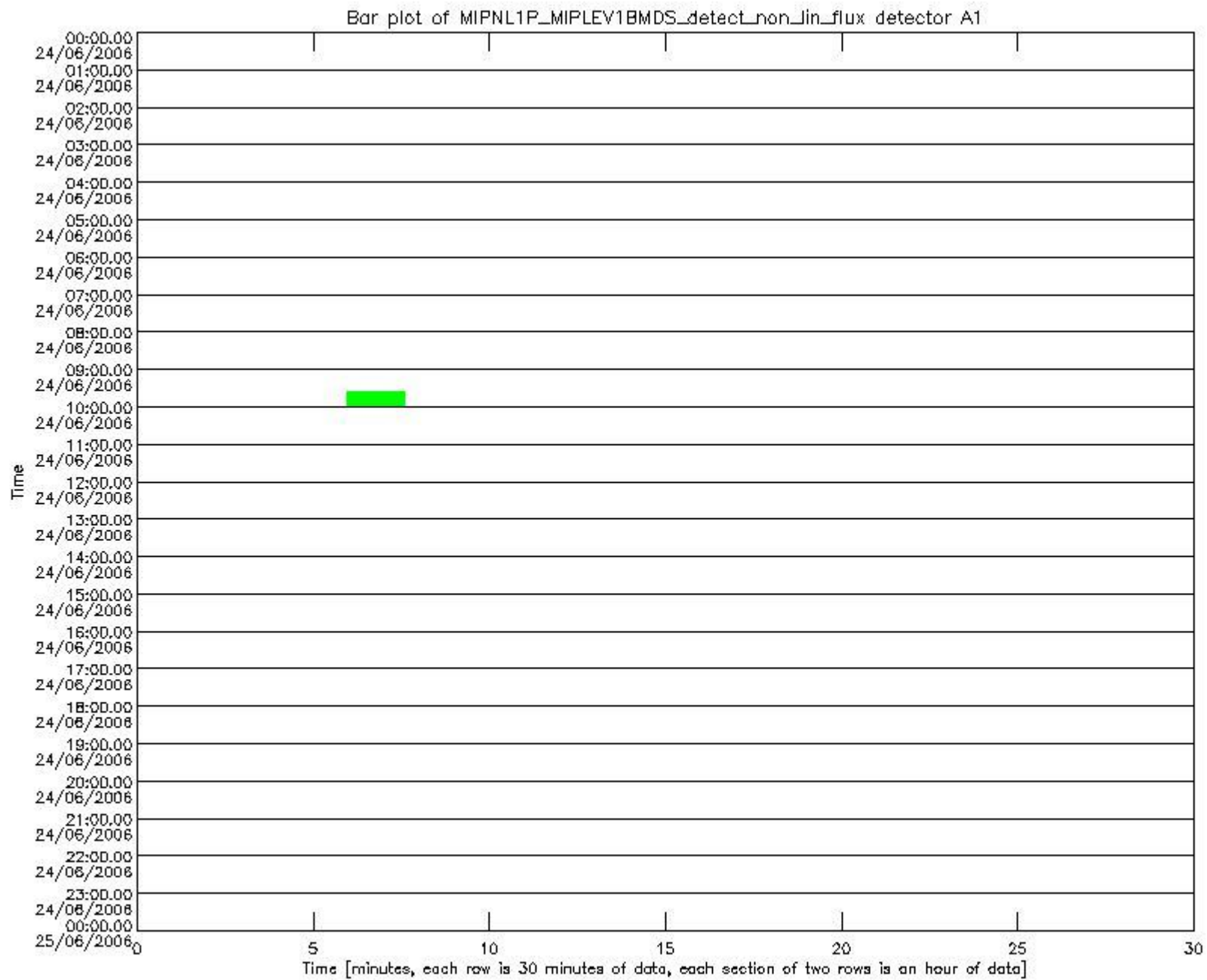


Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band D

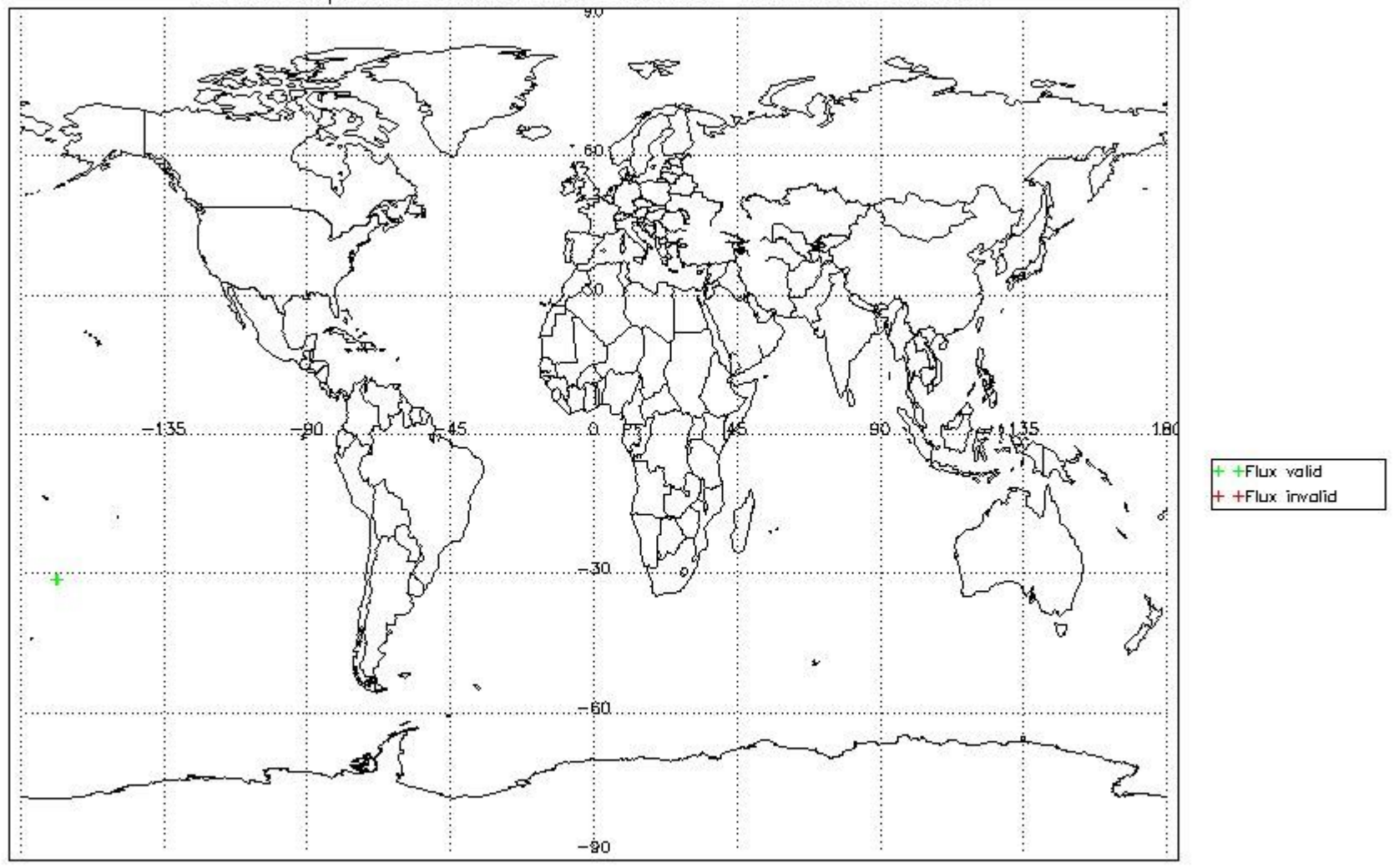


mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_39.PNG



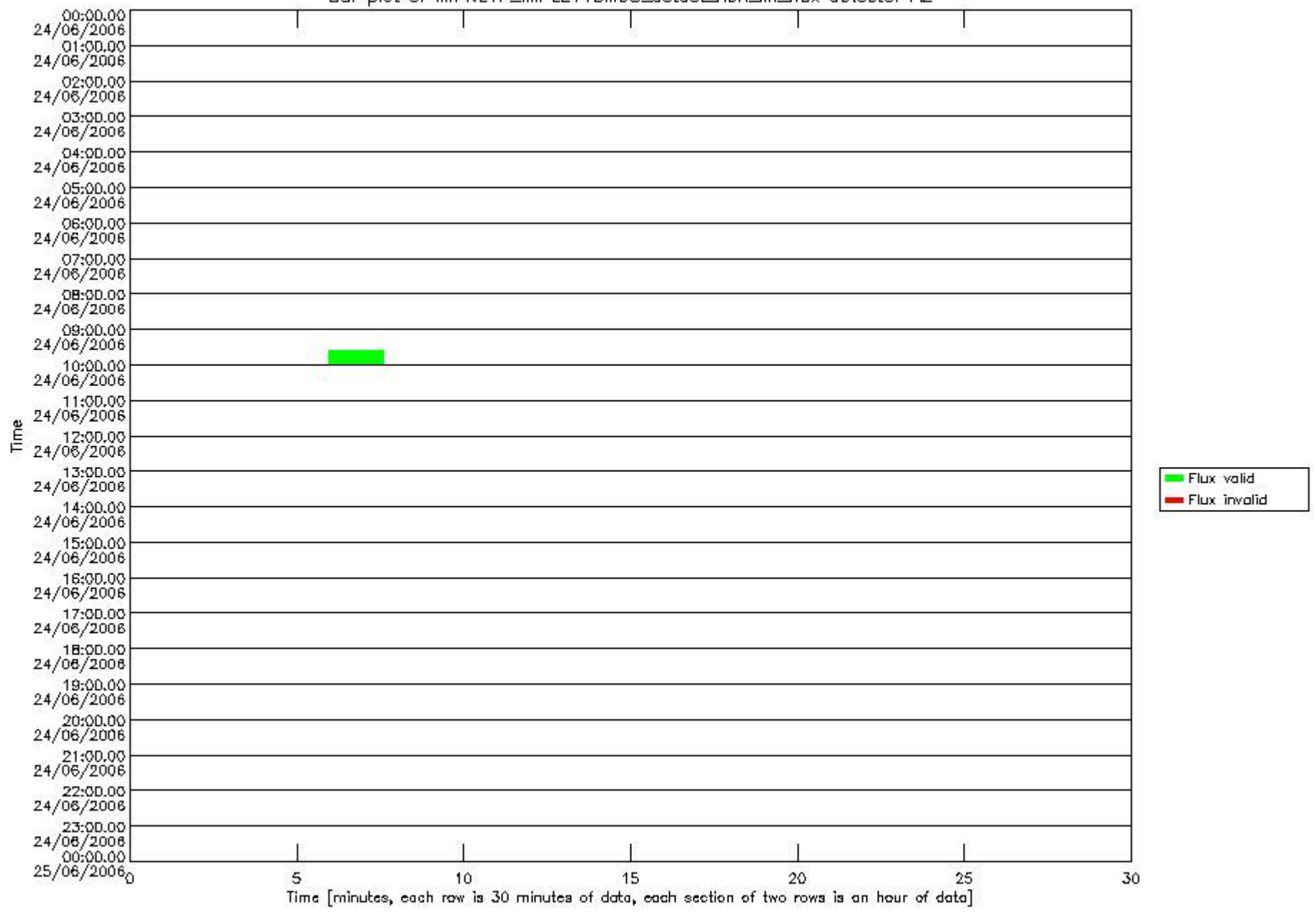


Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_in\_flux detector A1

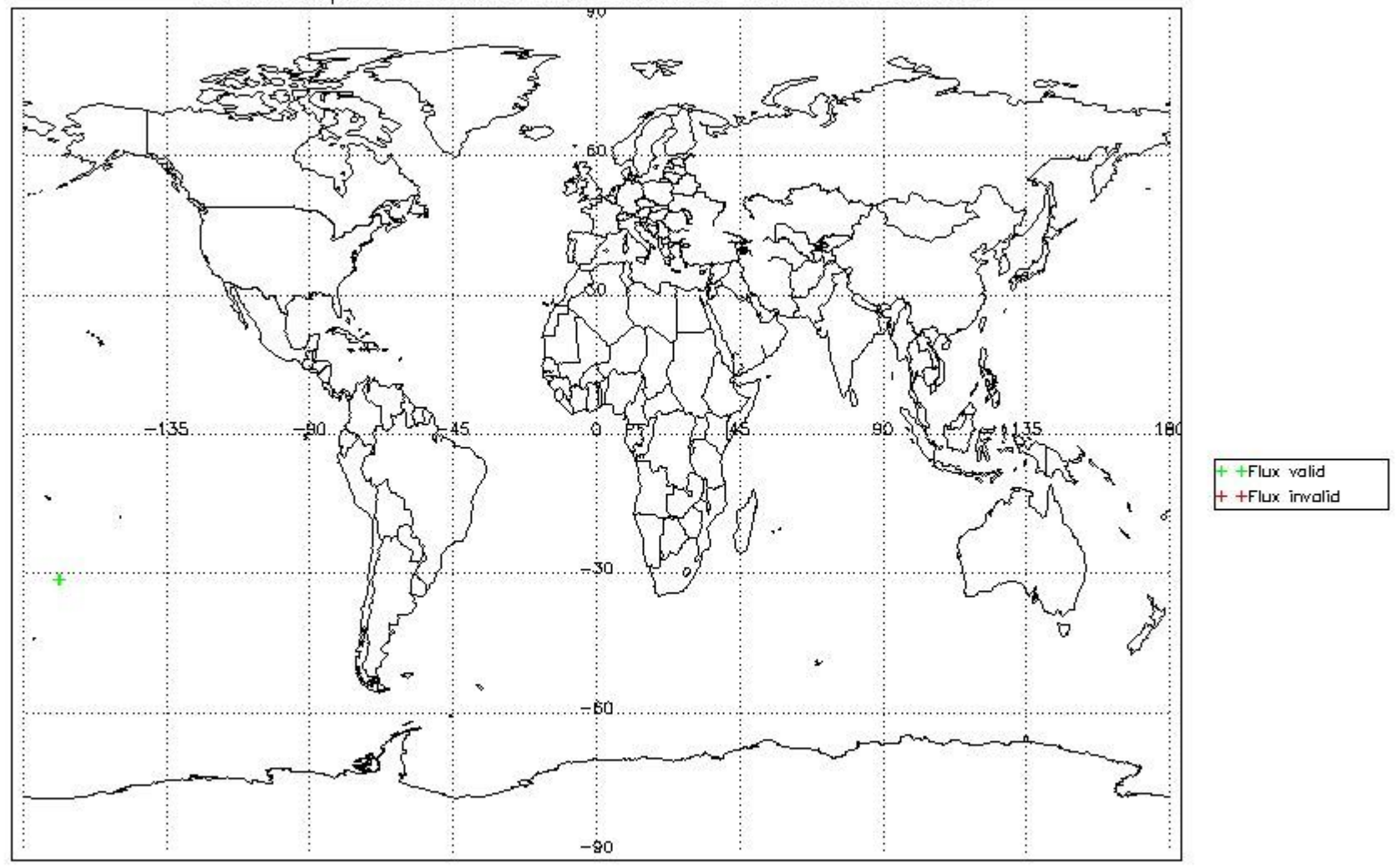


mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_41.PNG

Bar plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_in\_flux detector A2



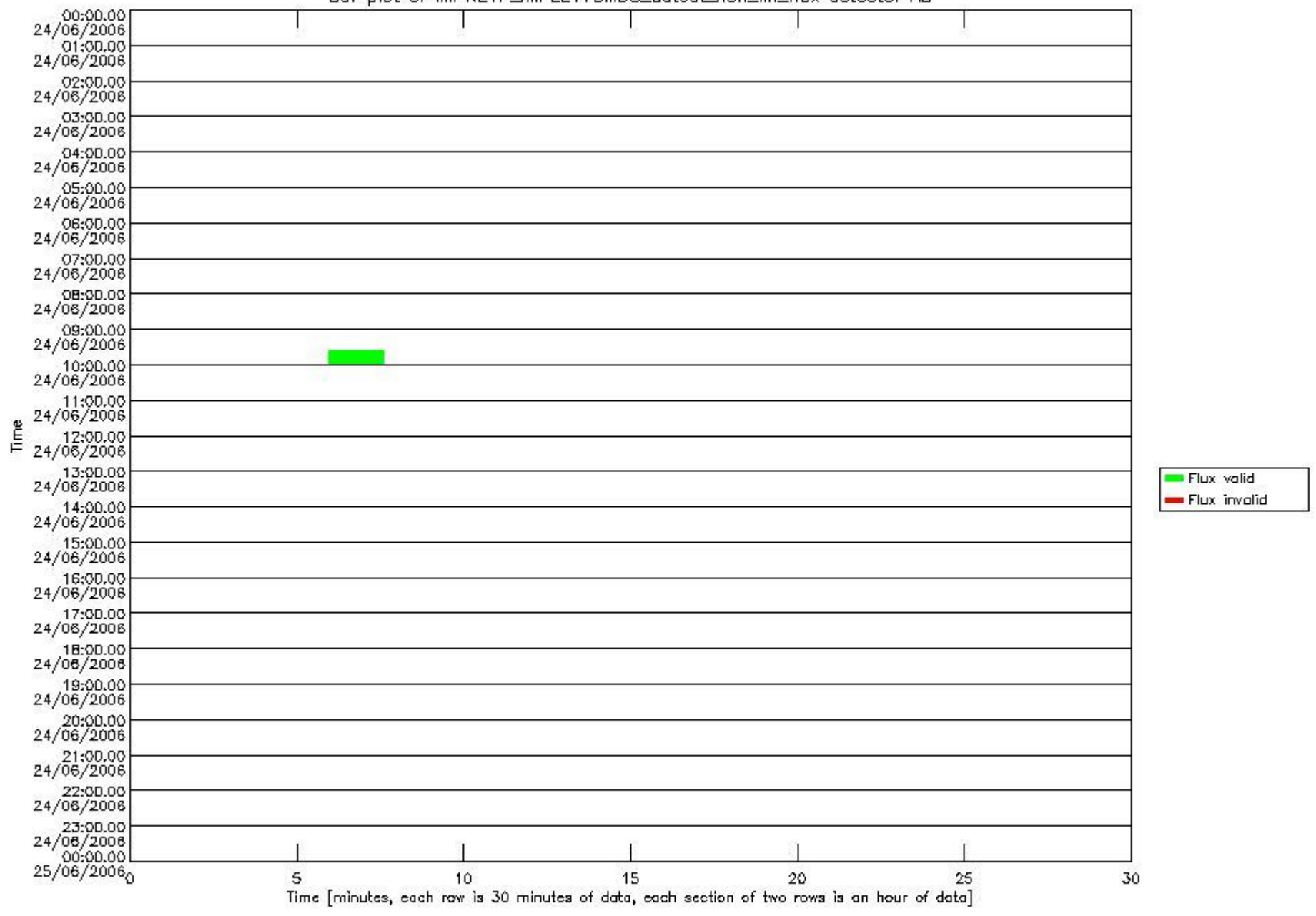
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_in\_flux detector A2



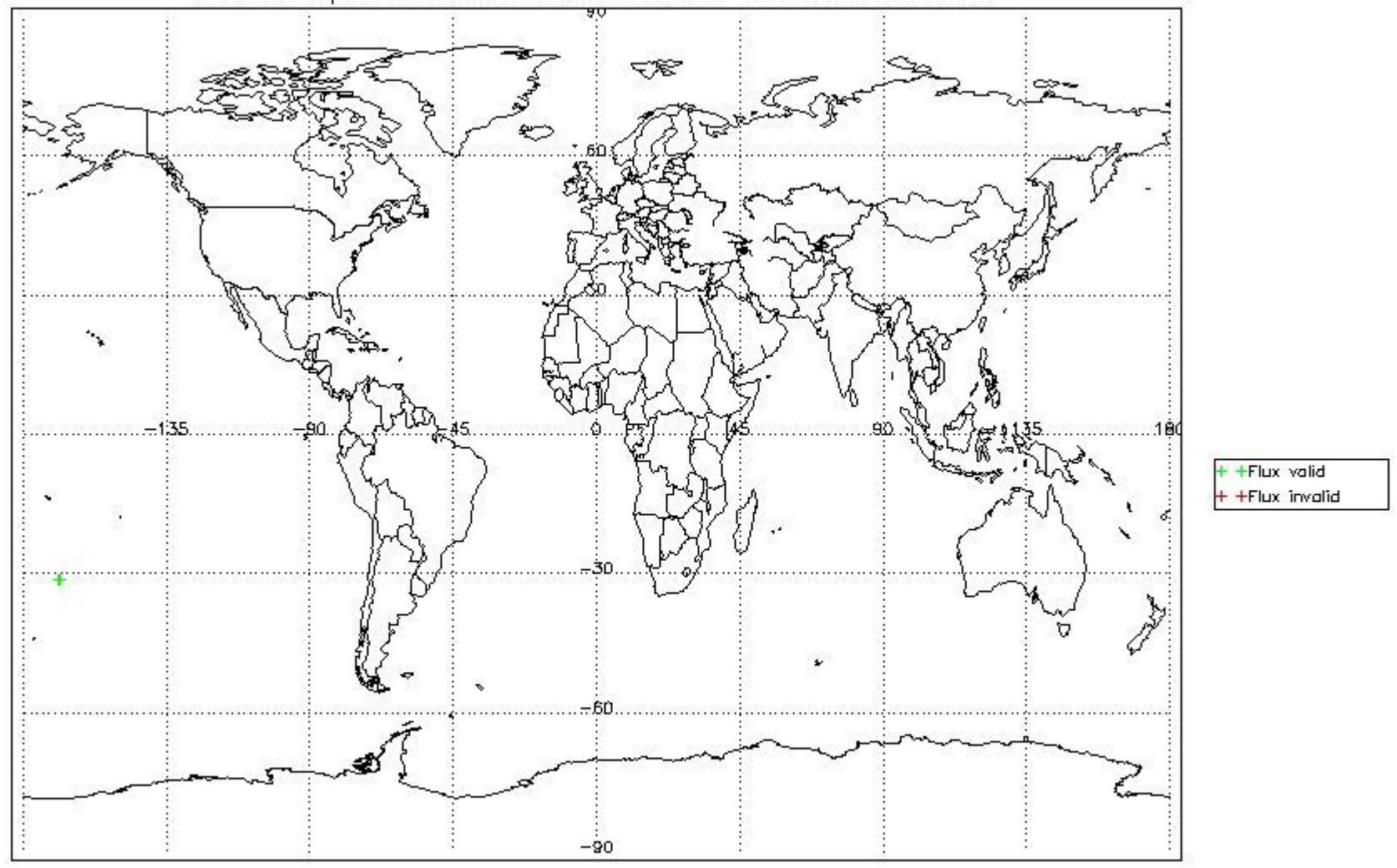
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_43.PNG



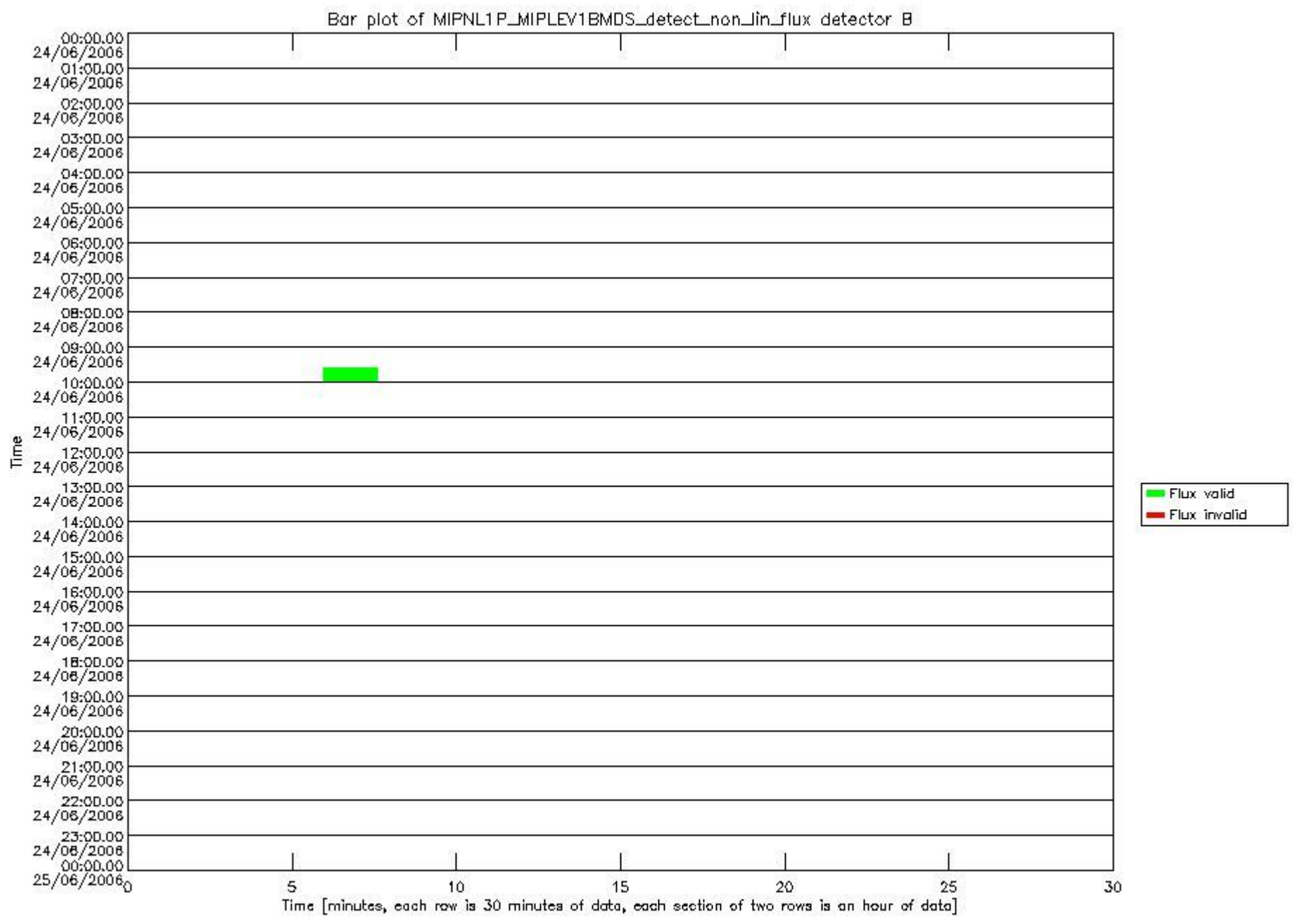
Bar plot of MIPNL1P\_MIPLEV1 BMDS\_detect\_non\_lin\_flux detector AB



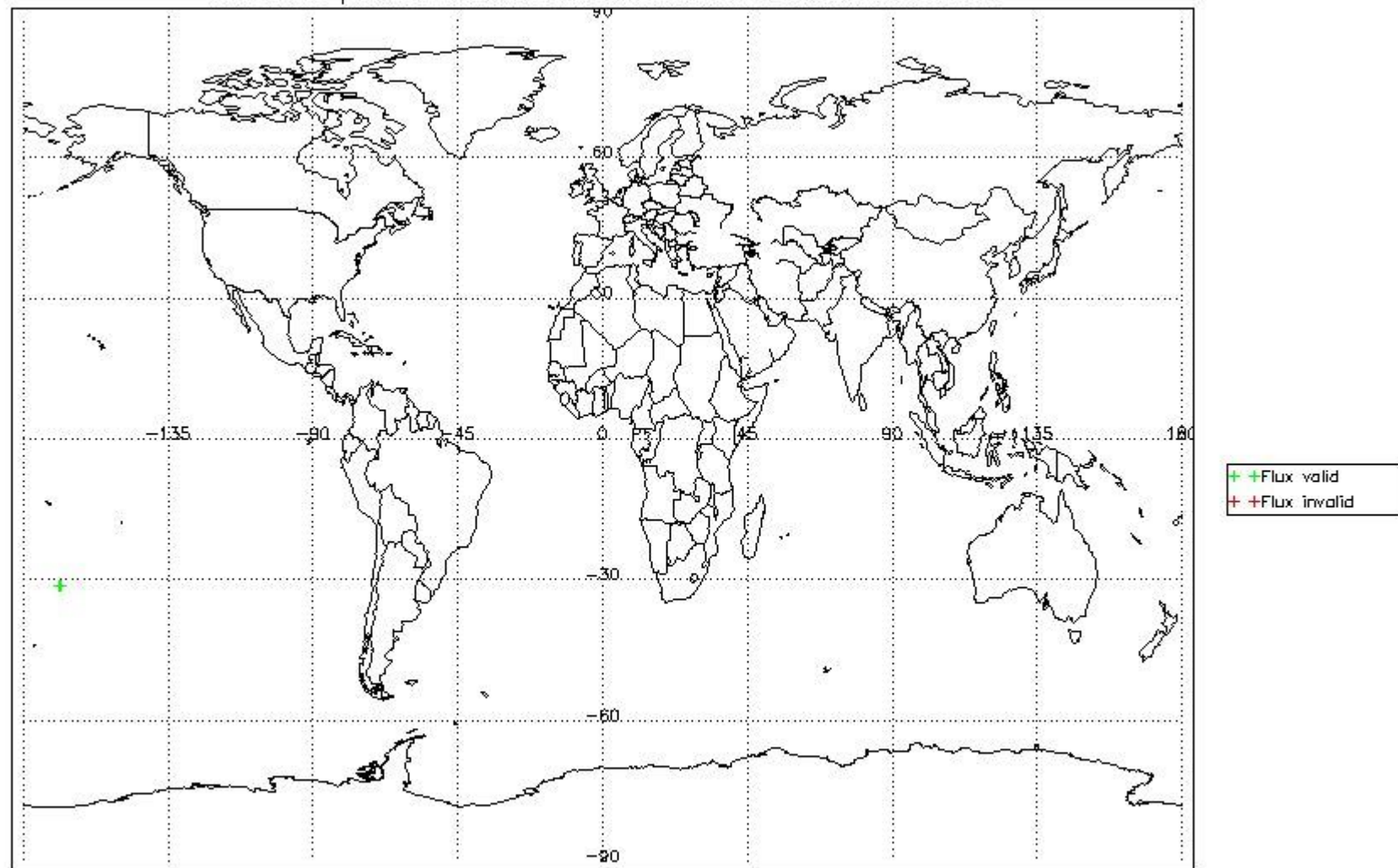
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_lin\_flux detector AB



mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_45.PNG



Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_in\_flux detector B



mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_47.PNG

### 1.2.3 Scan information ADS

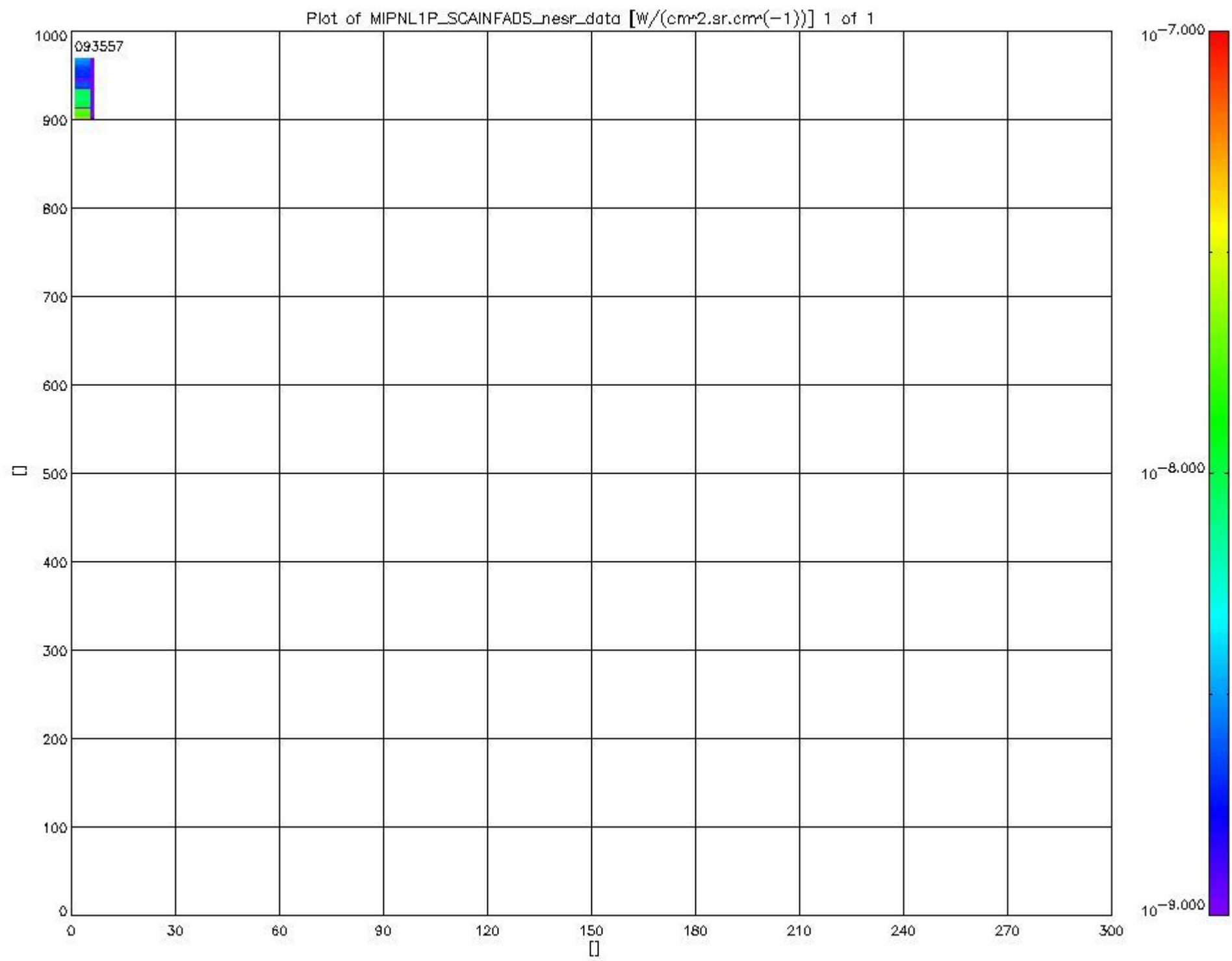
The following plots each contain 100 squares. Each square contains one NESR-scan (from MIPNL1P\_SCAINFADS\_nesr\_data).

The horizontal axis represents the sweep ID (starts at 1). A maximum of 19 sweeps per scan can be displayed.

The vertical axis shows the NESR data point index (starts at 0), which relates to wavenumber. A maximum of 200 wavenumber-points per NESR-measurement can be displayed.

The data values themselves are indicated by colours (as indicated on the right of the plot). Please refer to the plot header for data units.



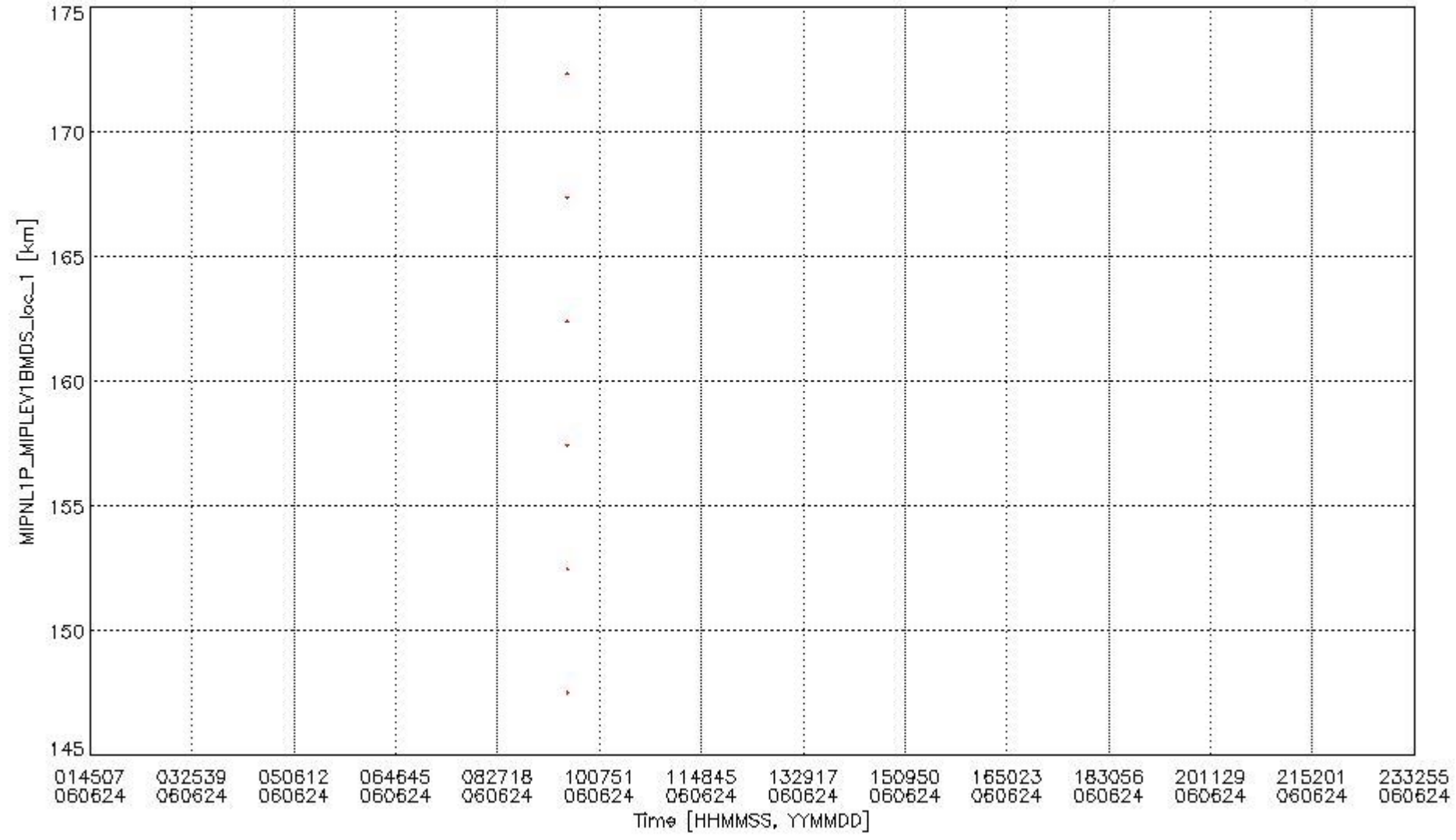


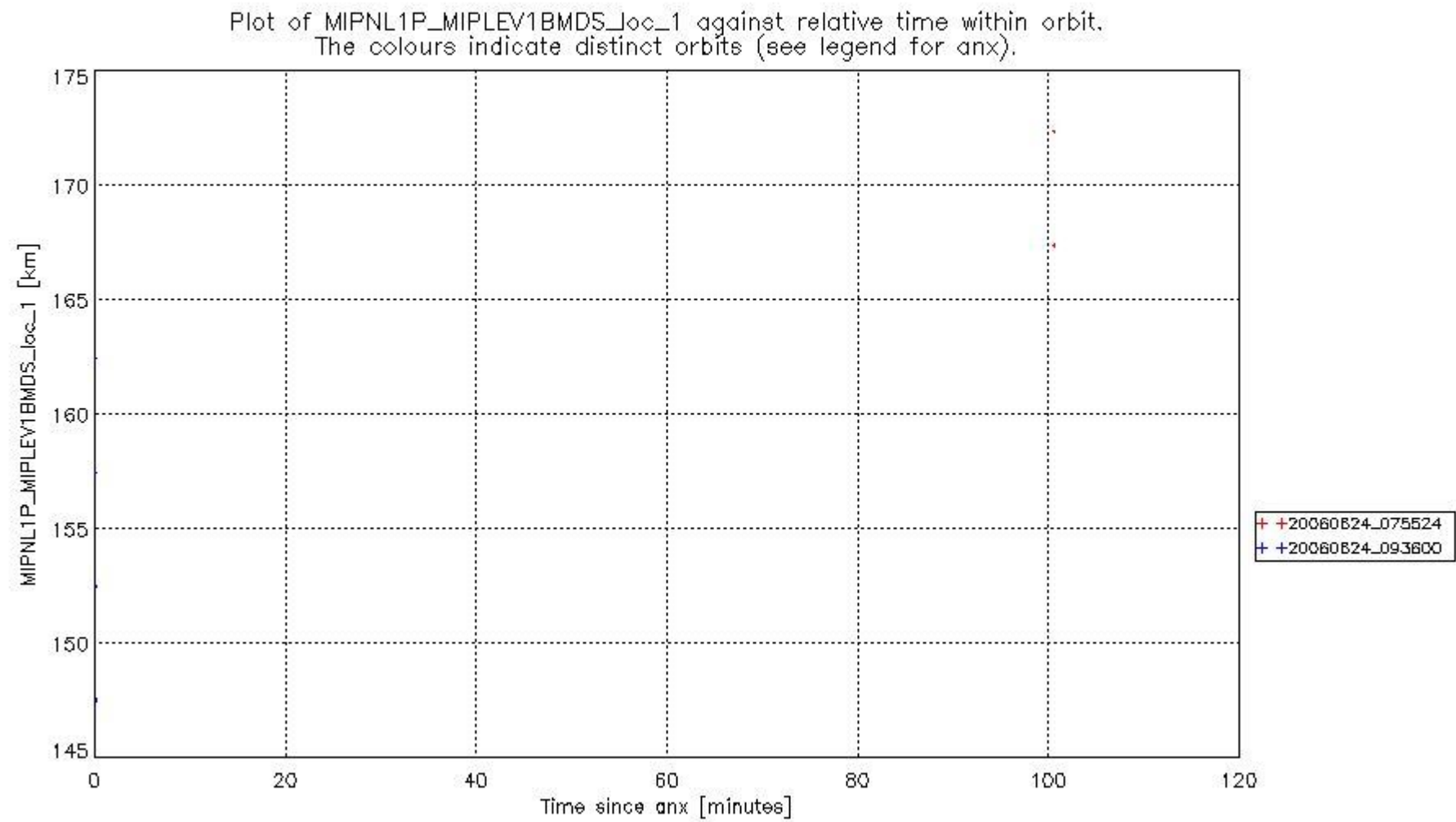
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_48.PNG

### 1.3 Physical Quality Indicators

#### 1.3.1 Tangent altitude

Plot of MIPNL1P\_MIPLEV1BMDS\_loc\_1 against time.  
The vertical grid lines indicate estimated anx events.





mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_50.PNG

### 1.3.2 Cloud top height

The following plots show an estimation of cloud top height, based on the ratio of two microwindows. Reference: R. Spang, J.J. Remedios and M.P. Barkley, "Colour indices for the detection and differentiation of cloud types in infra-red limb emission spectra", Adv Space Res, 33:1041-1047, (2004)

The non-nominal scans mentioned in the plots are scans that are rejected by the cloud top height algorithm for several reasons:

- Unconsidered instrument mode. The algorithm only considers nominal (39169) and special event (39172) instrument modes.
- Incomplete scan (missing sweeps)

No cloud top plot, since the following information was not available MIPNL1P\_MIPLEV1BMDS\_band\_a\_mw\_average\_cloud\_1\_low\_res

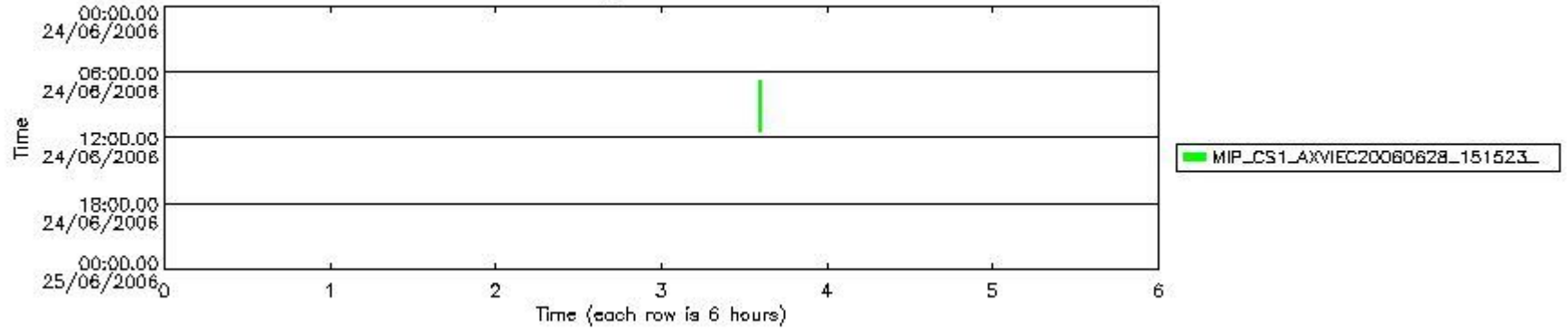
### 1.4 ADF monitoring

Number	ADF
0	AUX_FRO_AXVPDS20060626_233806_20060623_221000_20060626_005000
1	MIP_CA1_AXVIEC20050627_094412_20040809_000000_20090809_000000
2	MIP_CG1_AXVIEC20060628_150555_20060621_000000_20110621_000000
3	MIP_CL1_AXVIEC20050420_152028_20050420_095747_20100420_095747
4	MIP_CO1_AXVIEC20060628_150047_20060621_000000_20110621_000000
5	MIP_CS1_AXVIEC20060628_151523_20060621_000000_20110621_000000

6	MIP_MW1_AXVIEC20050627_094928_20040809_000000_20090809_000000
7	MIP_PS1_AXVIEC20050627_100609_20040809_000000_20090809_000000

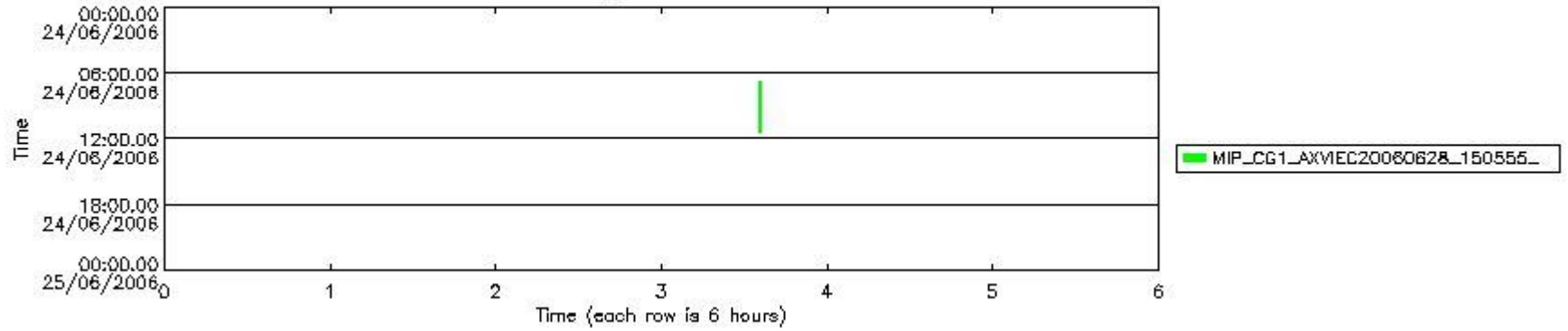
Number	Product name	#CS1	#CG1	#CL1	#CA1	#CO1	#MW1	#PS1	#FPO
0	MIP_NL_1PPDPA20060624_093557_000000112048_00465_22563_0194.N1	5	2	3	1	4	6	7	0

Bar plot of ADFs used for ILS&SPECTRAL CAL FILE.  
See legend for details.



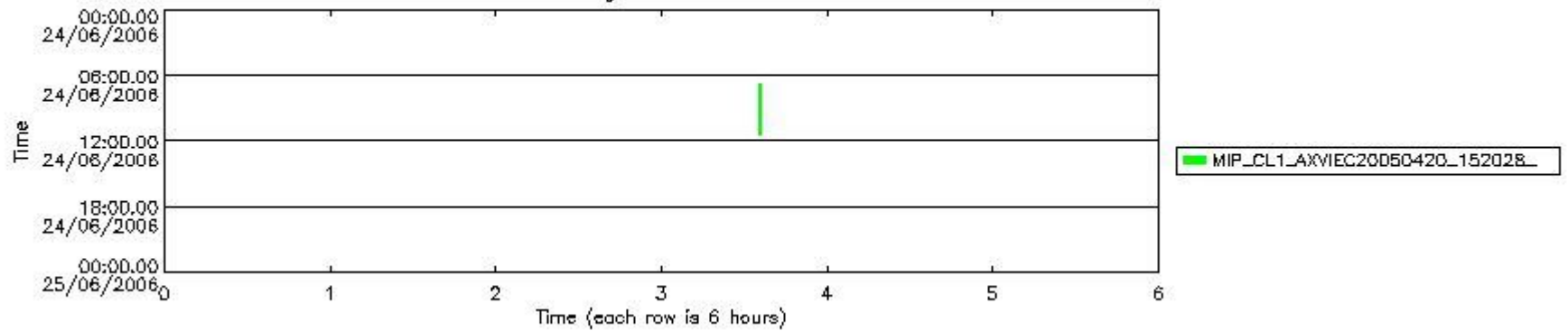
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_51.PNG

Bar plot of ADFs used for GAIN CALIBRATION FILE.  
See legend for details.



mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_52.PNG

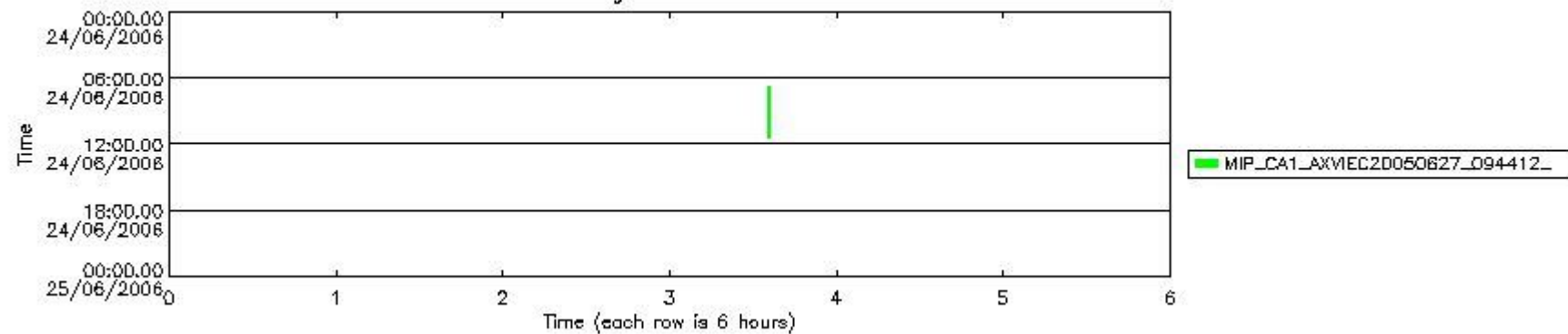
Bar plot of ADFs used for LINE OF SIGHT FILE.  
See legend for details.



mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_53.PNG

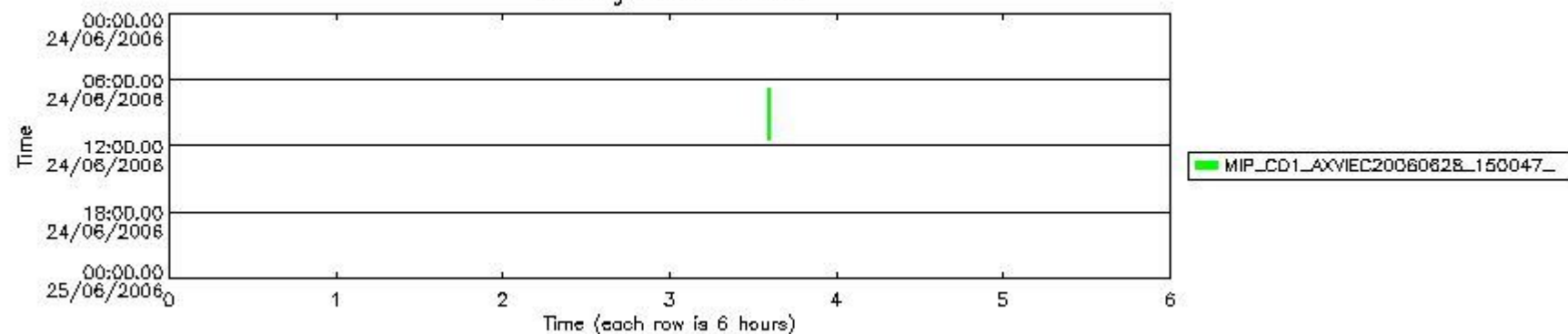


Bar plot of ADFs used for INSTRUMENT CHAR FILE.  
See legend for details.



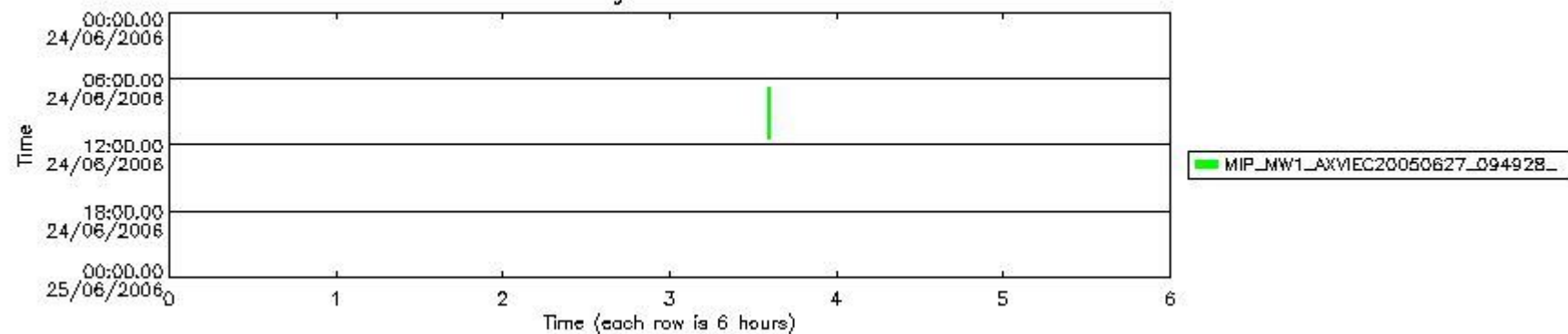
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_54.PNG

Bar plot of ADFs used for OFFSET VALIDATION FILE.  
See legend for details.



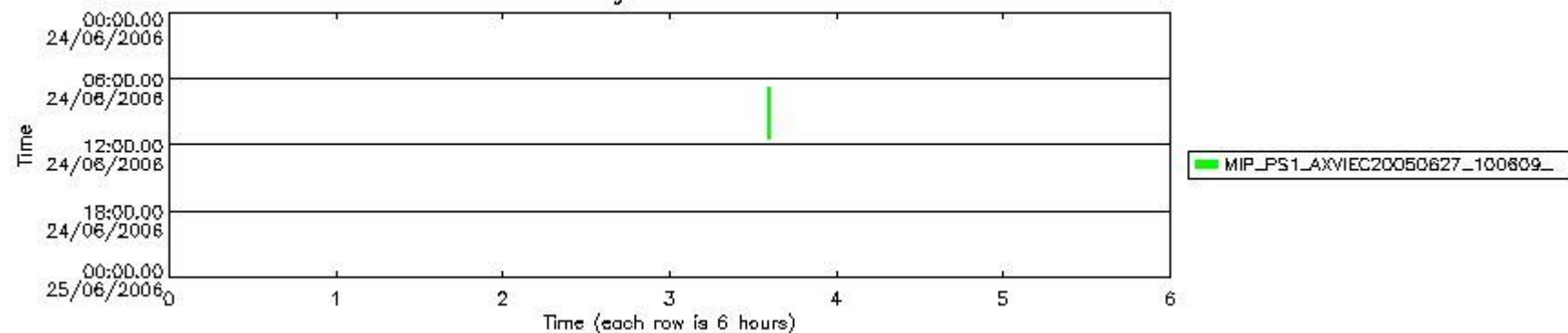
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_55.PNG

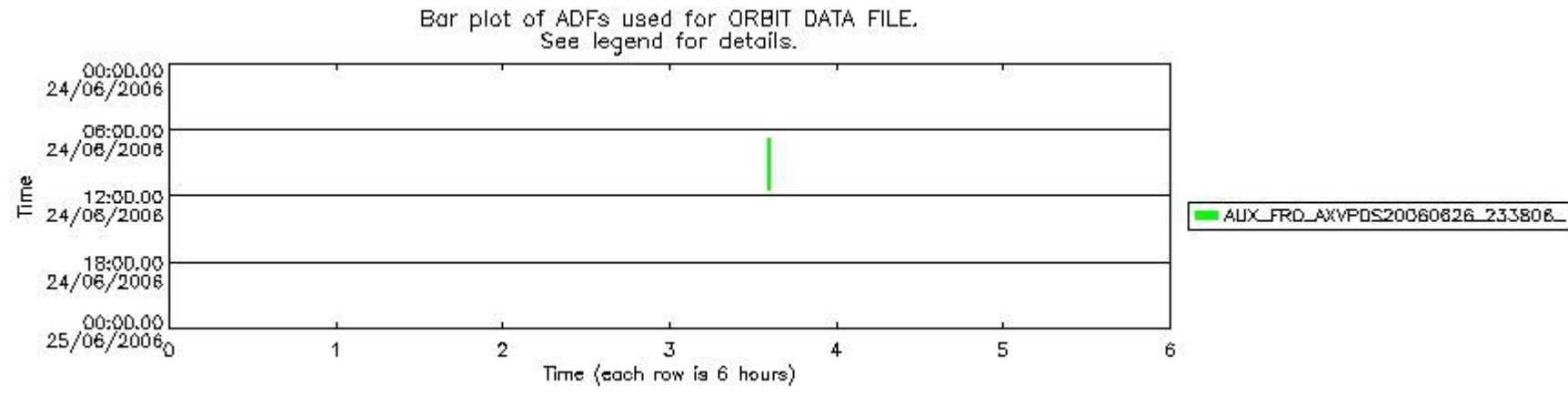
Bar plot of ADFs used for MICROWINDOWS FILE.  
See legend for details.



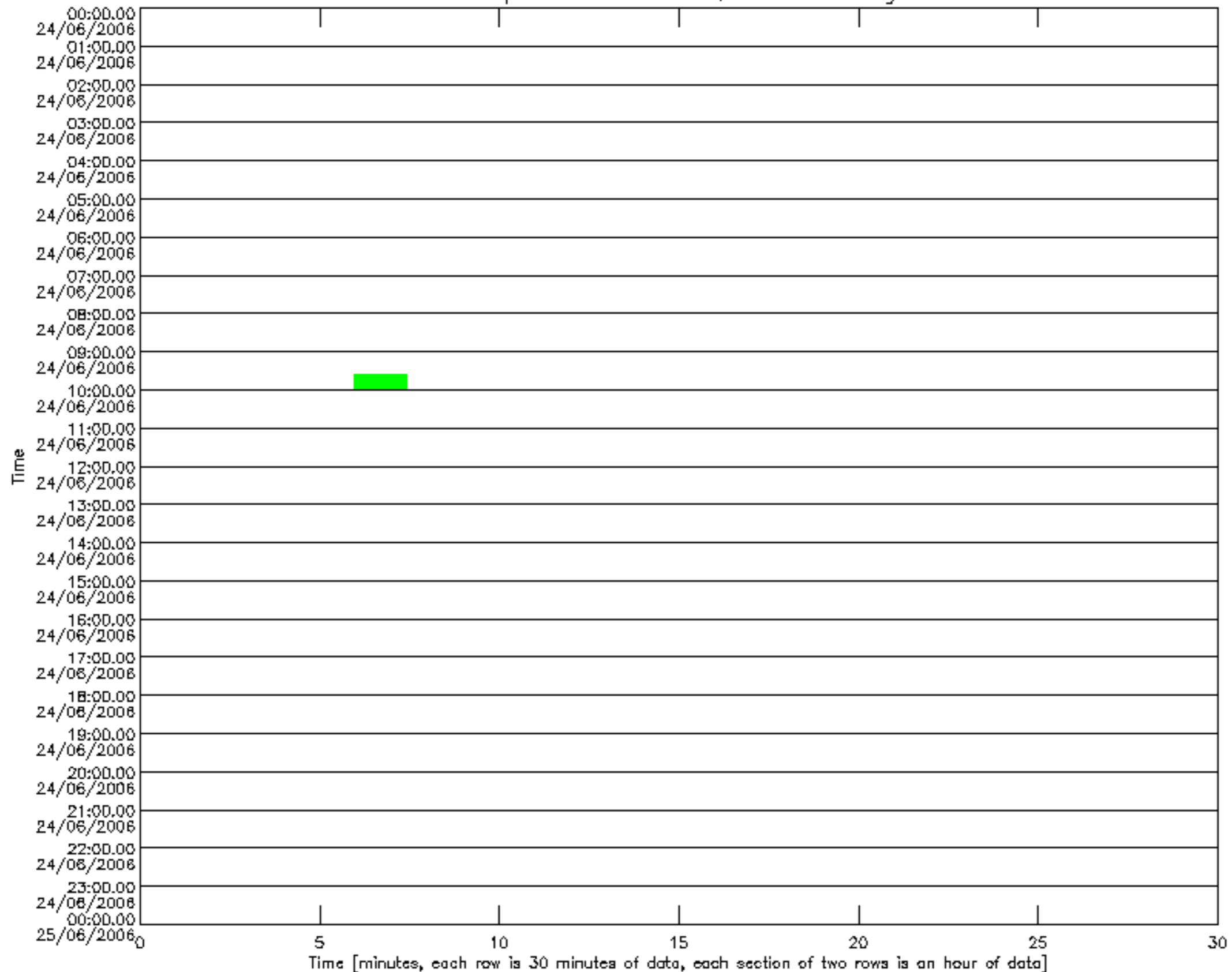
mipas\_daily\_report\_level1\_OFL\_MIPAS\_4\_65\_P\_20060624\_56.PNG

Bar plot of ADFs used for PROCESS PARAMETERS FILE.  
See legend for details.

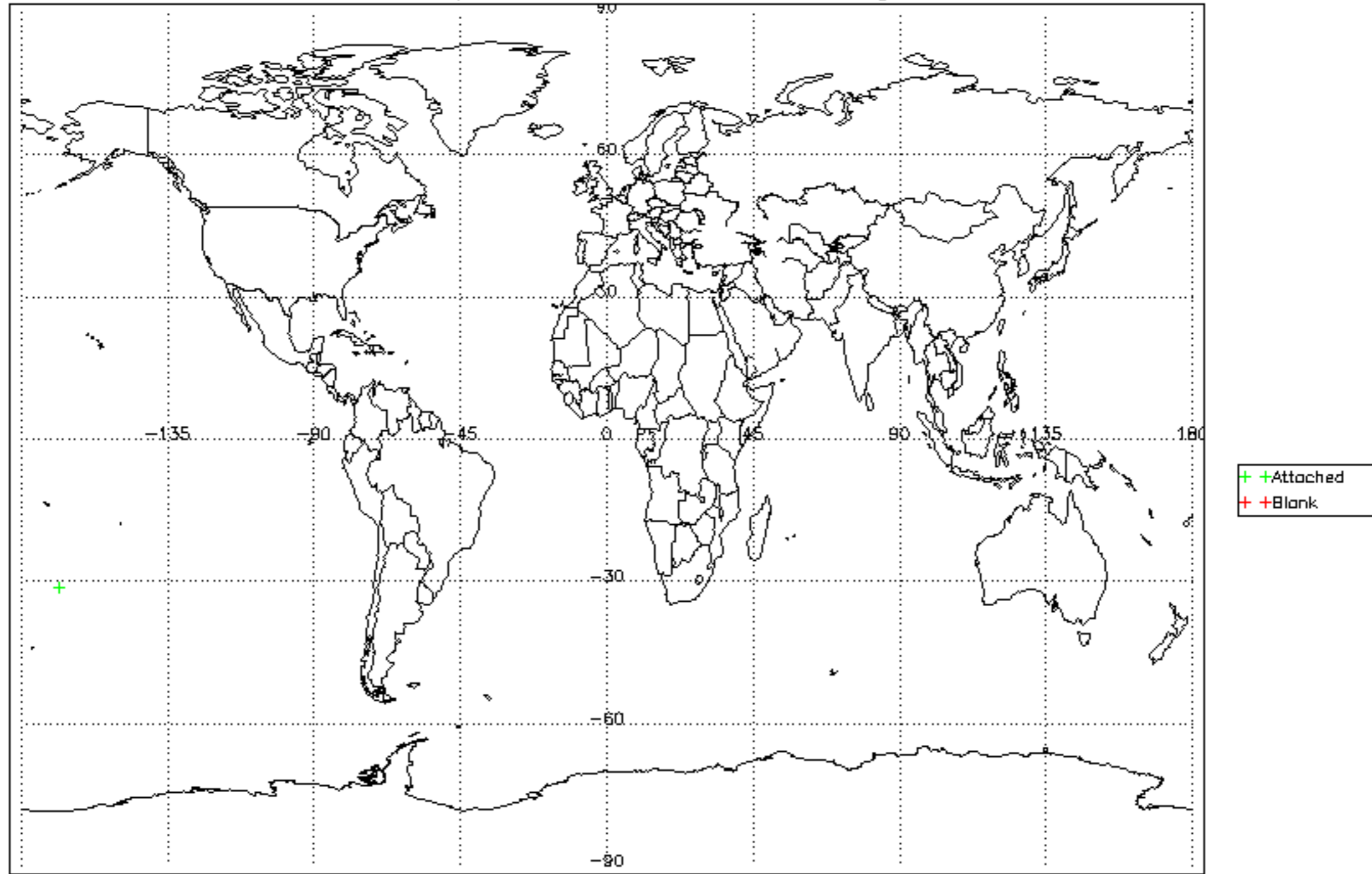




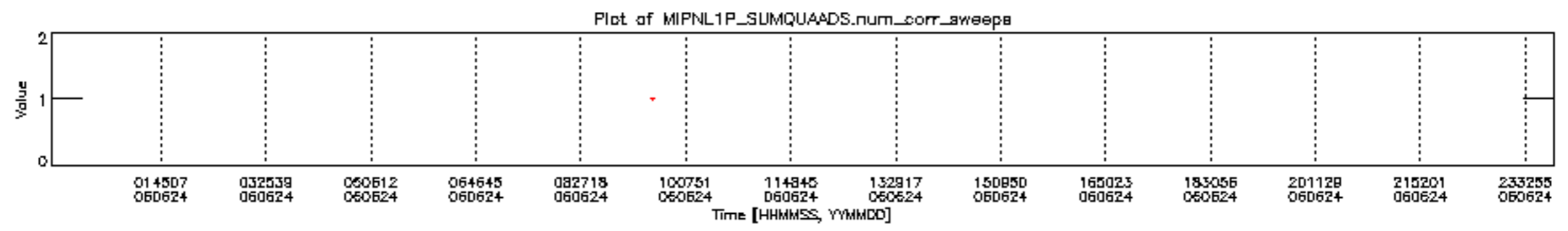
Bar plot of MIPNL1P\_SUMQUAADS.attach\_flag



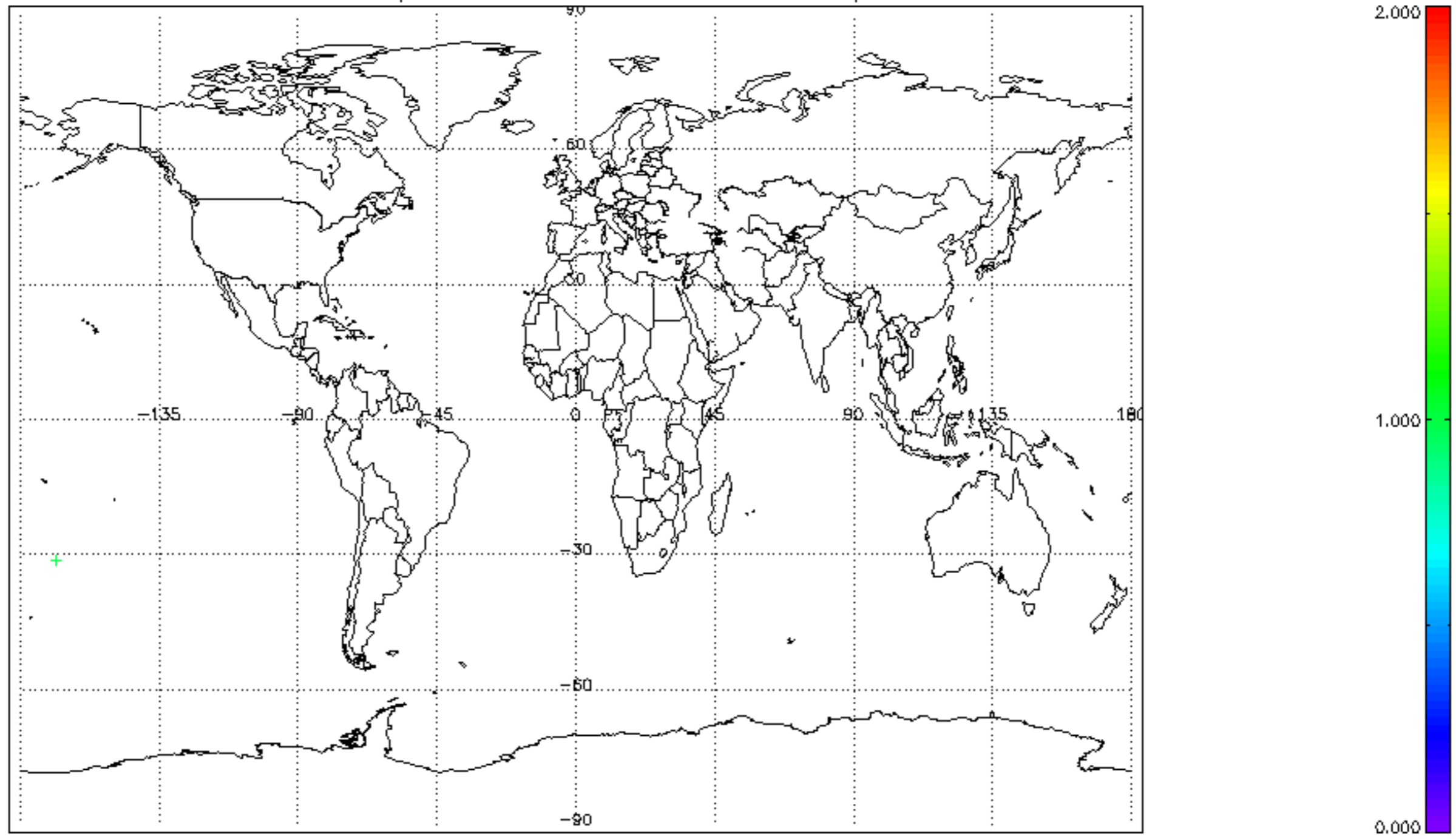
Geolocation plot of MIPNL1P\_SUMQUAADS.attach\_flag

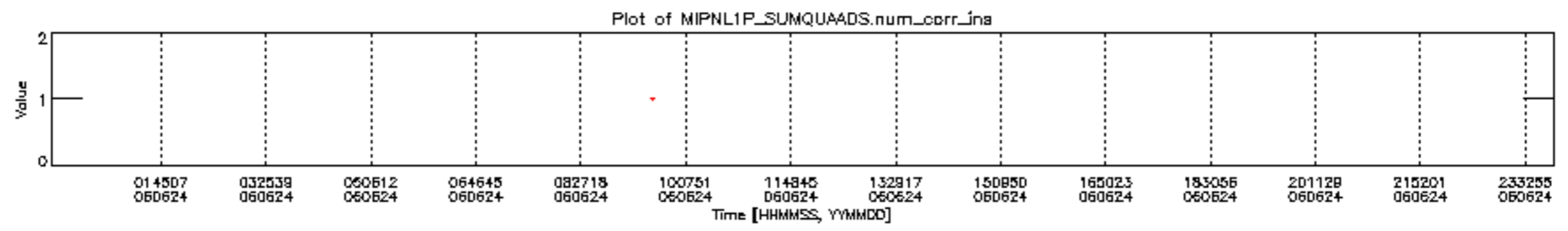




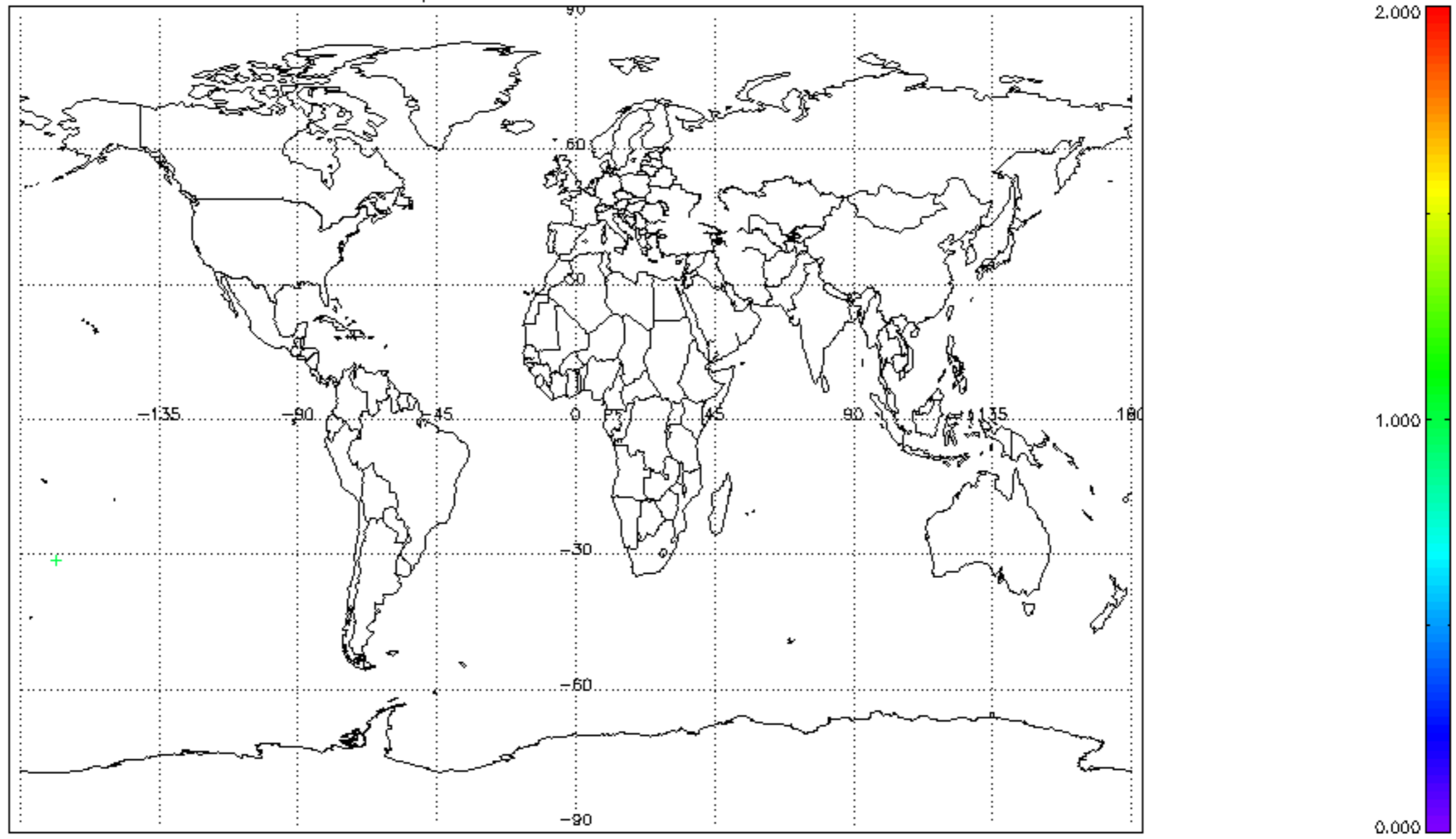


Geolocation plot of MIPNL1P\_SUMQUAADS.num\_corr\_sweeps

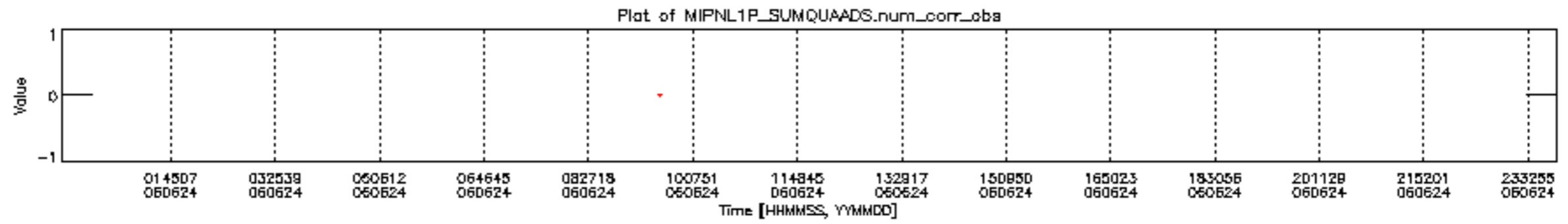




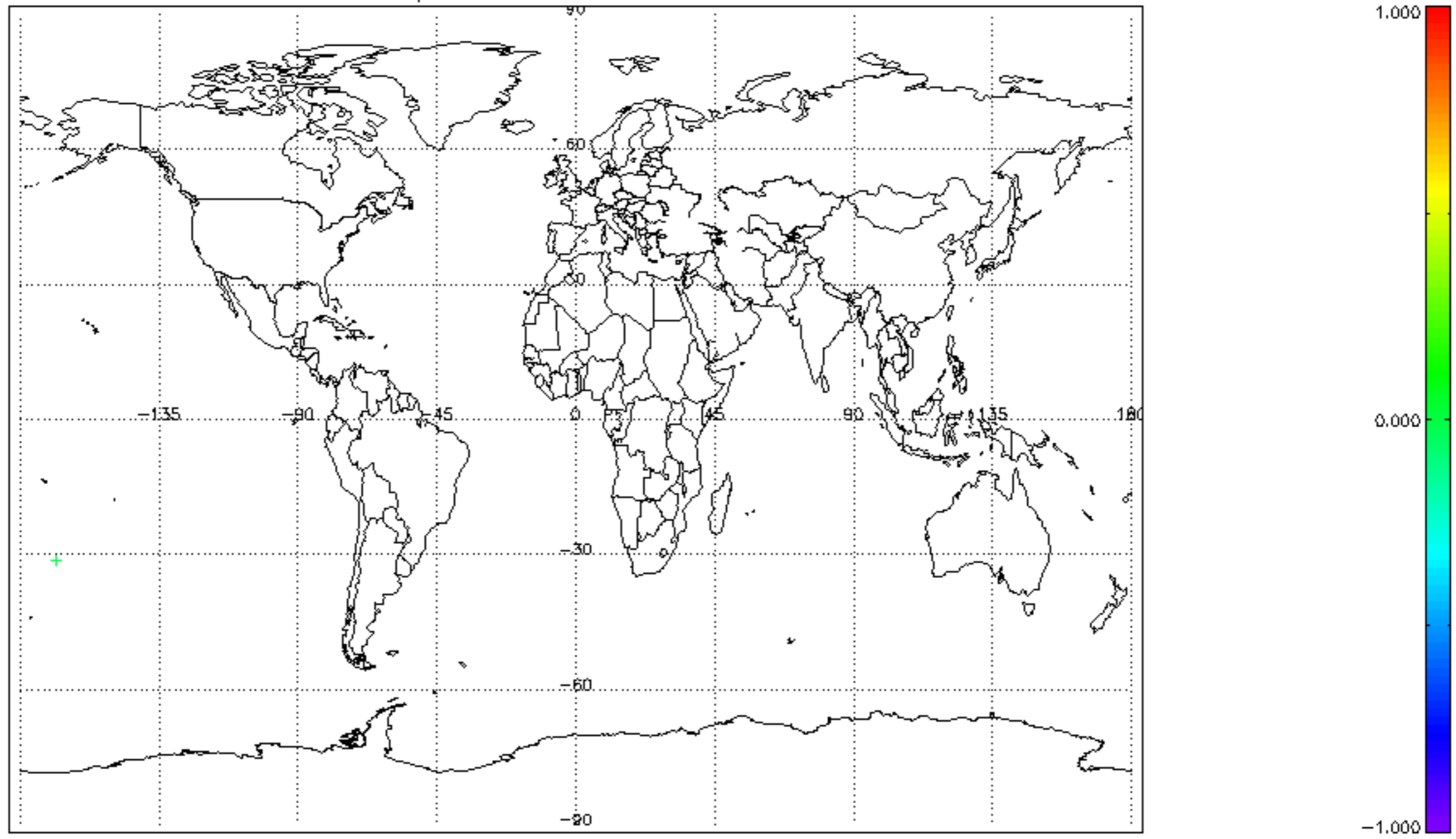
Geolocation plot of MIPNL1P\_SUMQUAADS.num\_corr\_ins

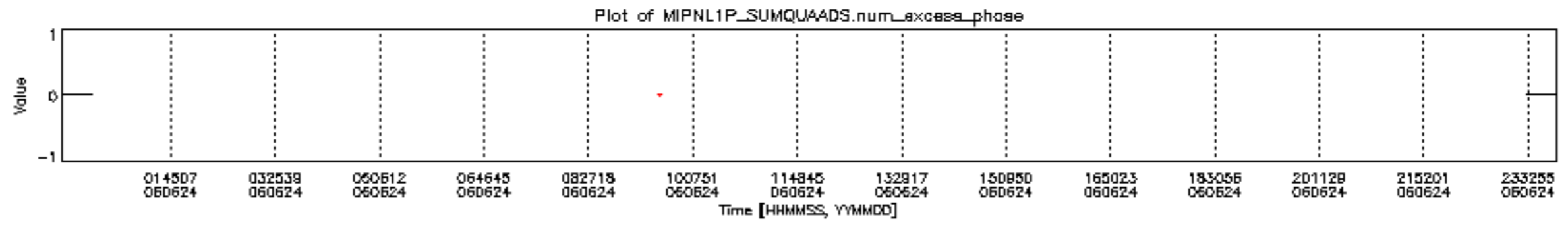




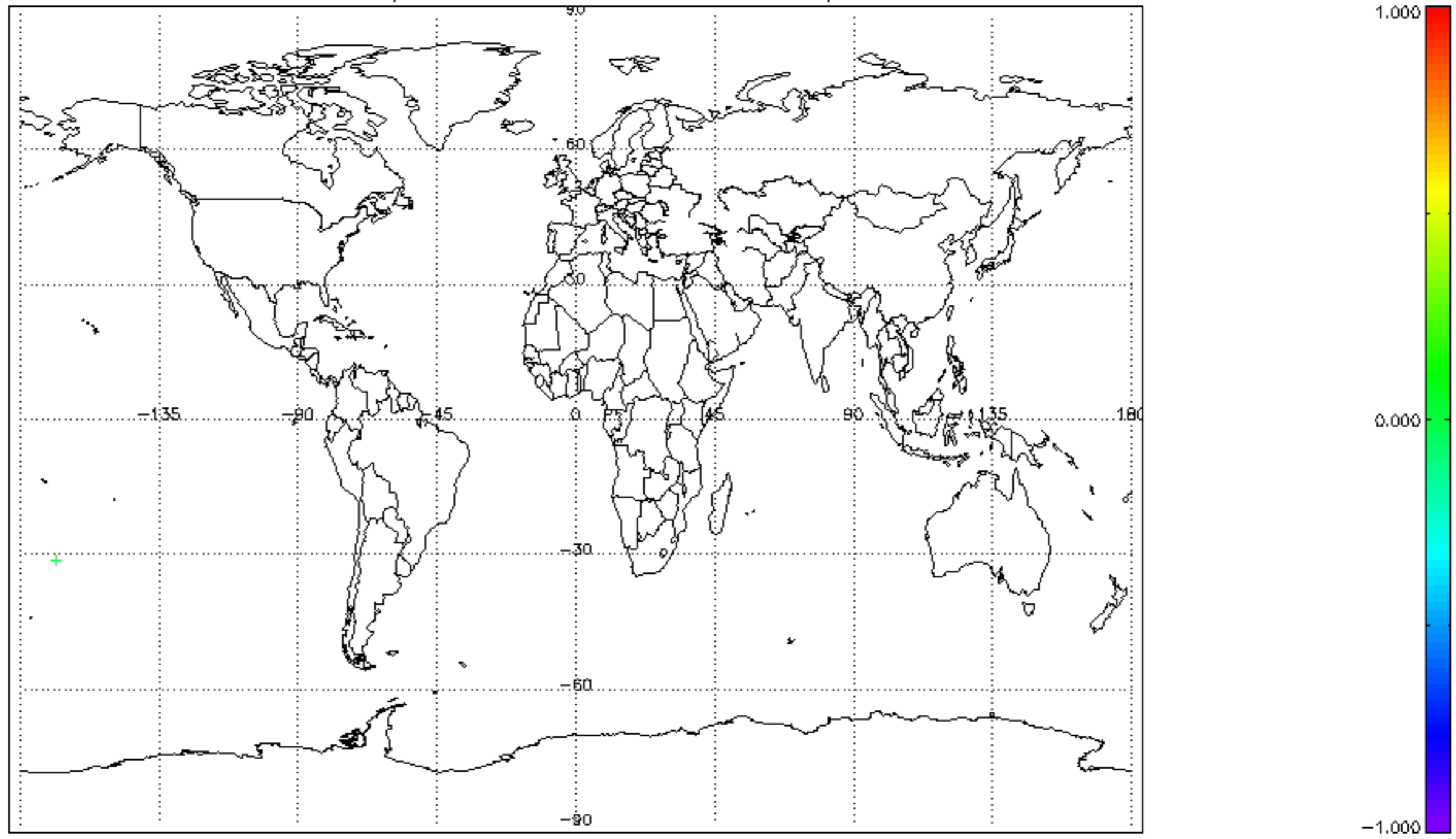


Geolocation plot of MIPNL1P\_SUMQUAADS.num\_corr\_obs

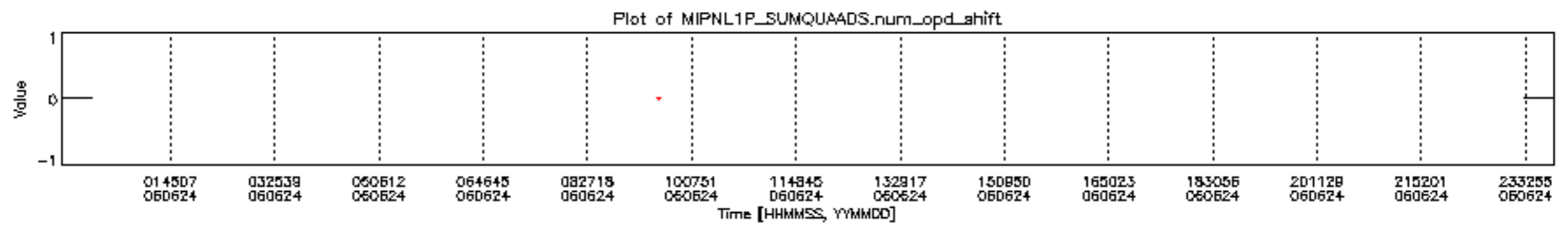




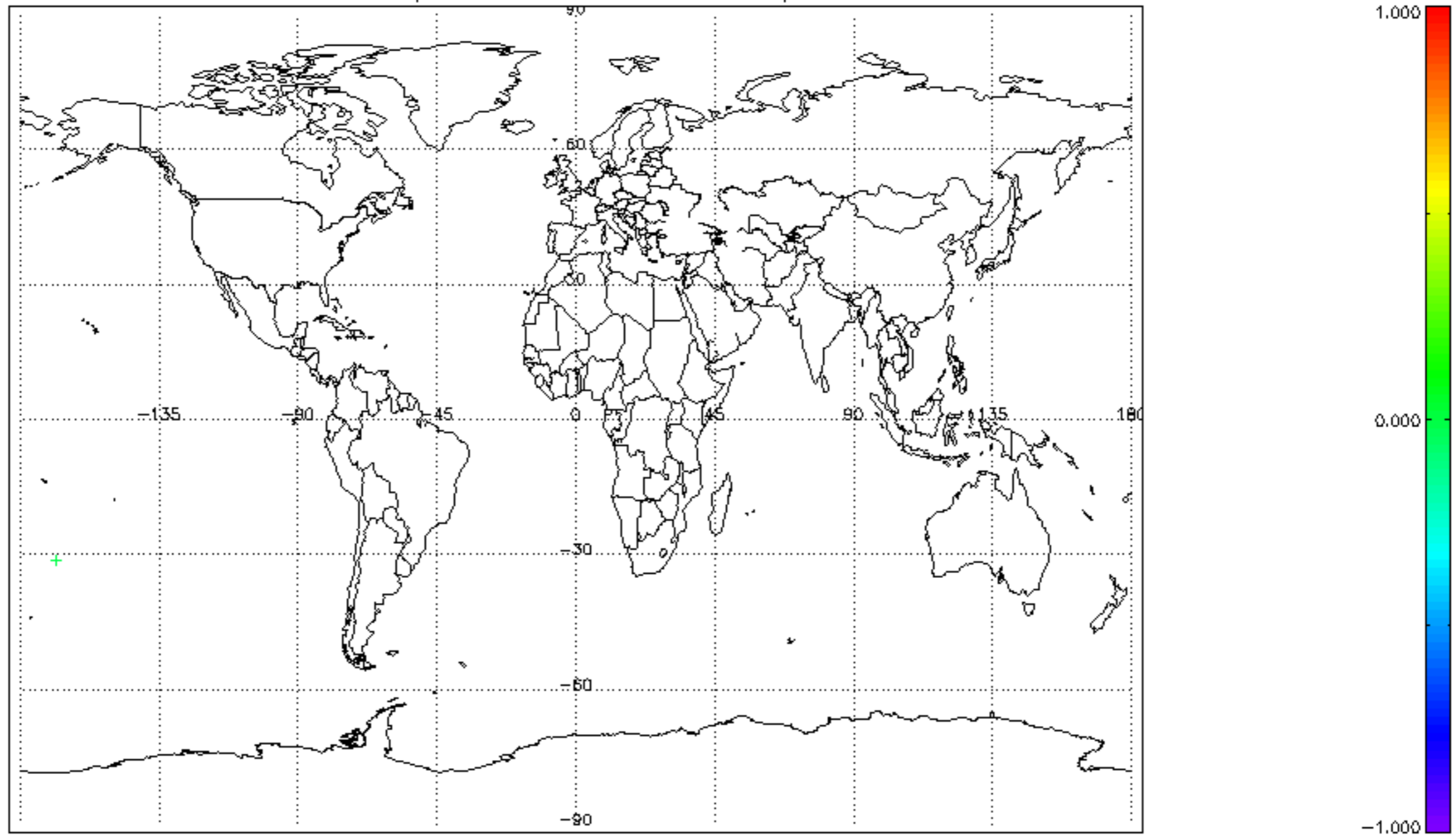
Geolocation plot of MIPNL1P\_SUMQUAADS.num\_excess\_phase

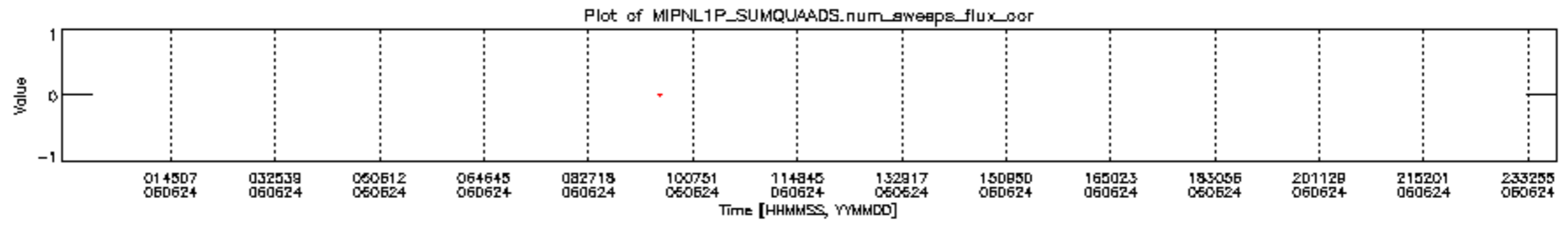




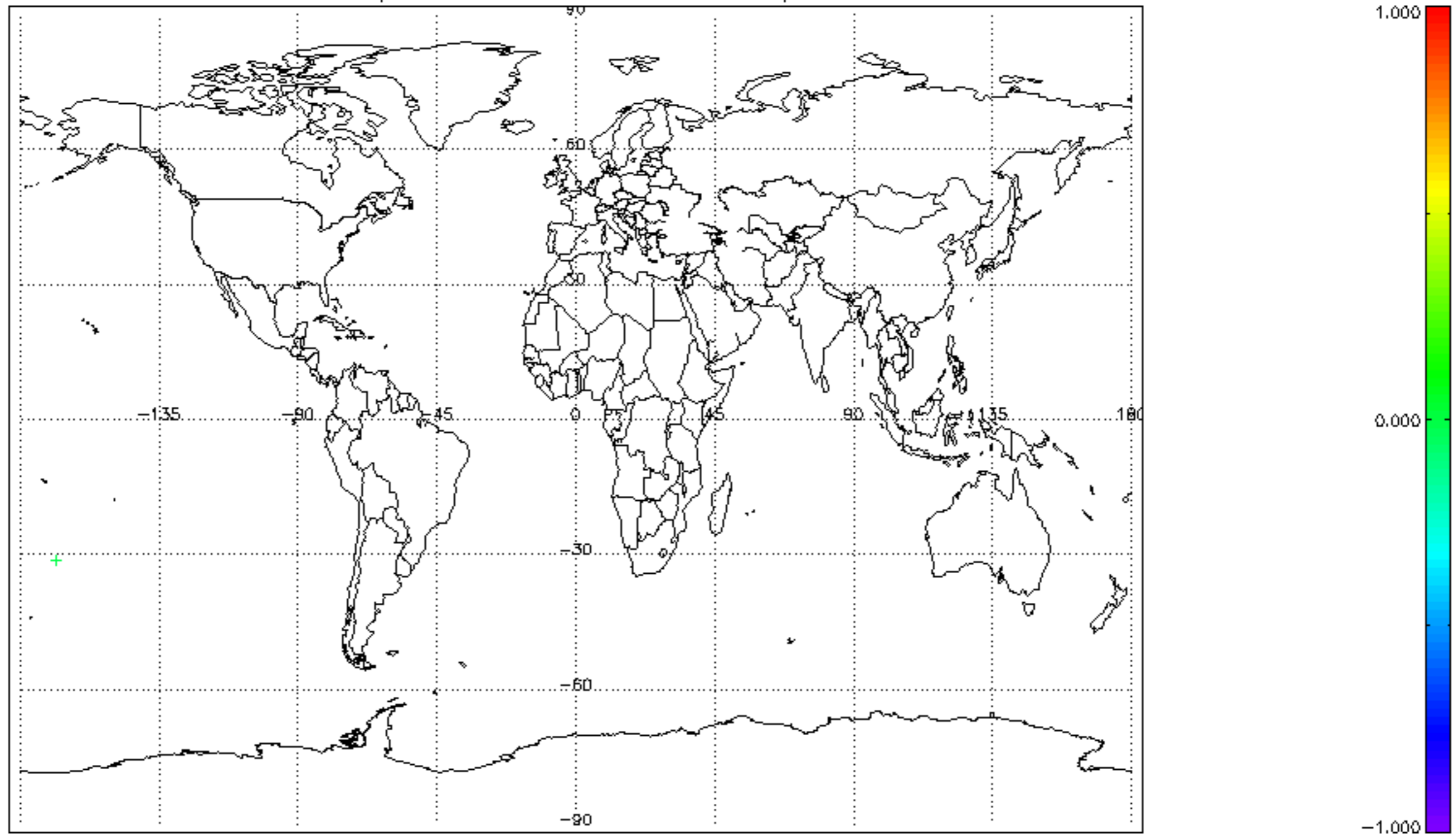


Geolocation plot of MIPNL1P\_SUMQUAADS.num\_opd\_shift

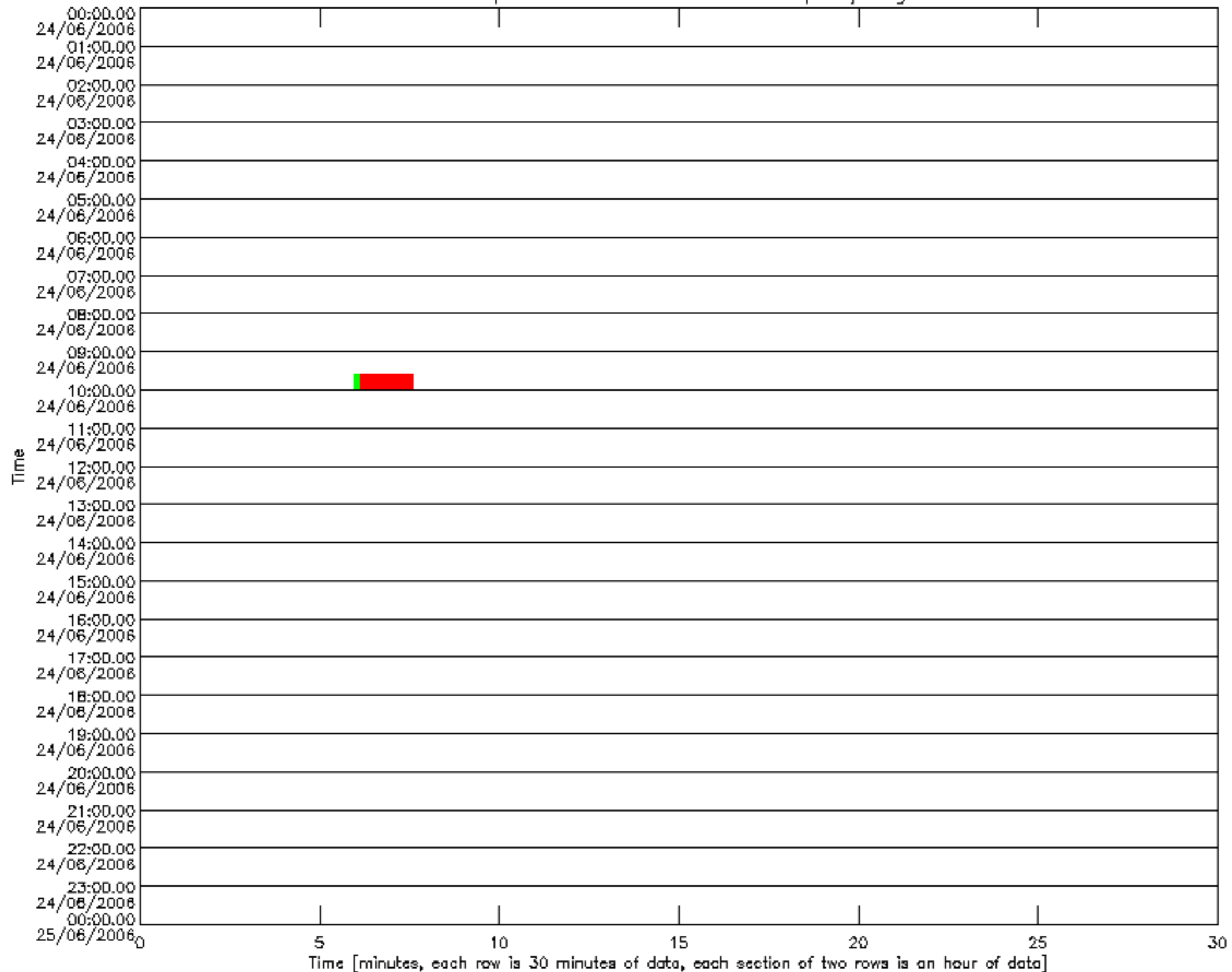




Geolocation plot of MIPNL1P\_SUMQUAADS.num\_sweeps\_flux\_oor

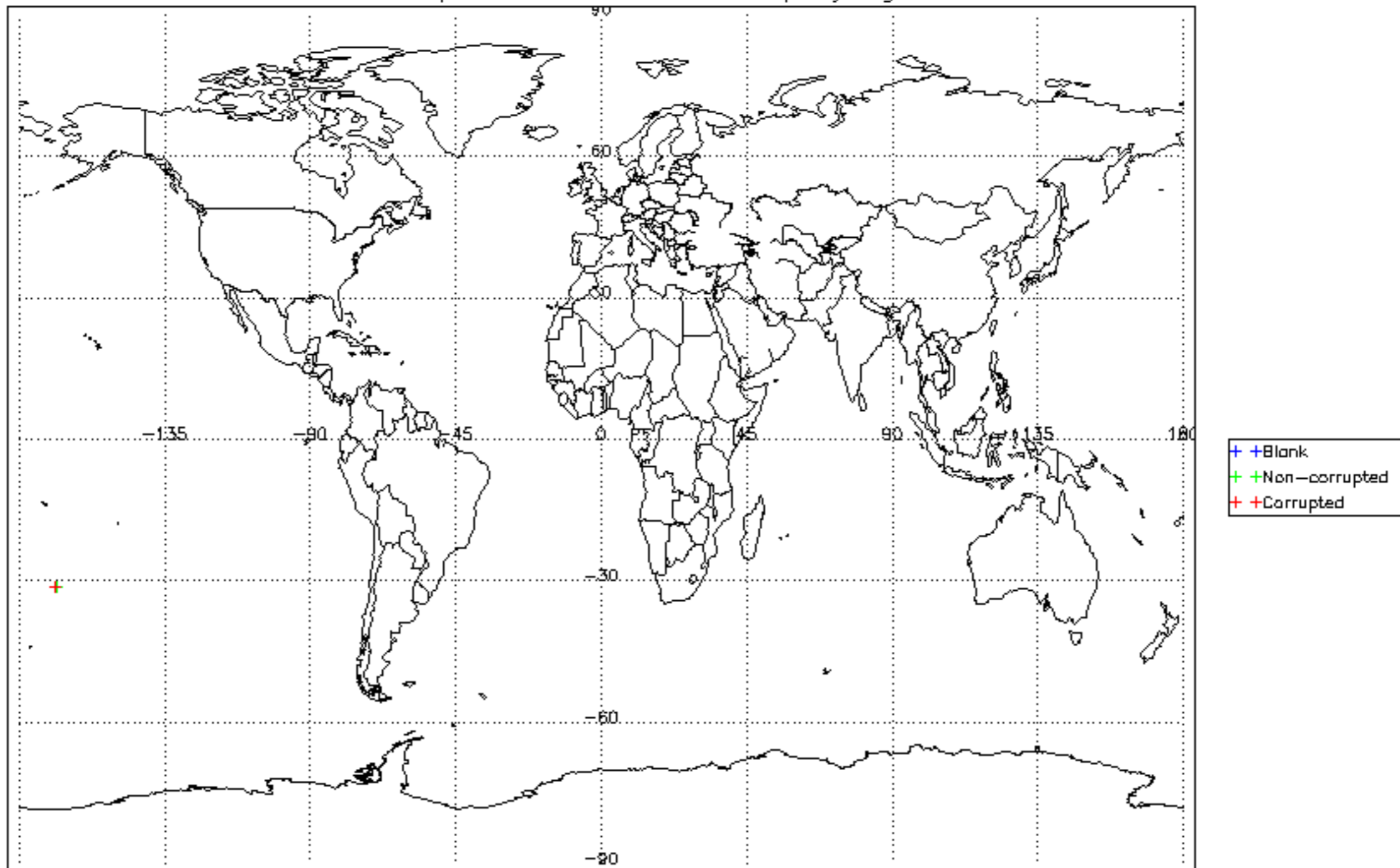


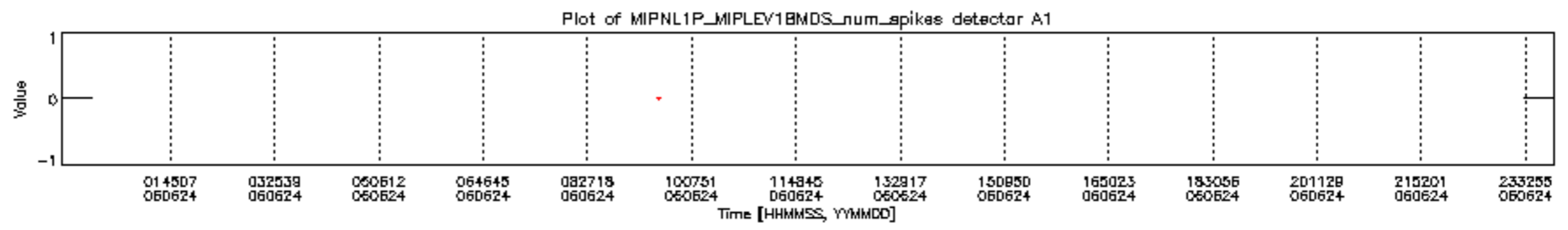
Bar plot of MIPNL1P\_MIPLEV1BMDS\_quality\_flag



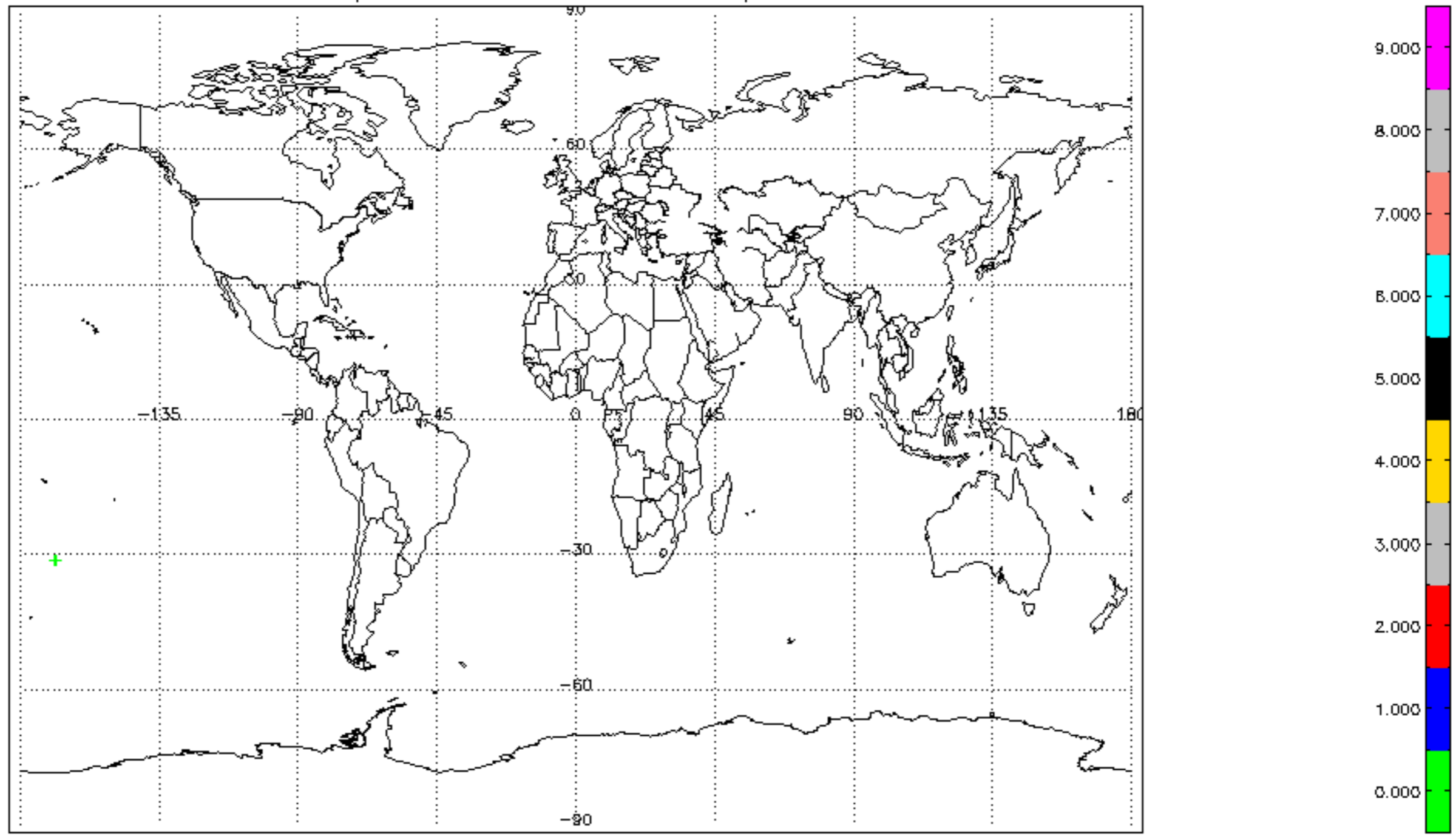


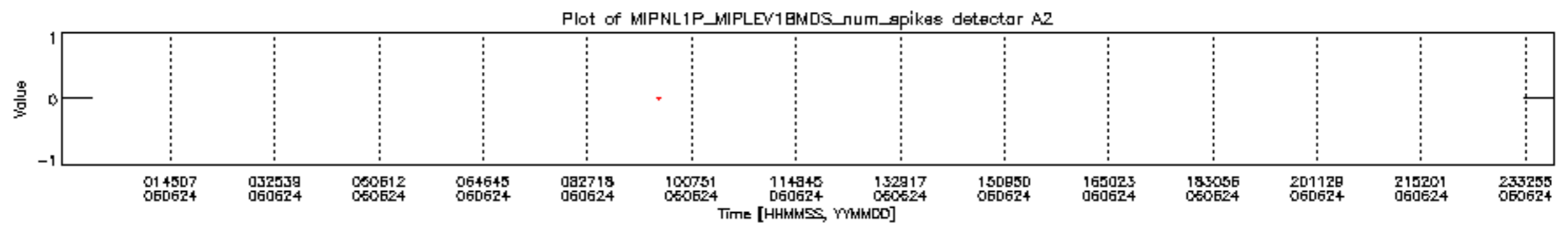
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_quality\_flag



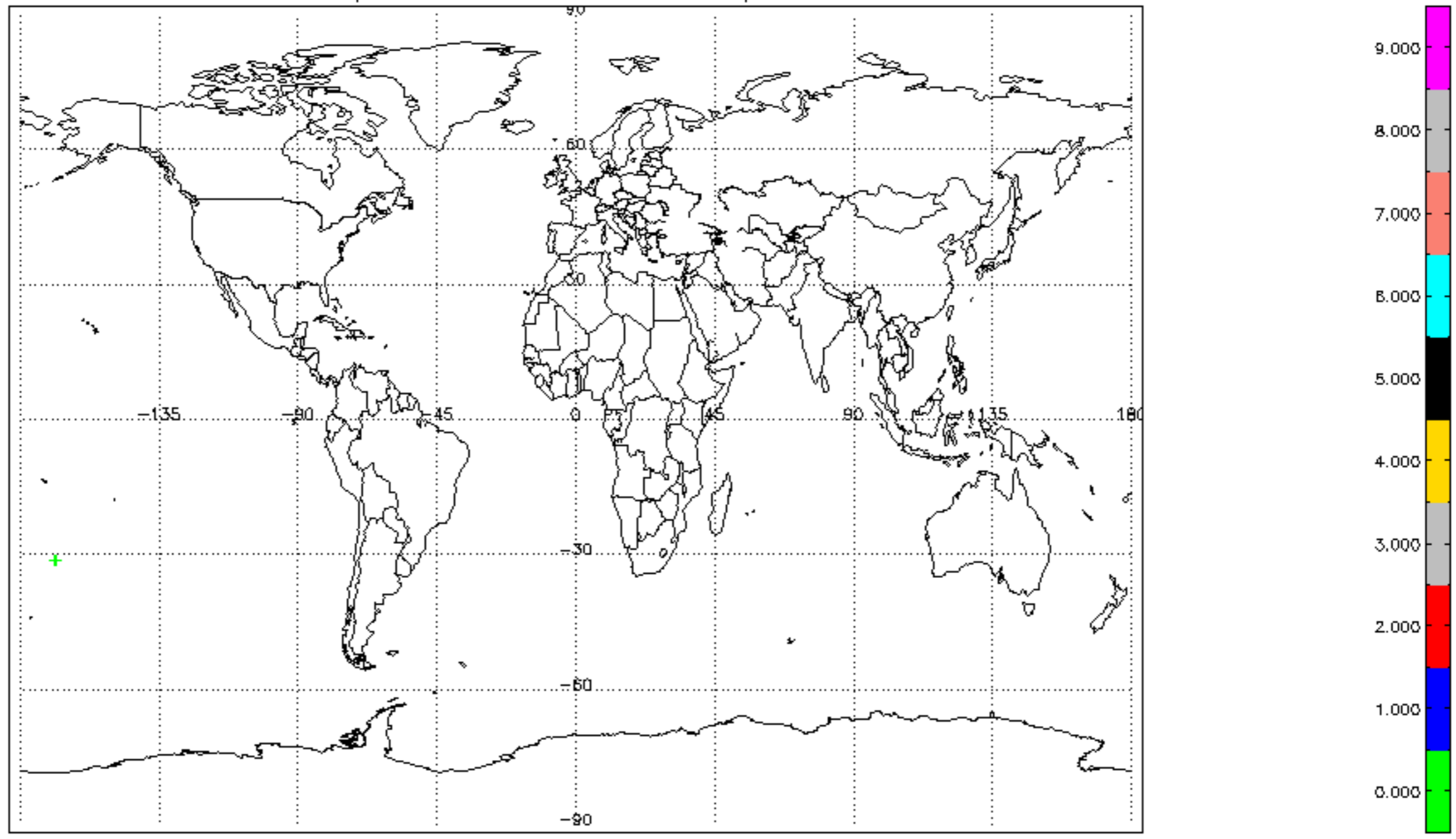


Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector A1

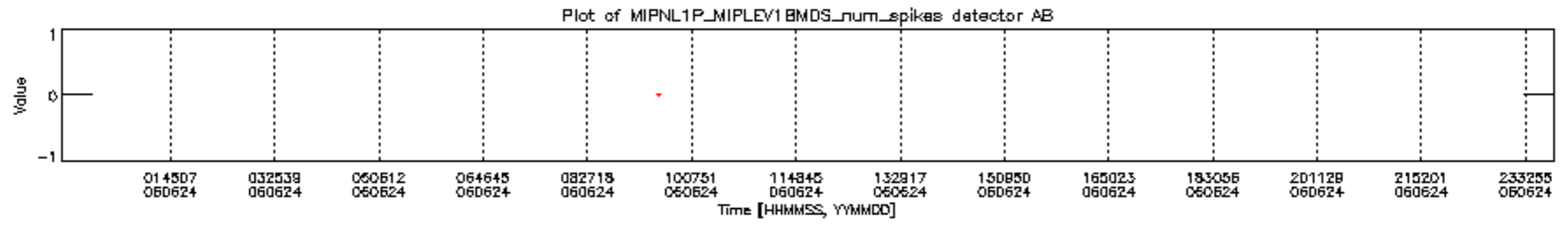




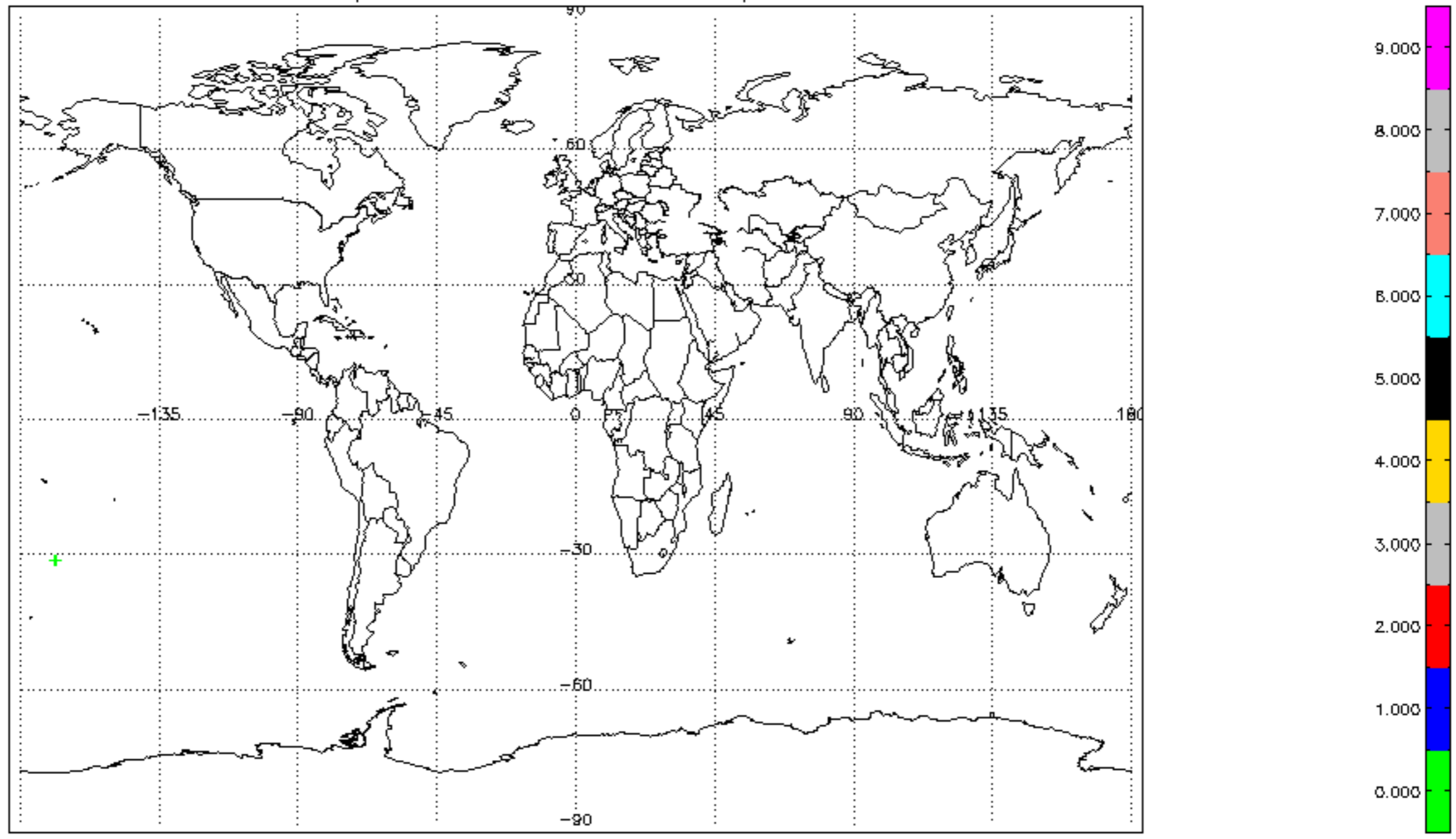
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector A2

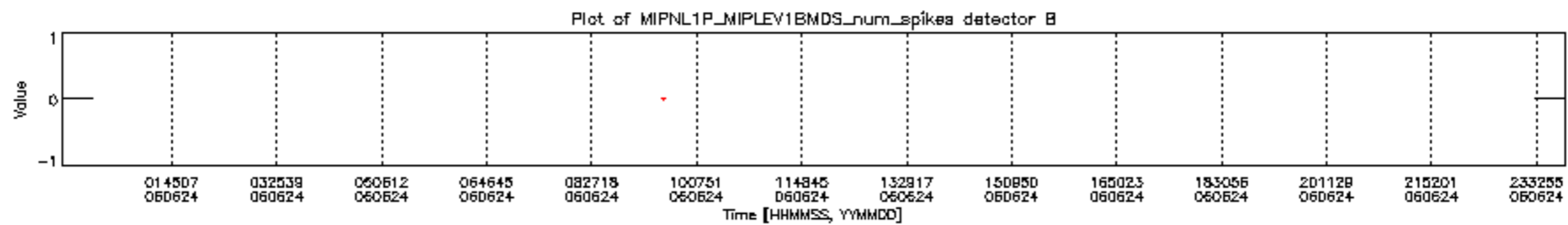




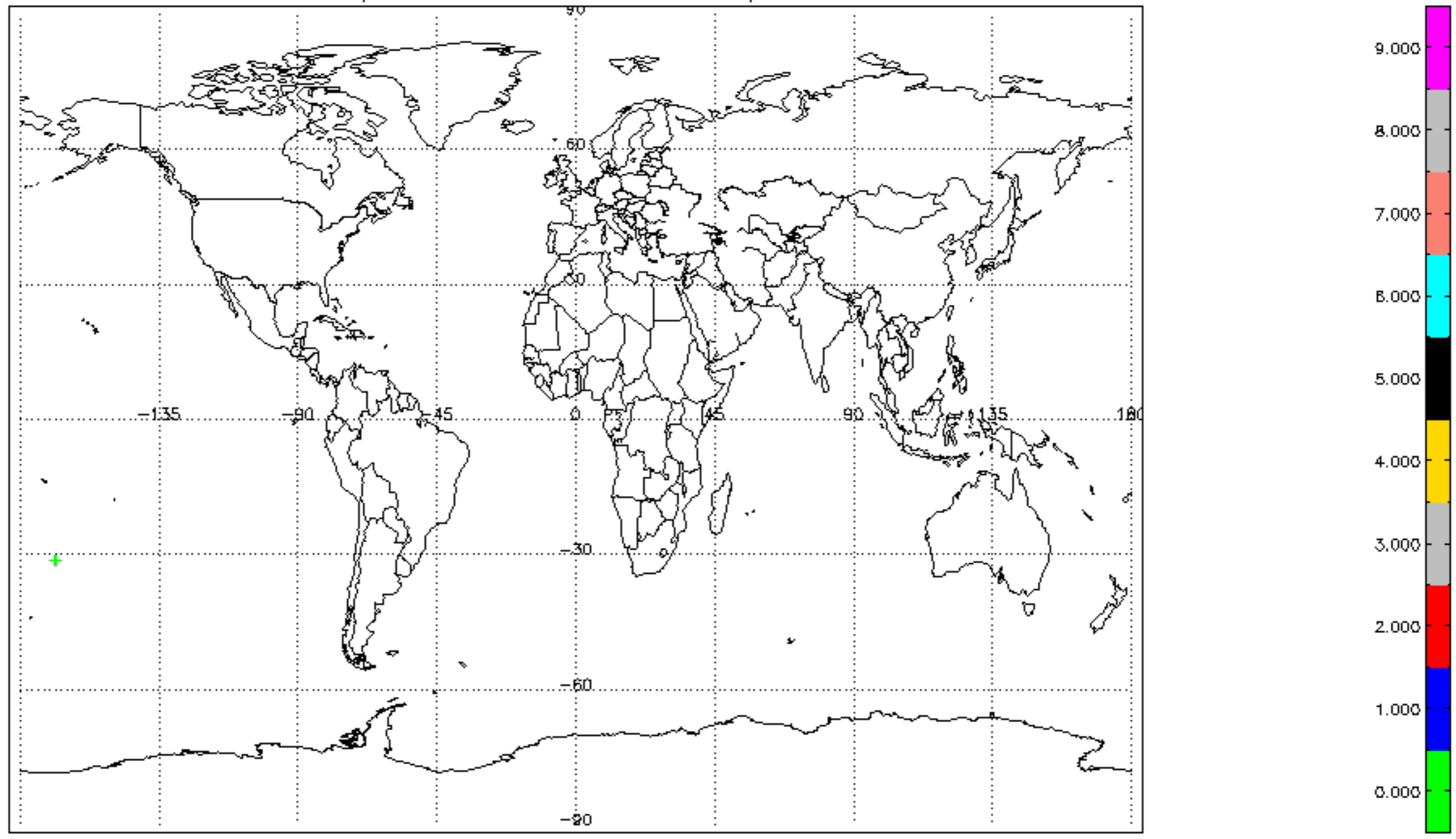


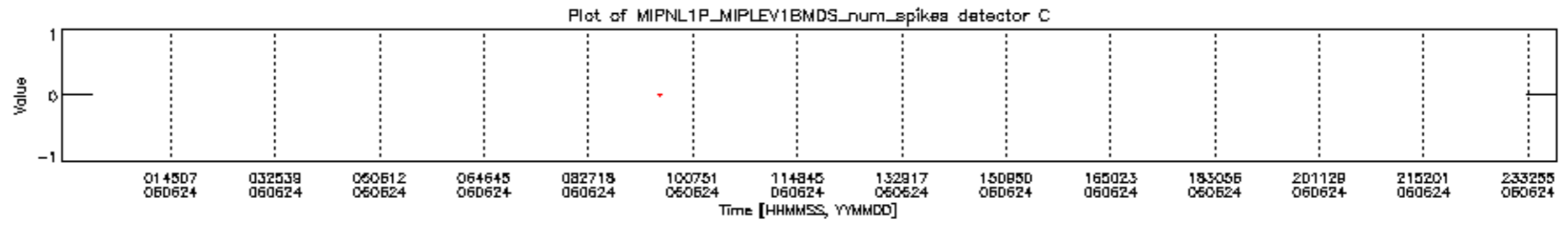
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector AB





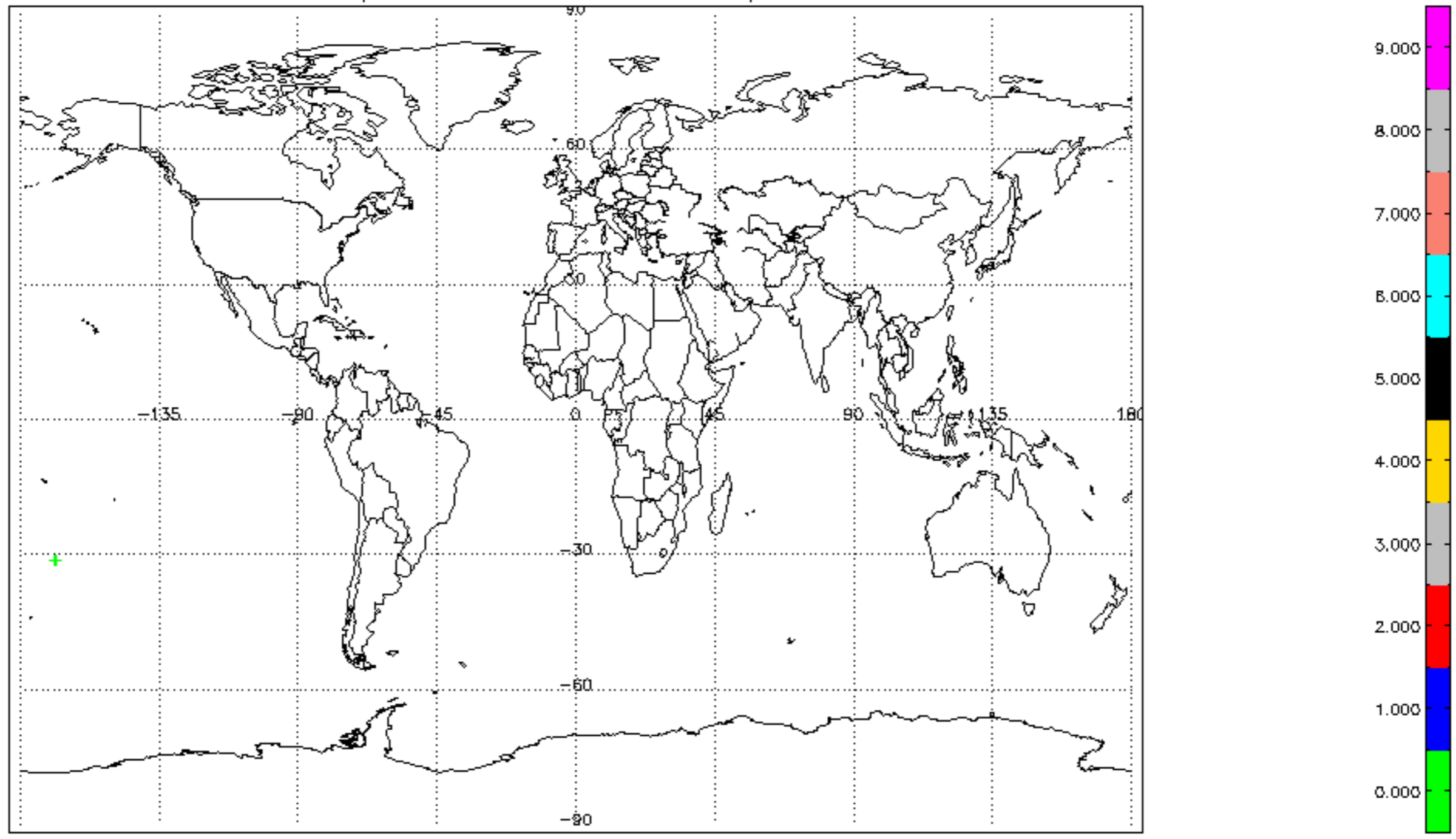
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector B

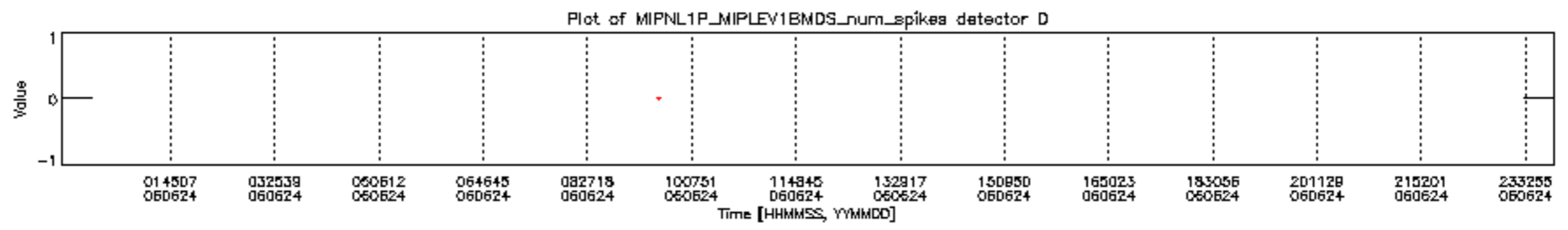




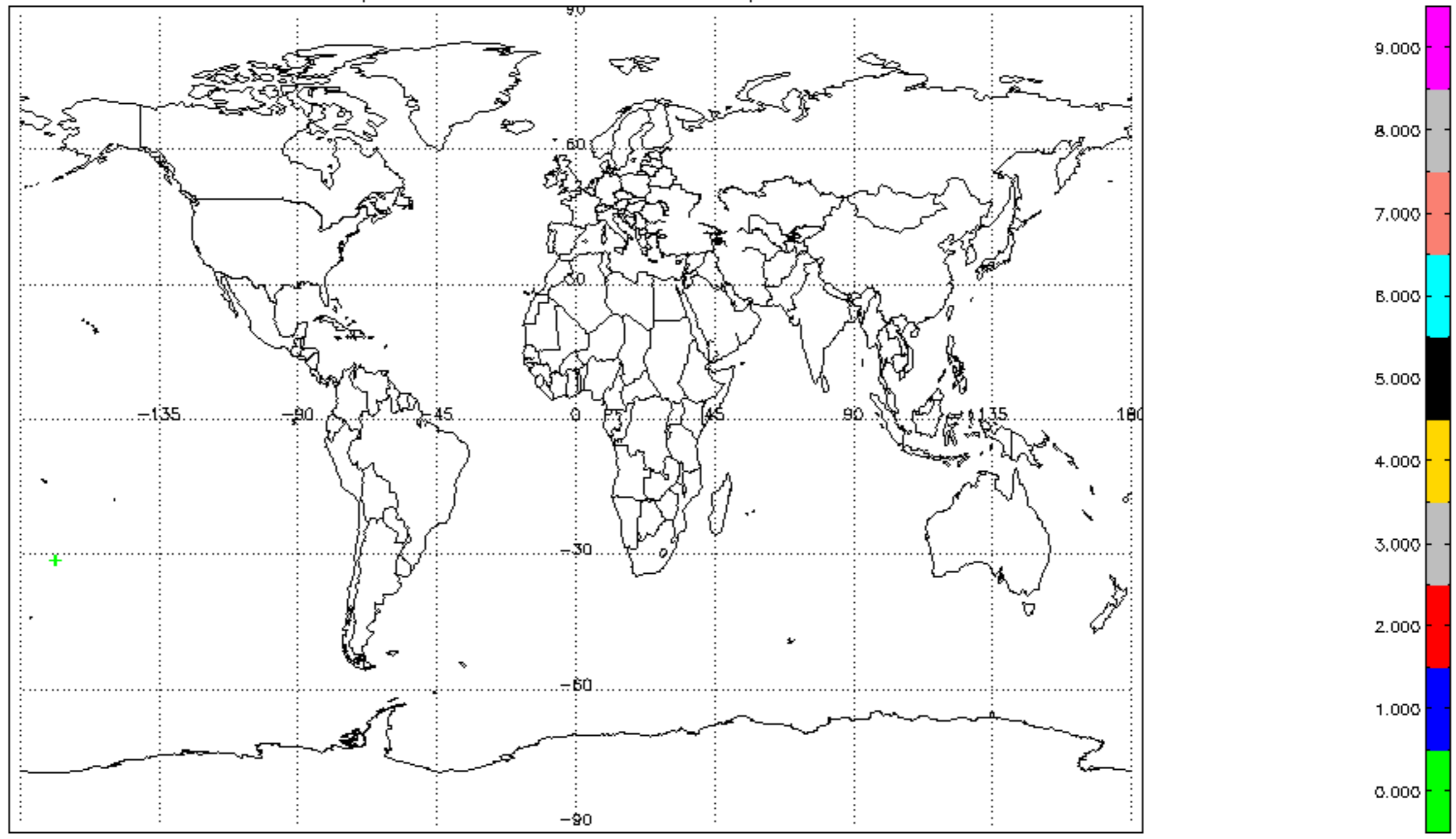


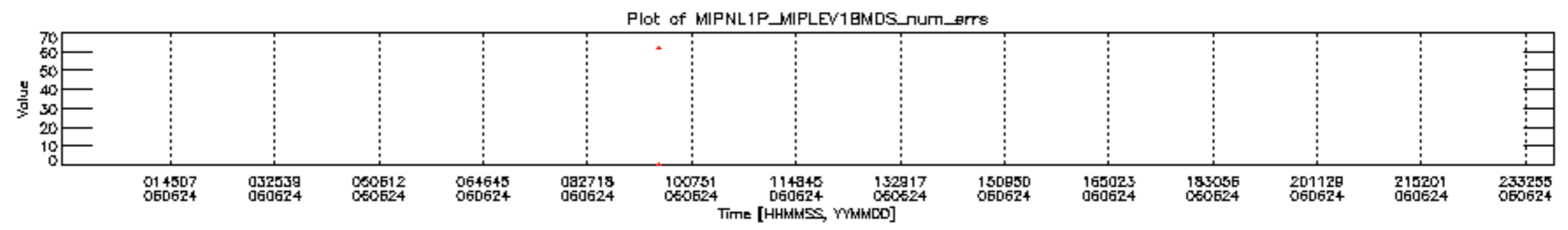
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector C



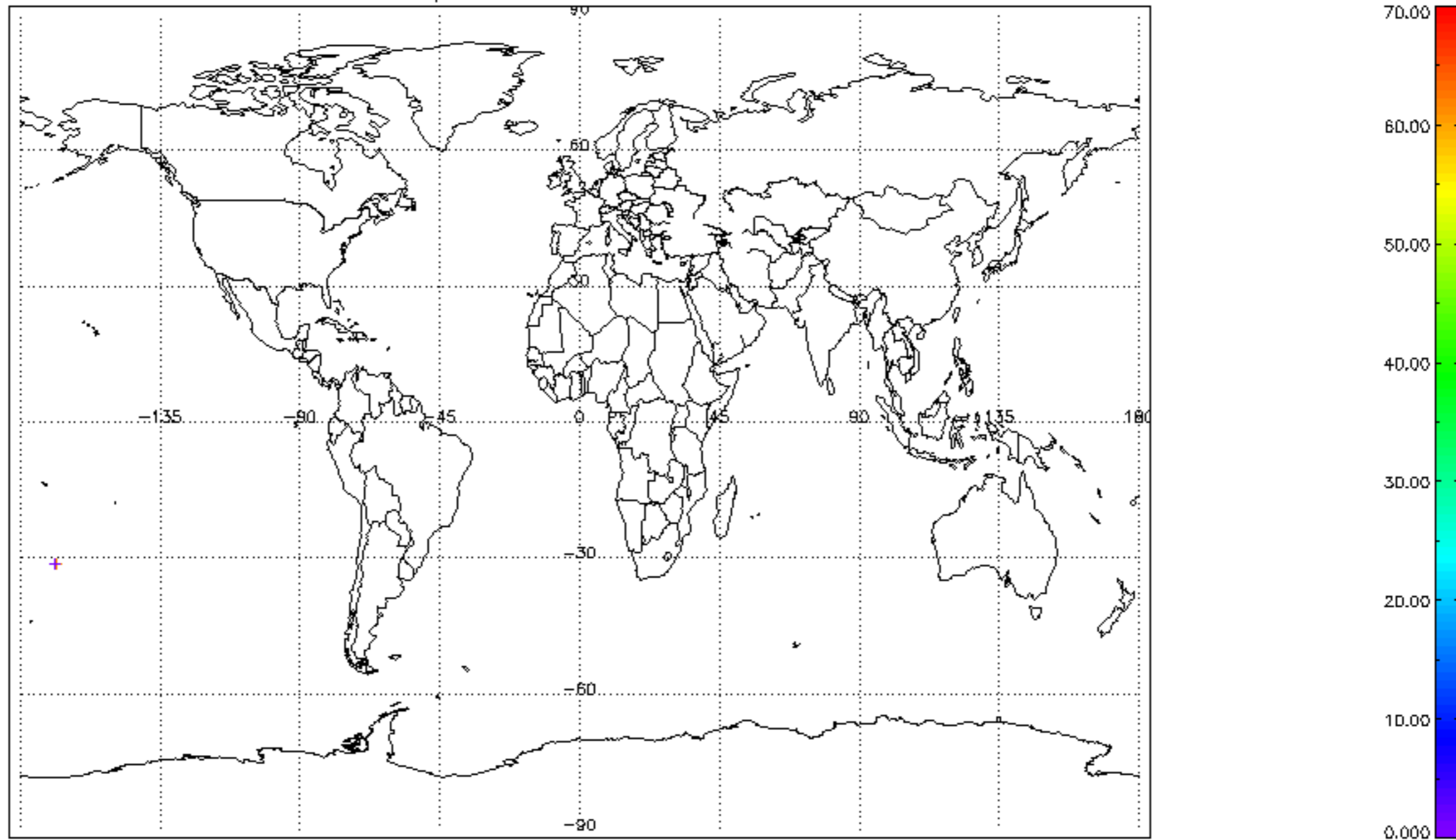


Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_spikes detector D



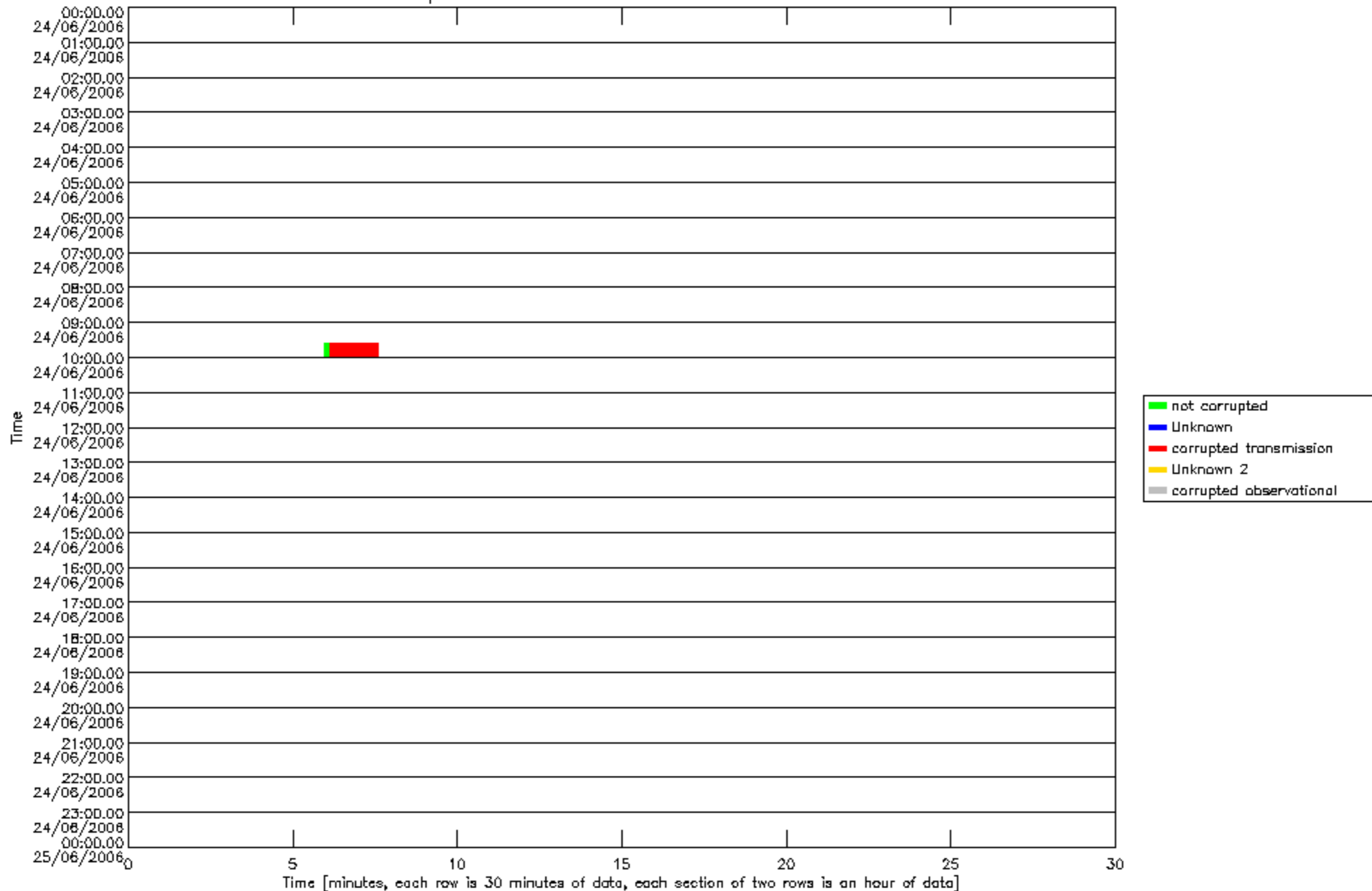


Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_num\_errs

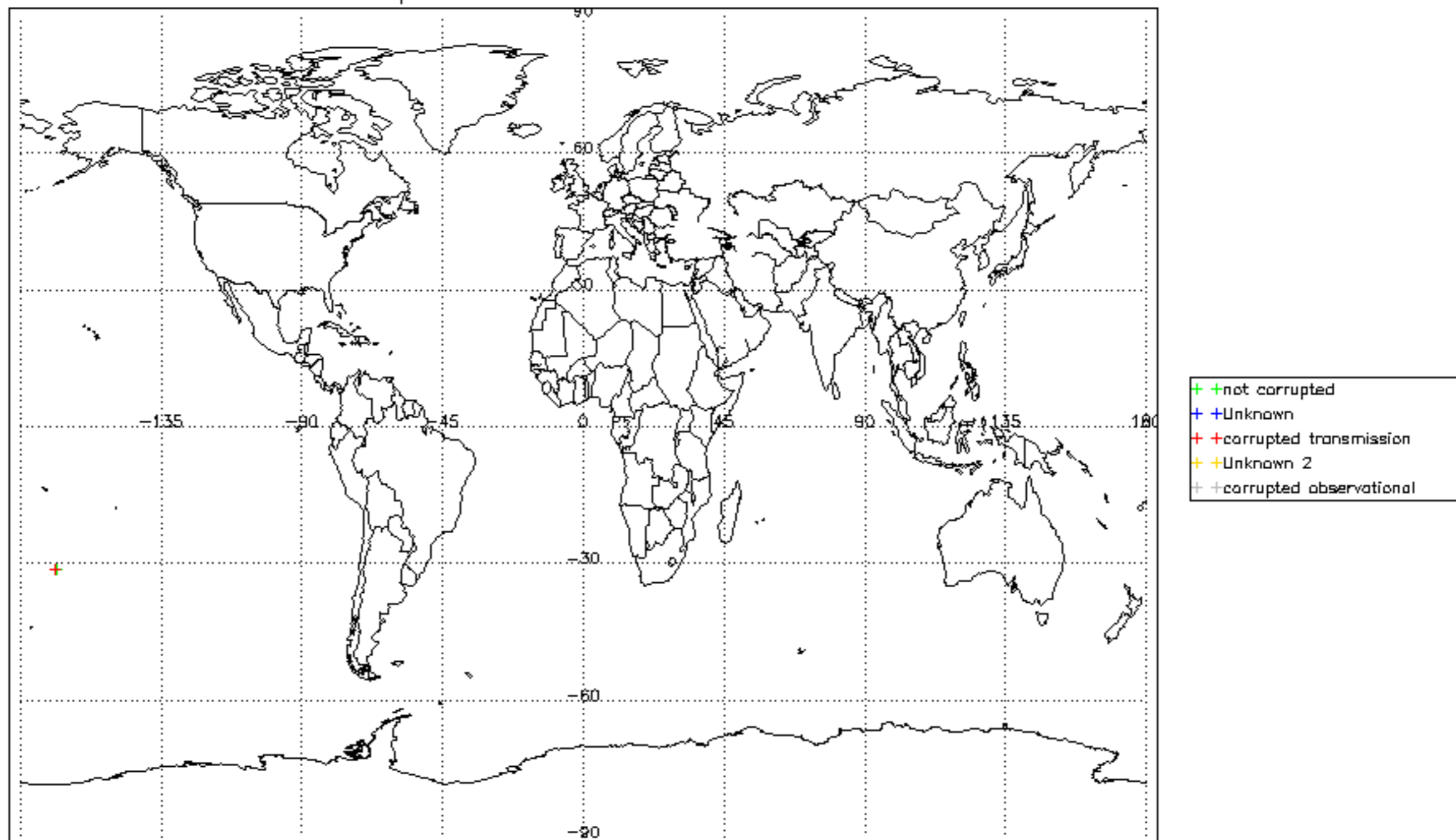




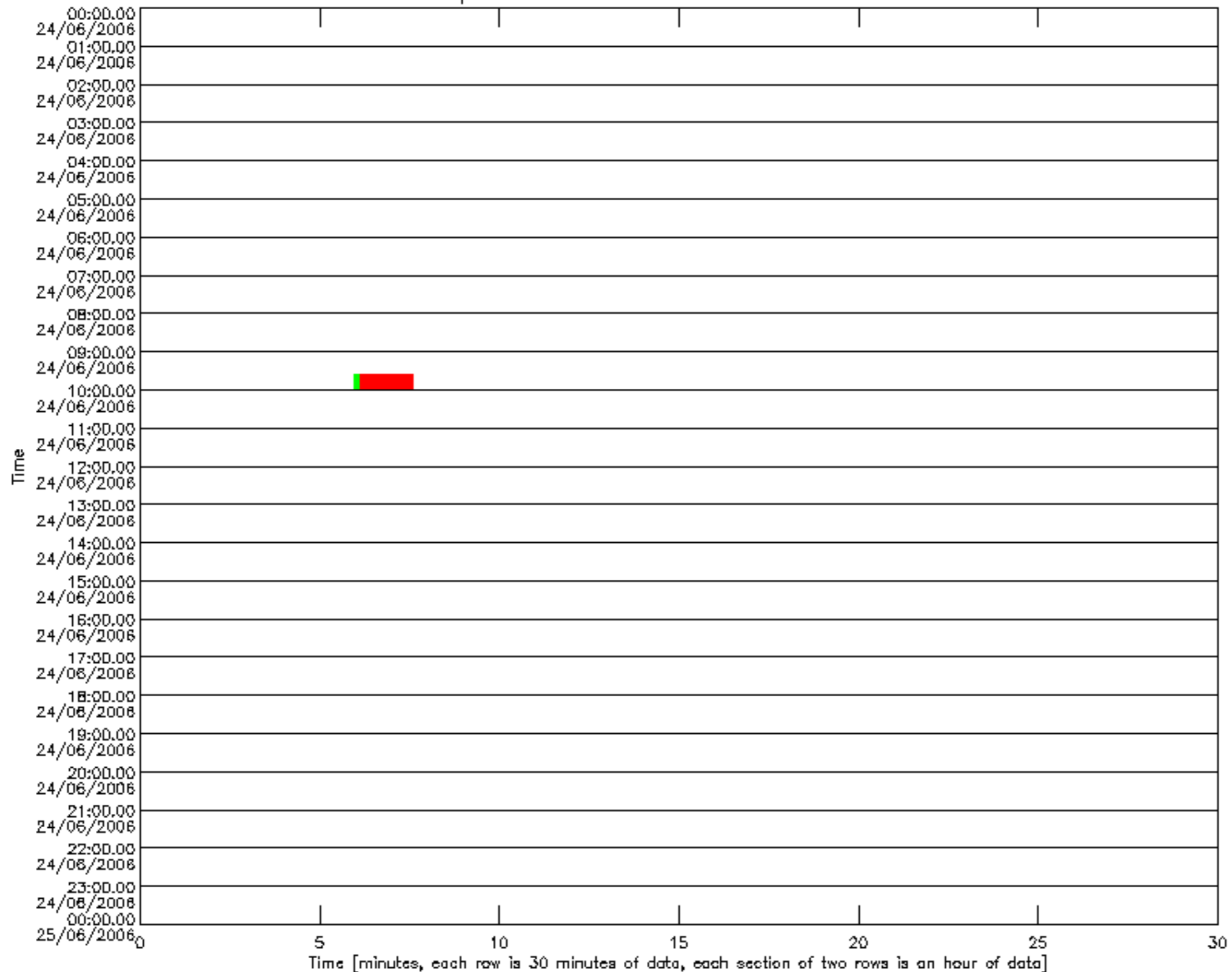
Bar plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band A



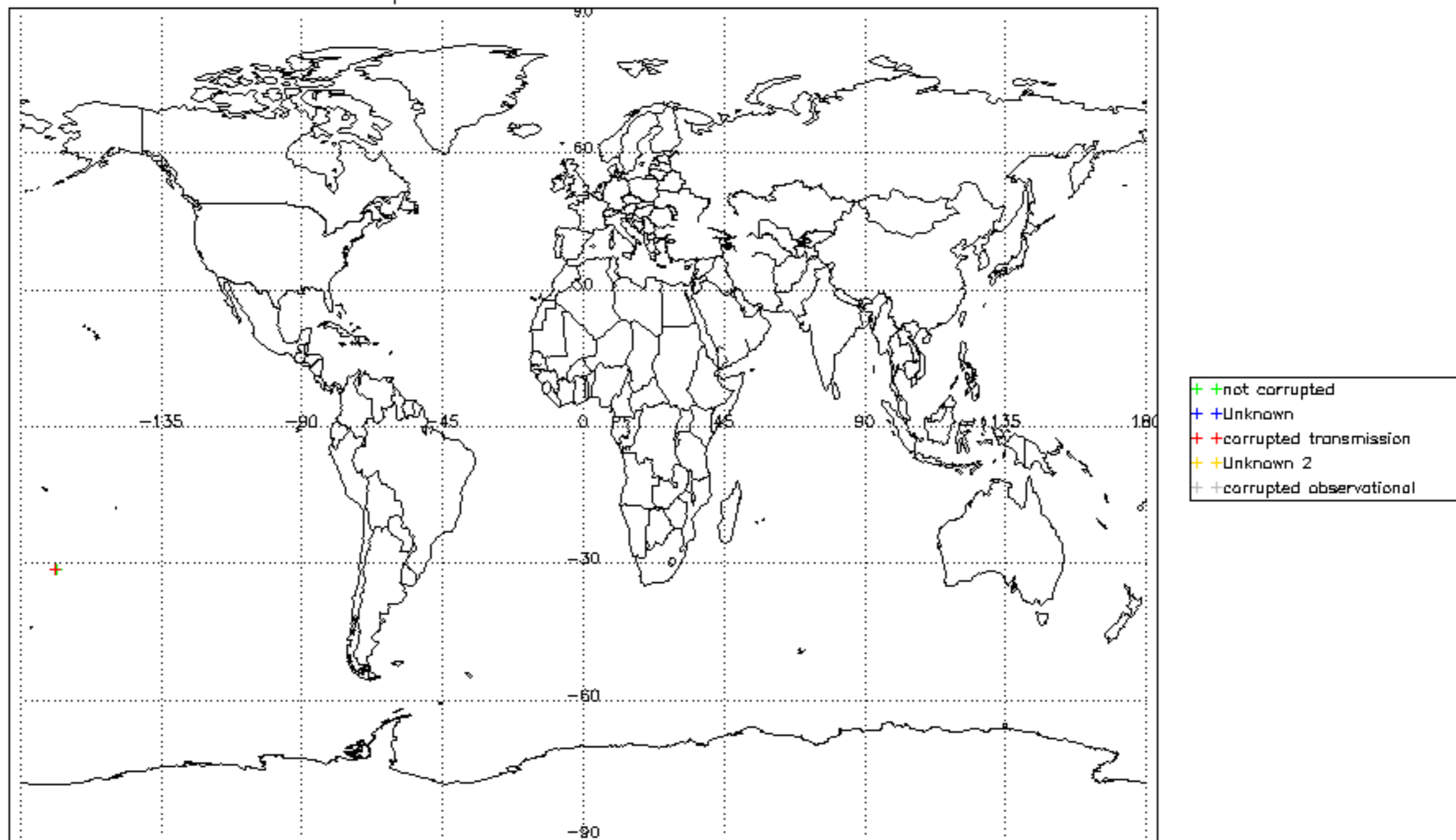
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band A



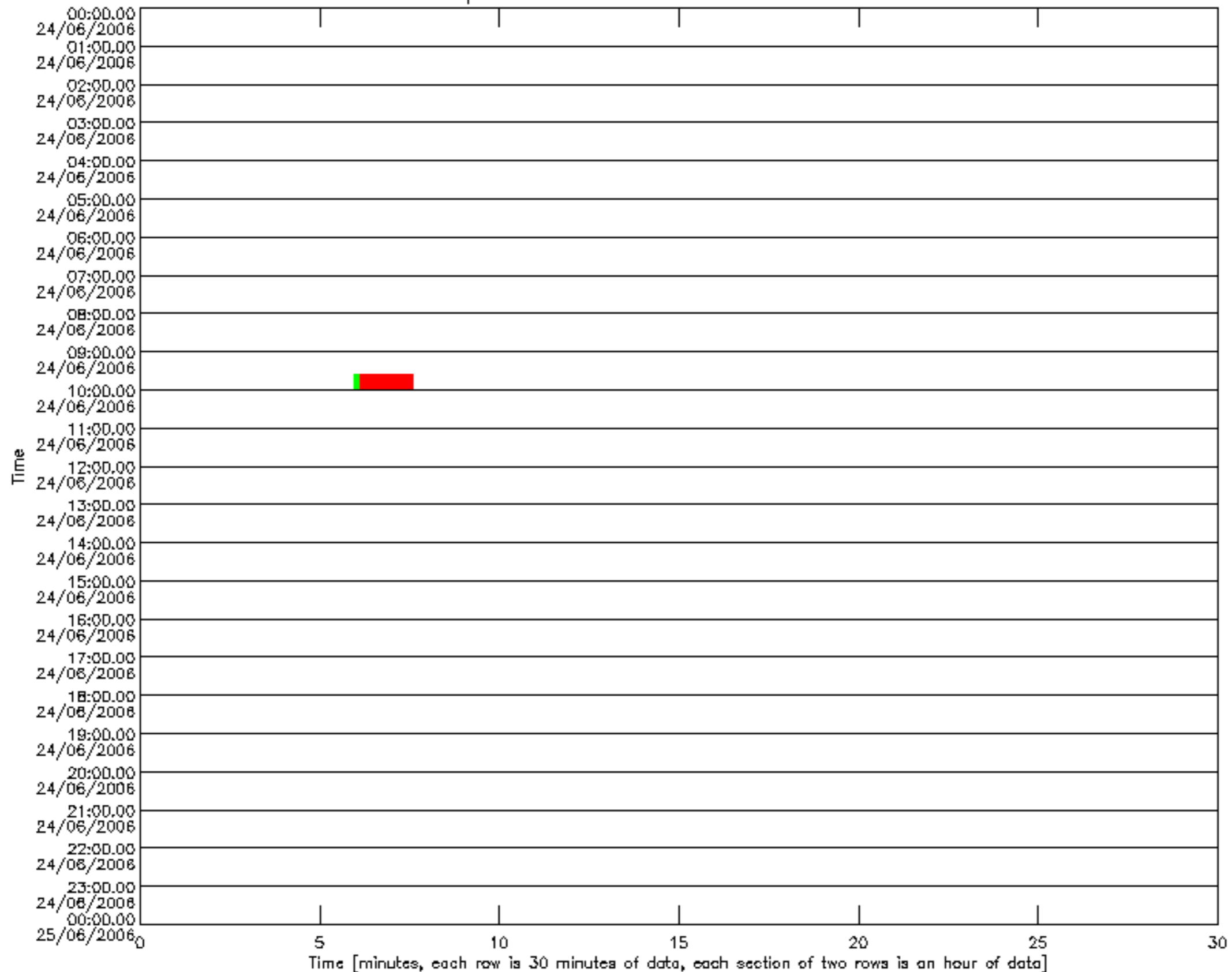
Bar plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band AB



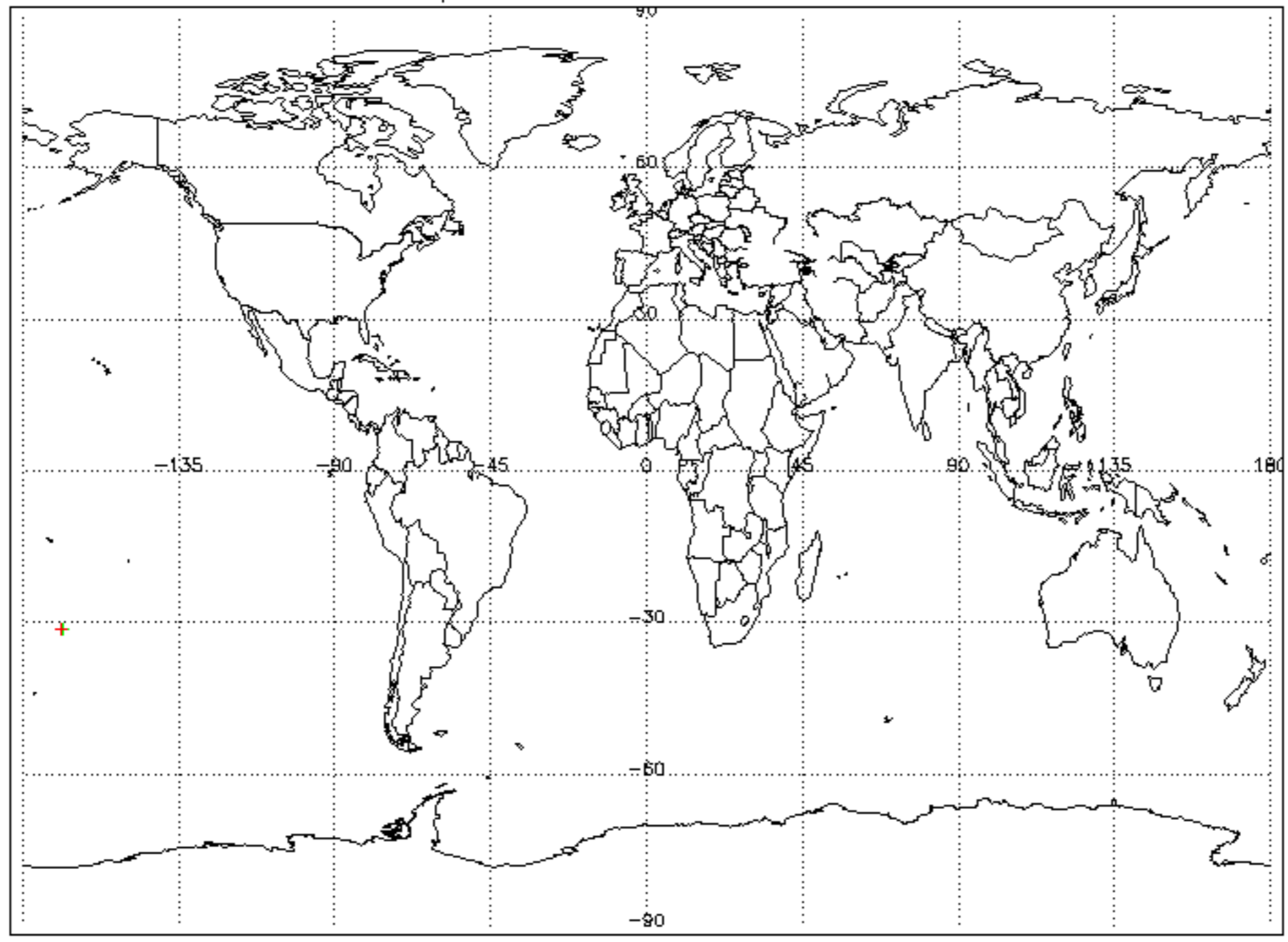
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band AB



Bar plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band B



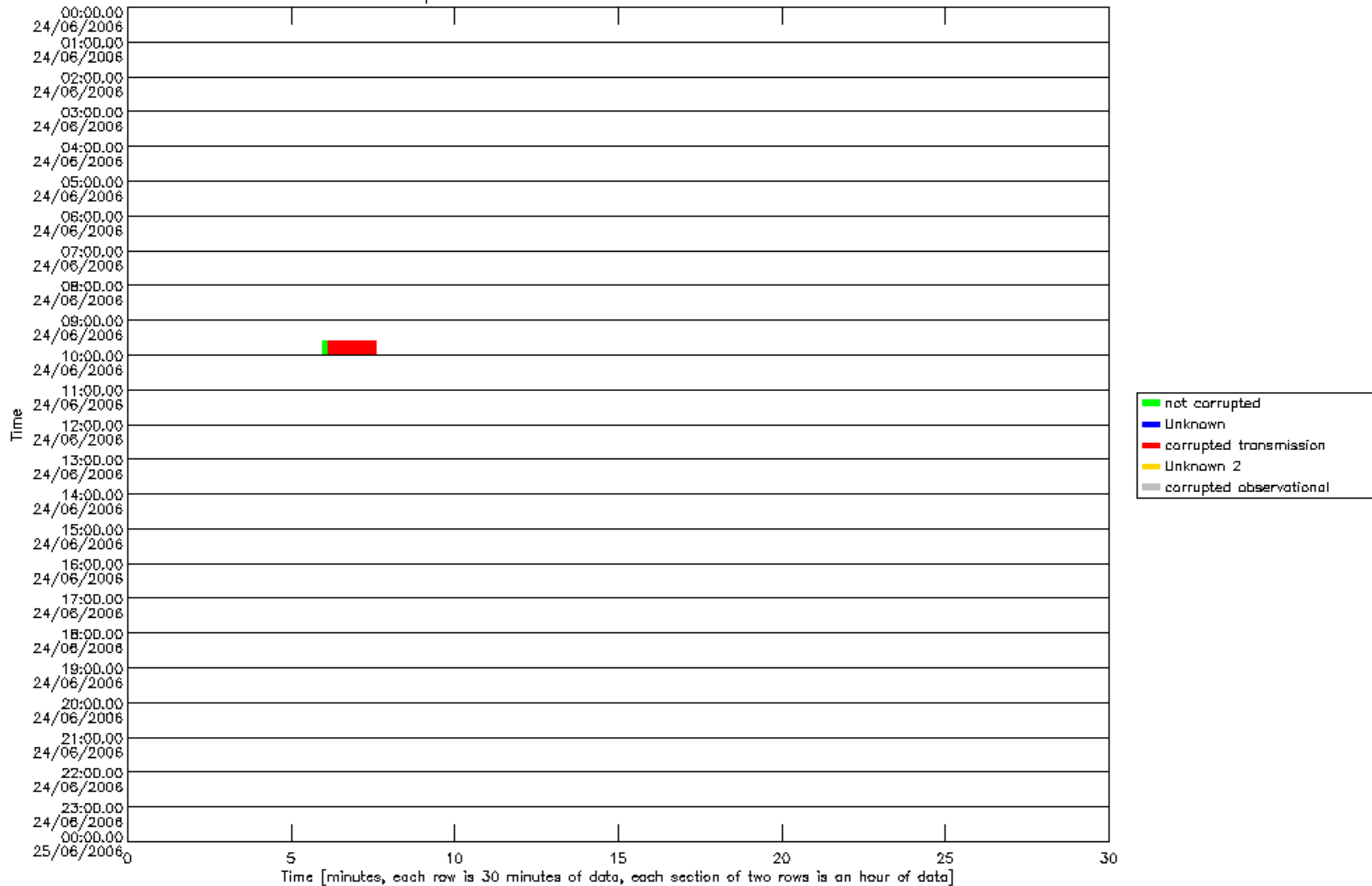
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band B



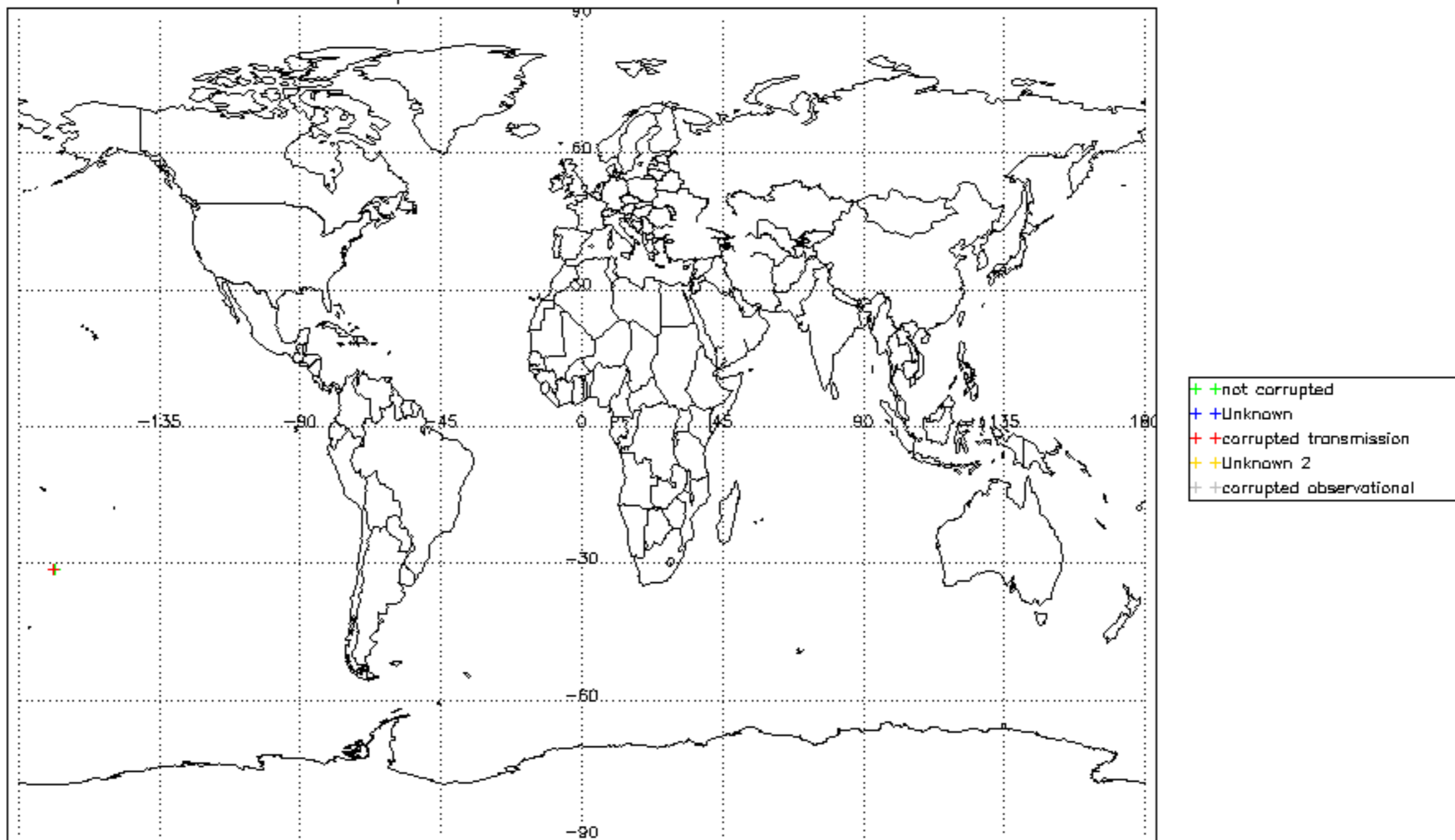
- + not corrupted
- + Unknown
- + corrupted transmission
- + Unknown 2
- + corrupted observational



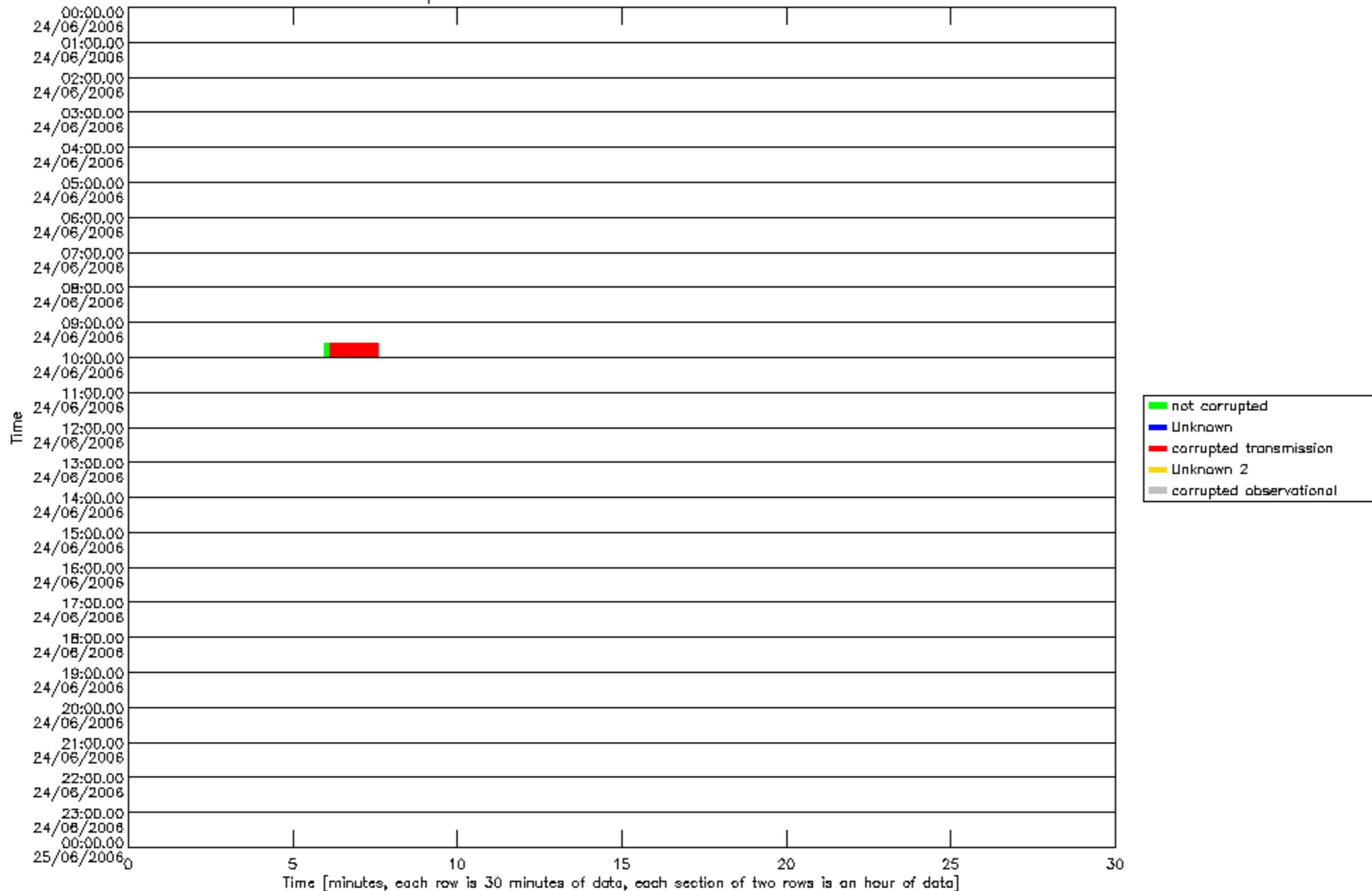
Bar plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band C



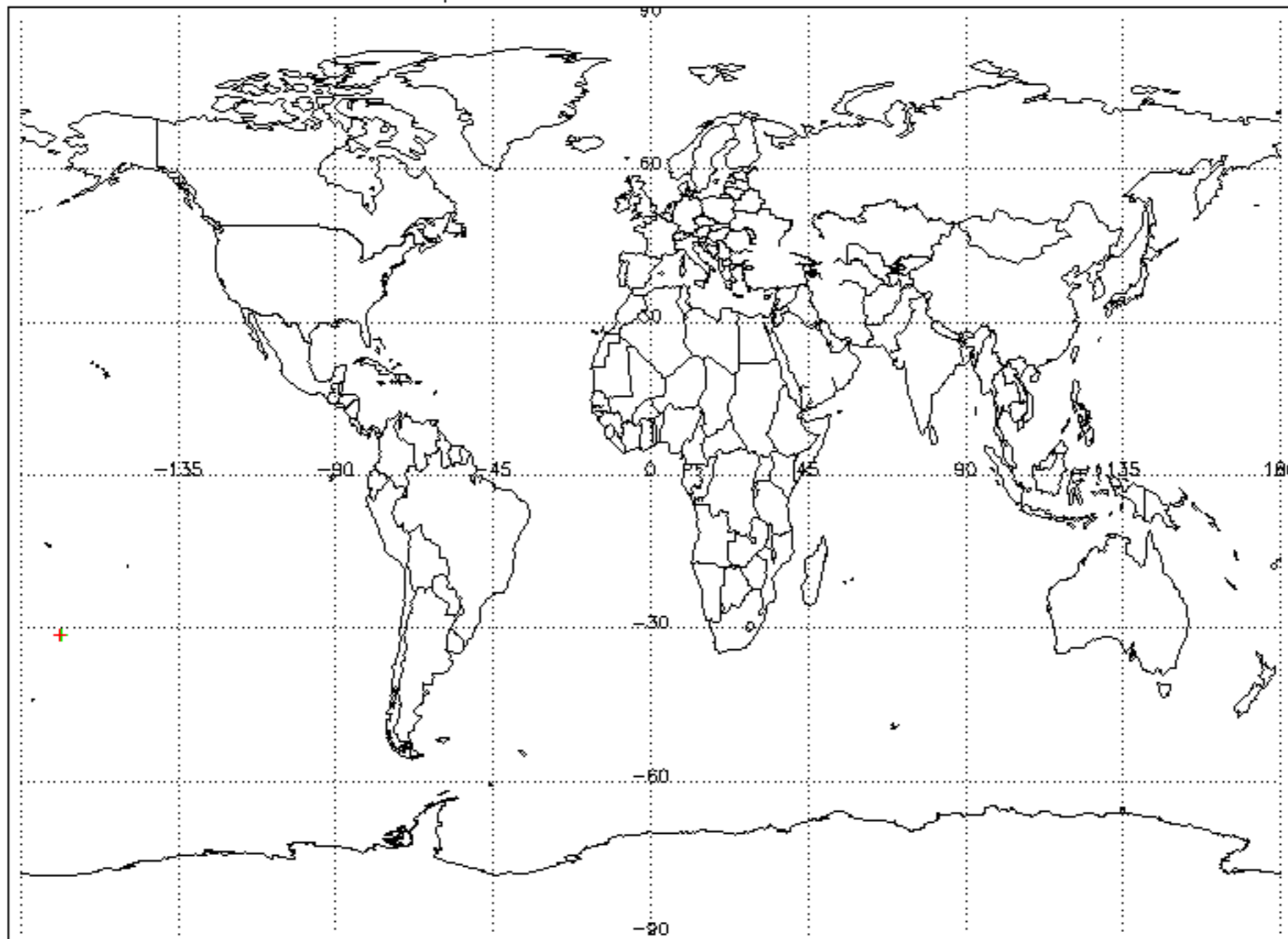
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band C



Bar plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band D

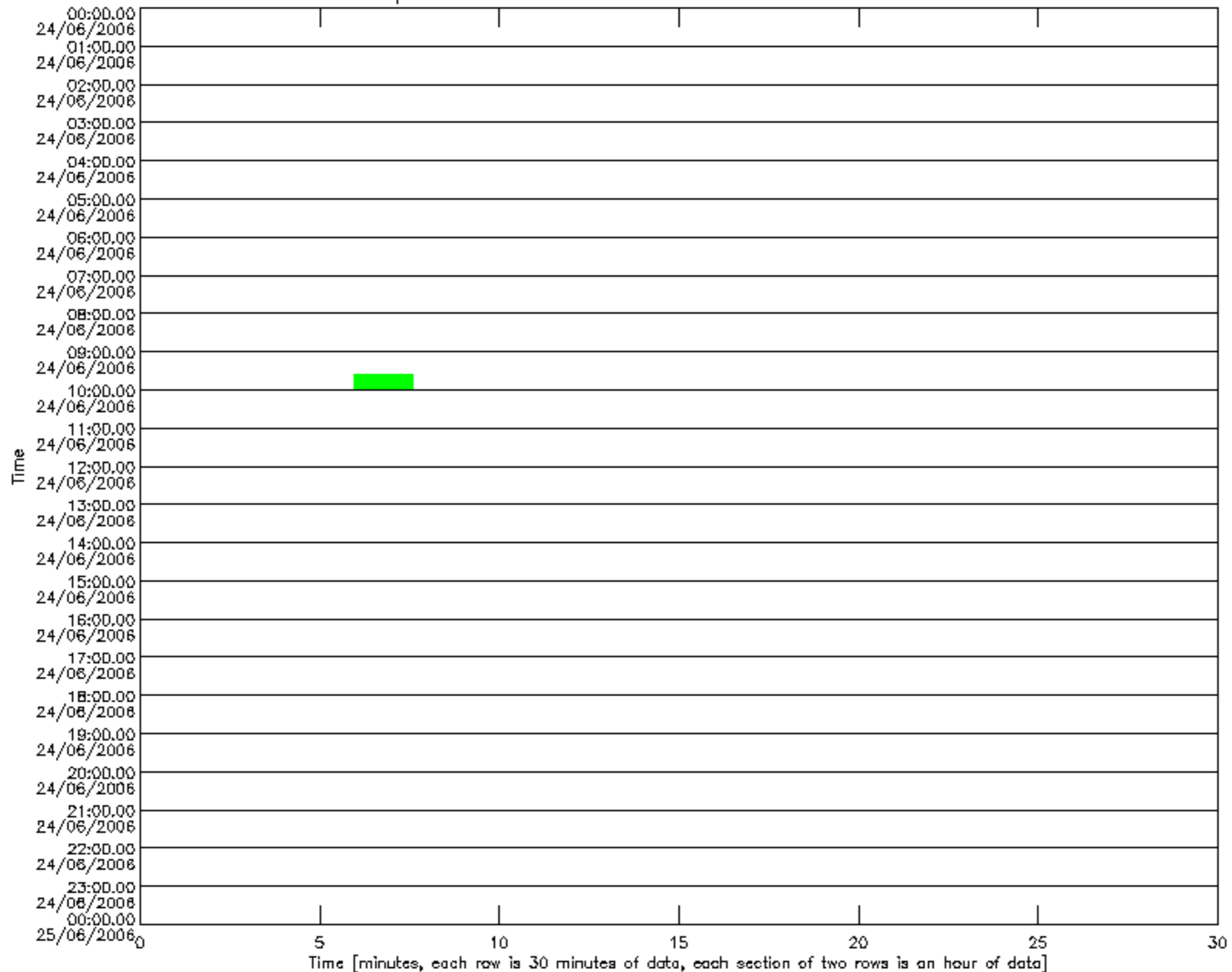


Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_band\_val band D

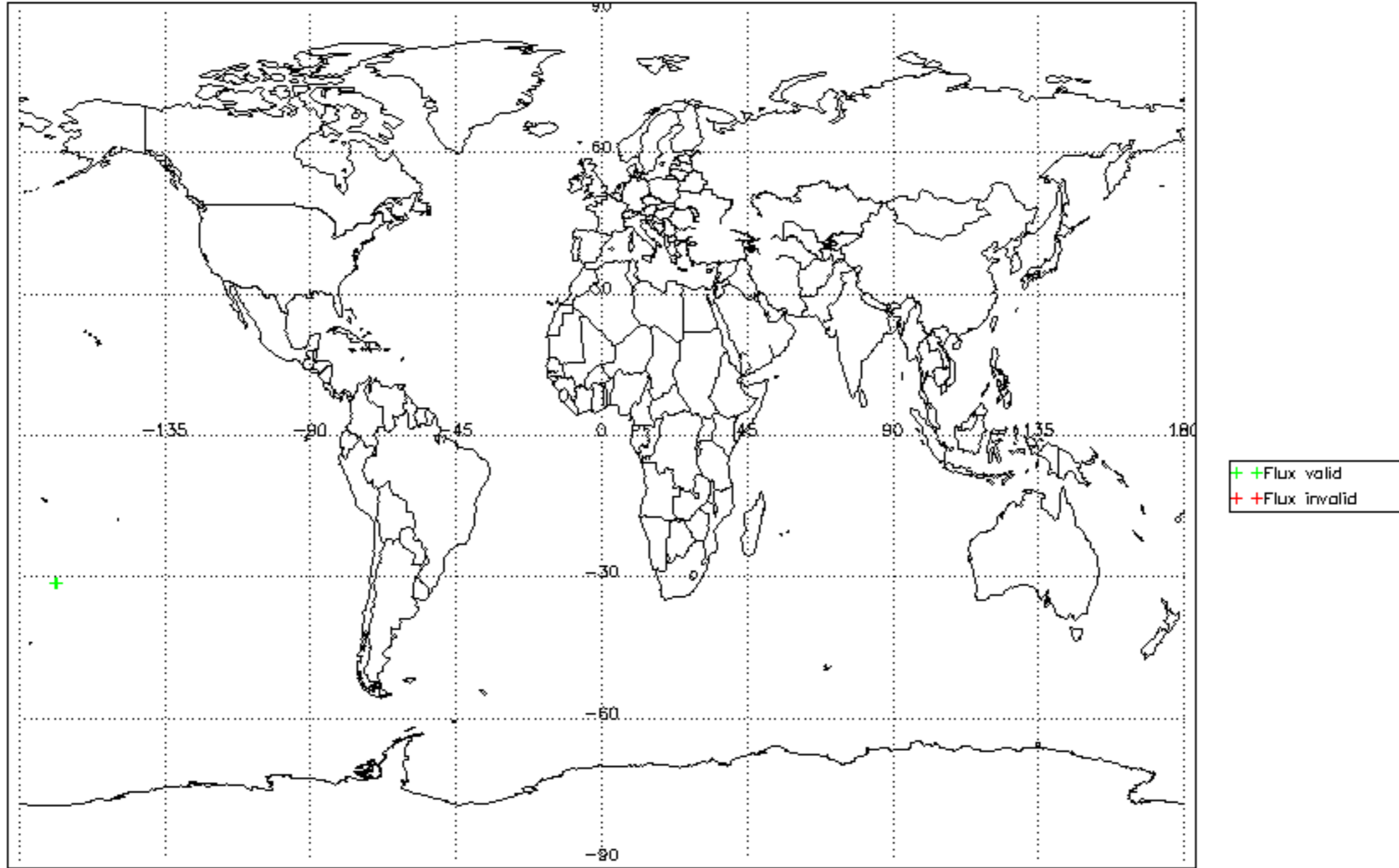


- + not corrupted
- + Unknown
- + corrupted transmission
- + Unknown 2
- + corrupted observational

Bar plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_lin\_flux detector A1

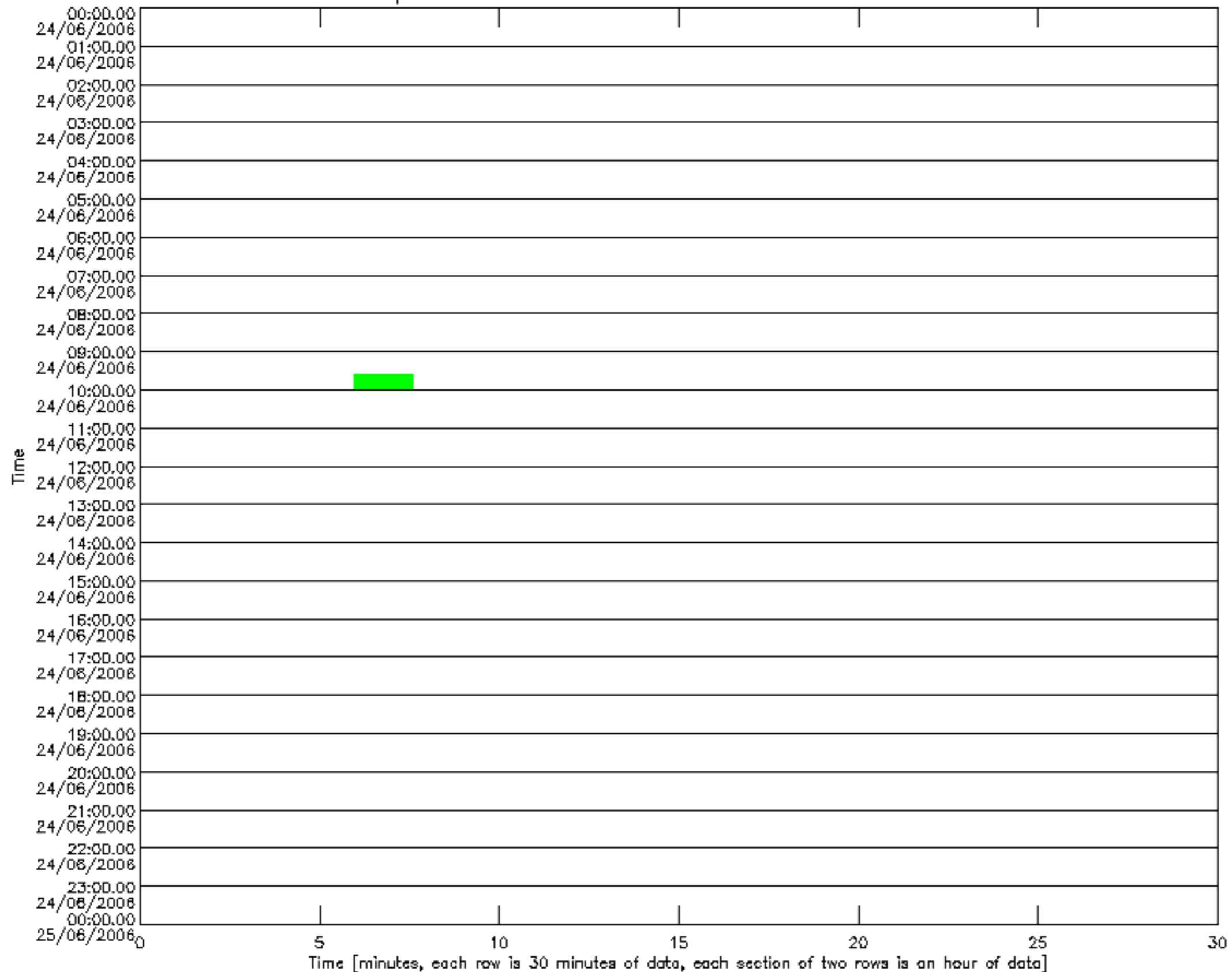


Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_in\_flux detector A1

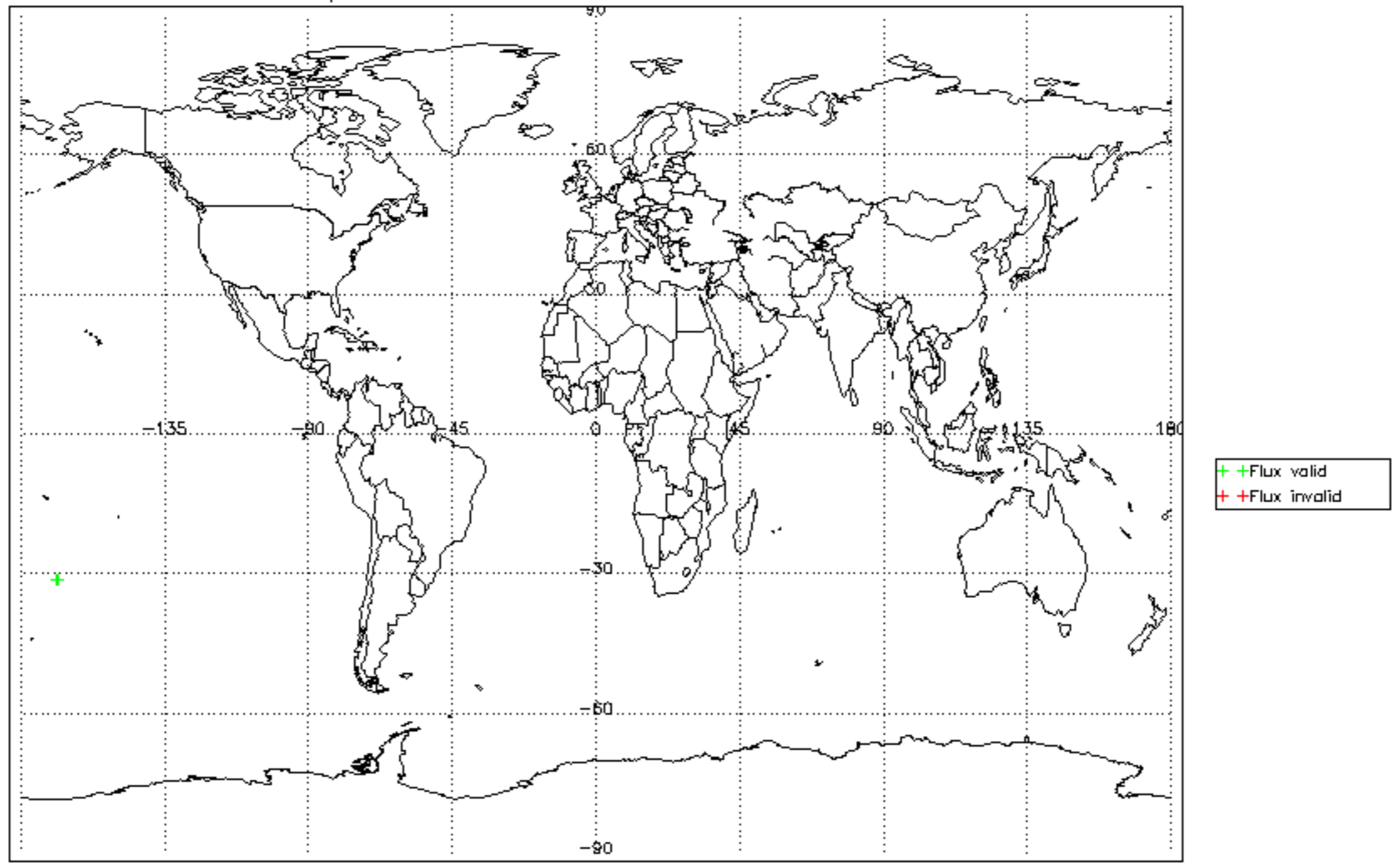




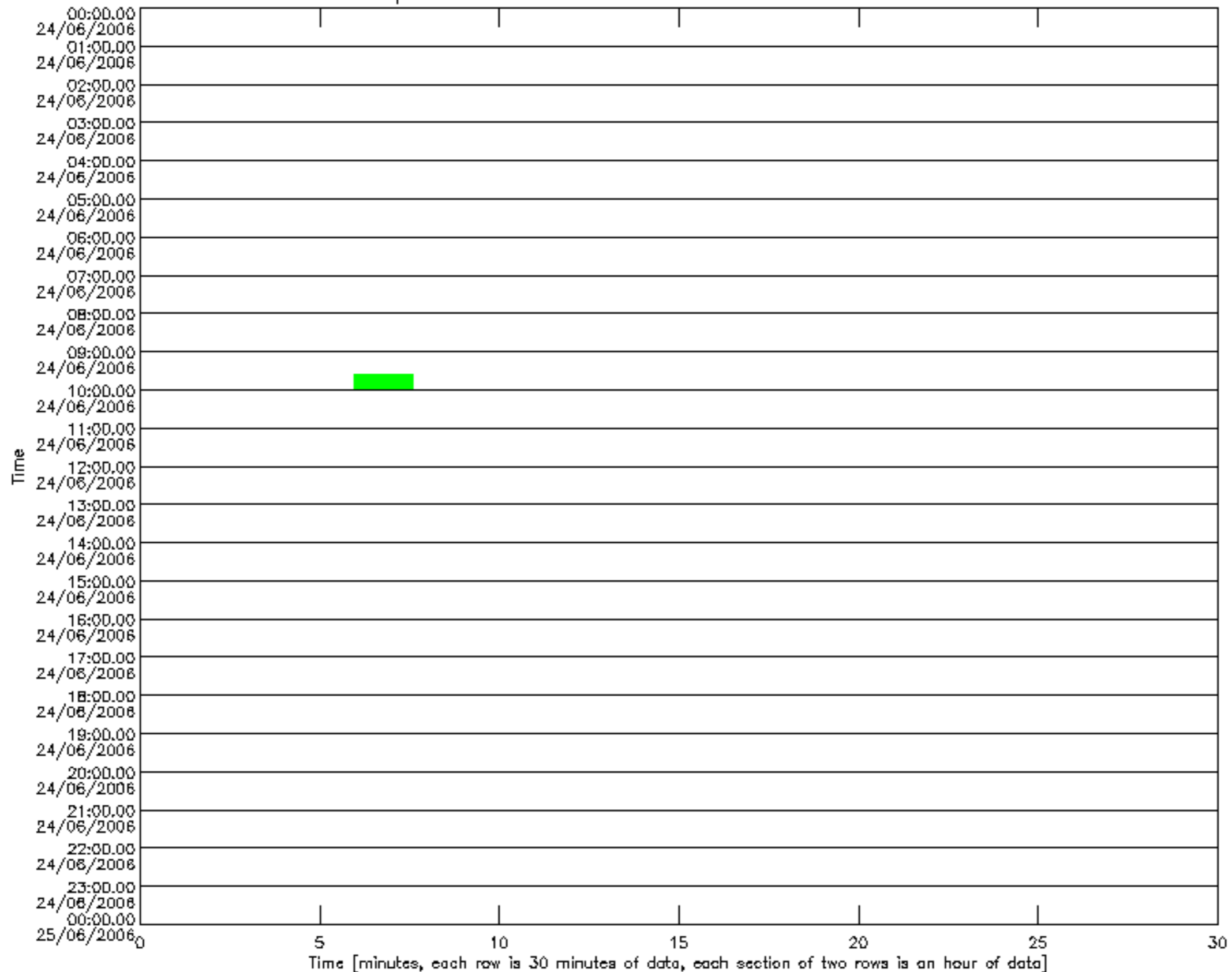
Bar plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_lin\_flux detector A2



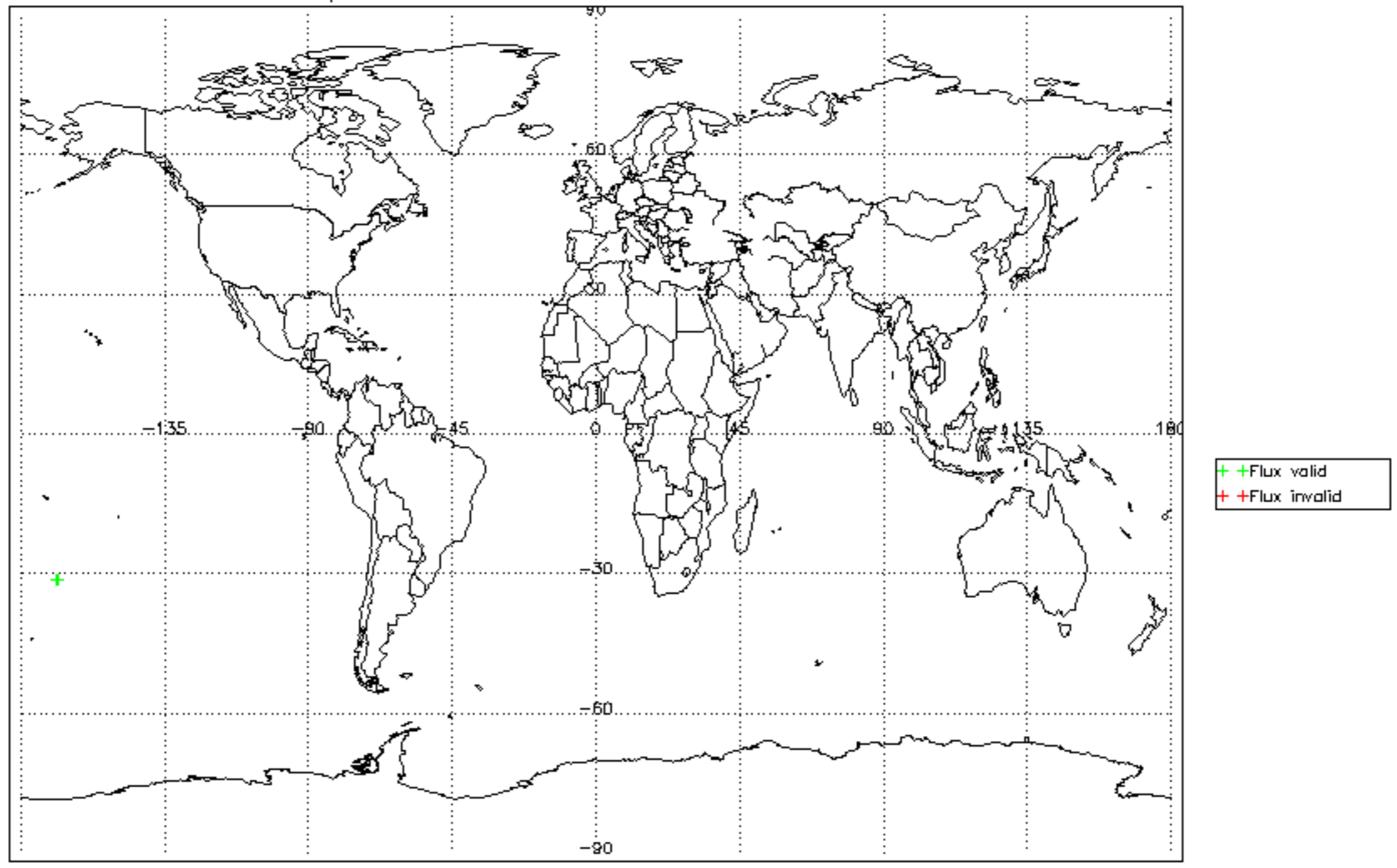
Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_in\_flux detector A2



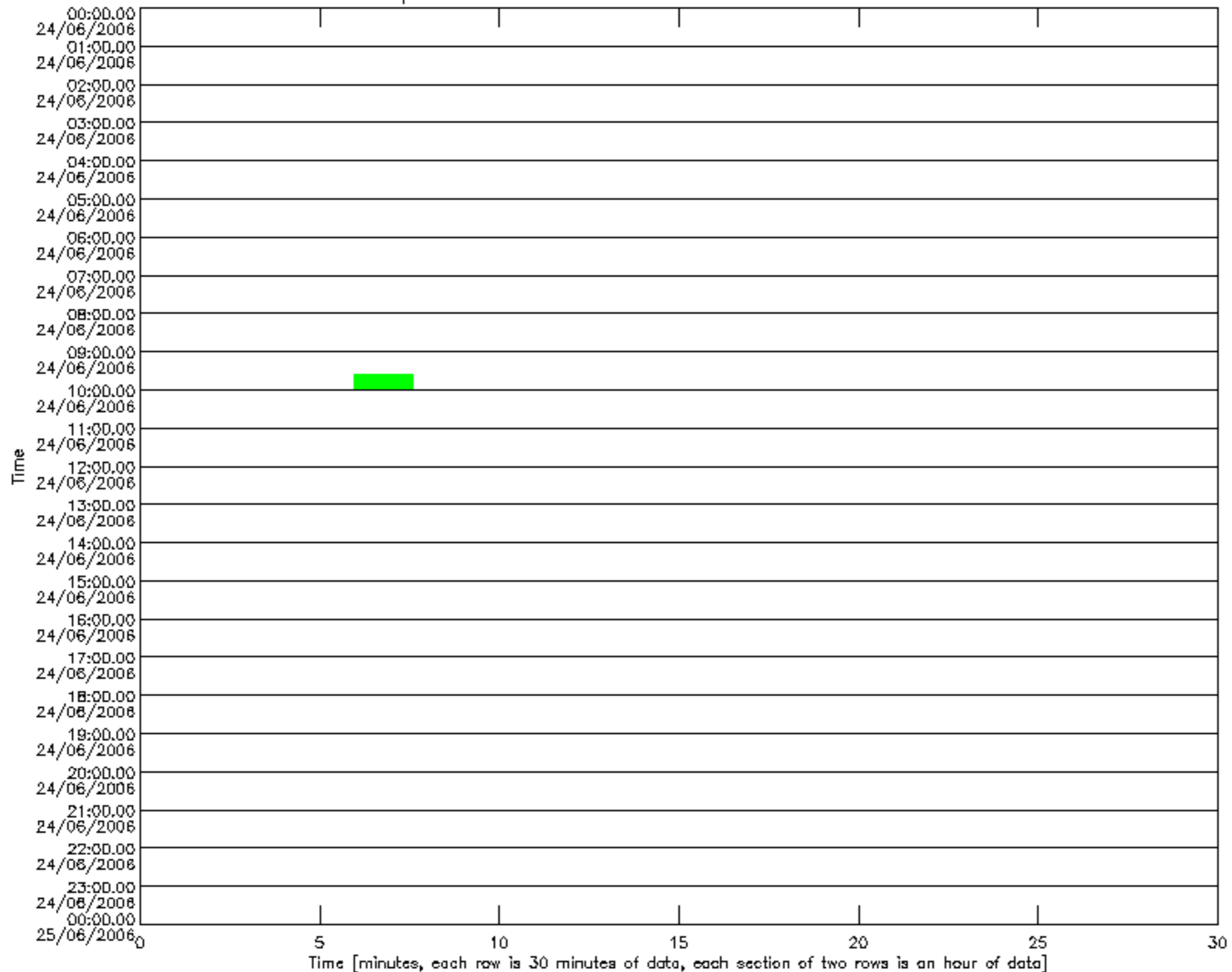
Bar plot of MIPNL1P\_MIPLEV1 BMDS\_detect\_non\_lin\_flux detector AB



Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_lin\_flux detector AB

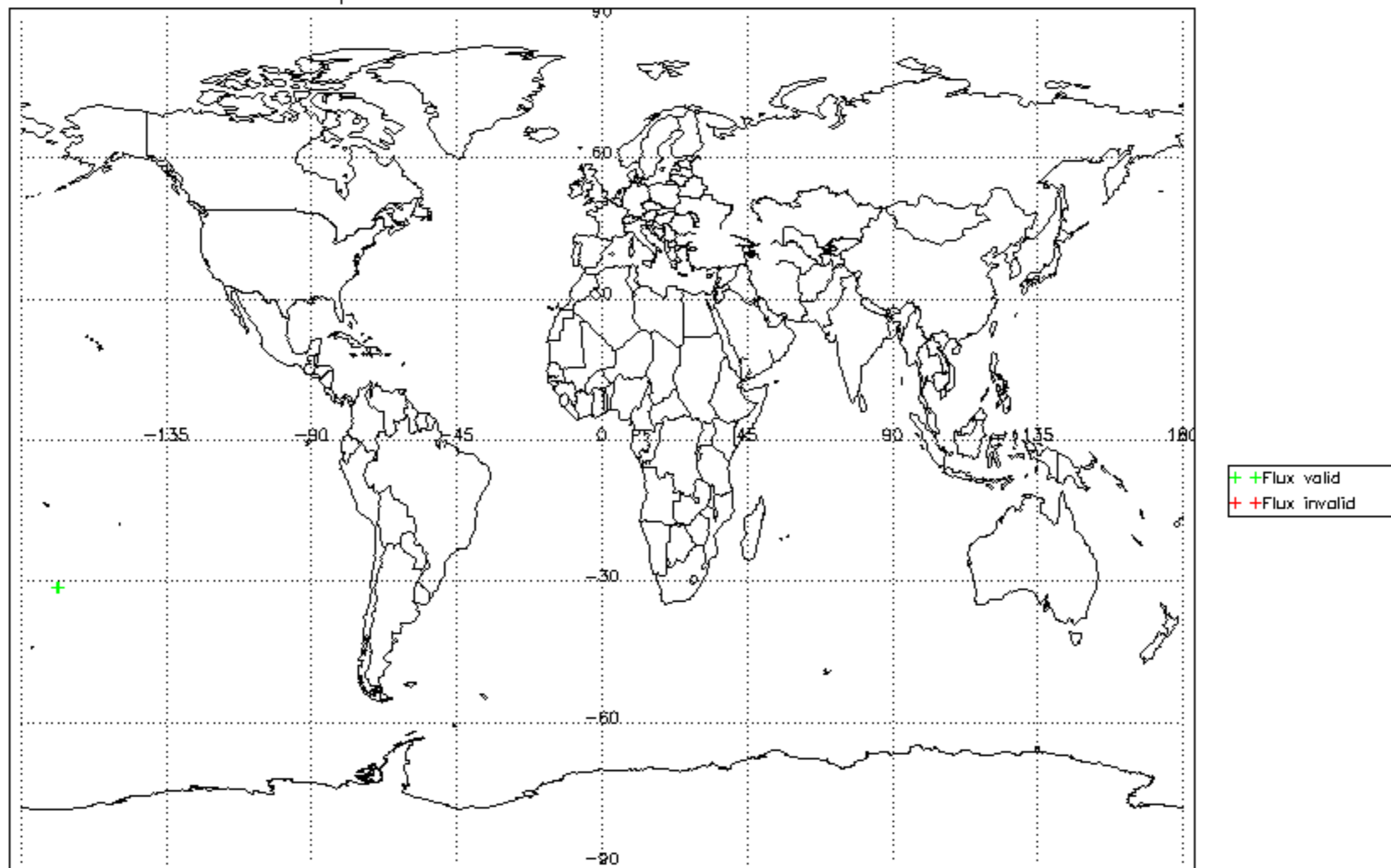


Bar plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_in\_flux detector B



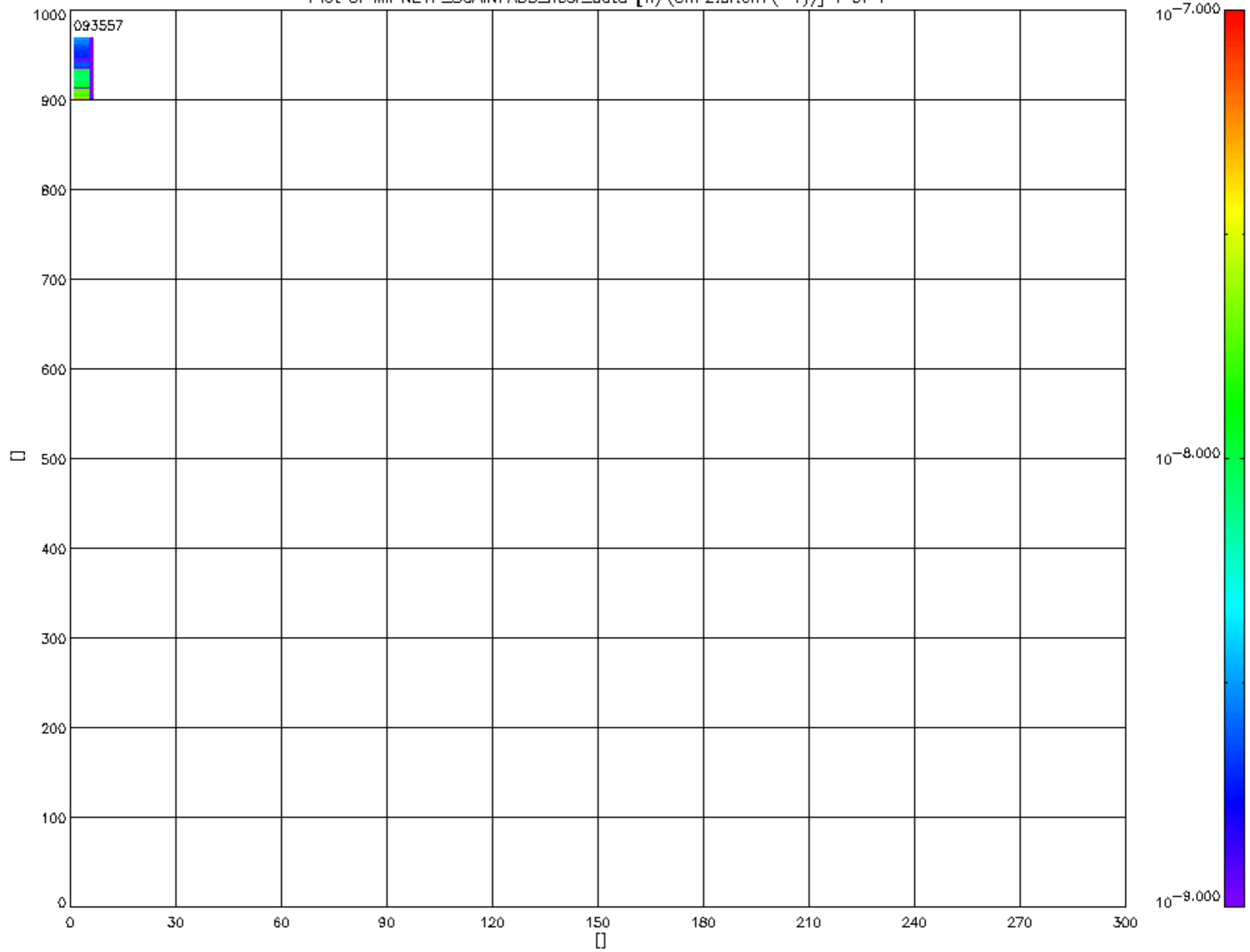
■ Flux valid  
■ Flux invalid

Geolocation plot of MIPNL1P\_MIPLEV1BMDS\_detect\_non\_in\_flux detector B

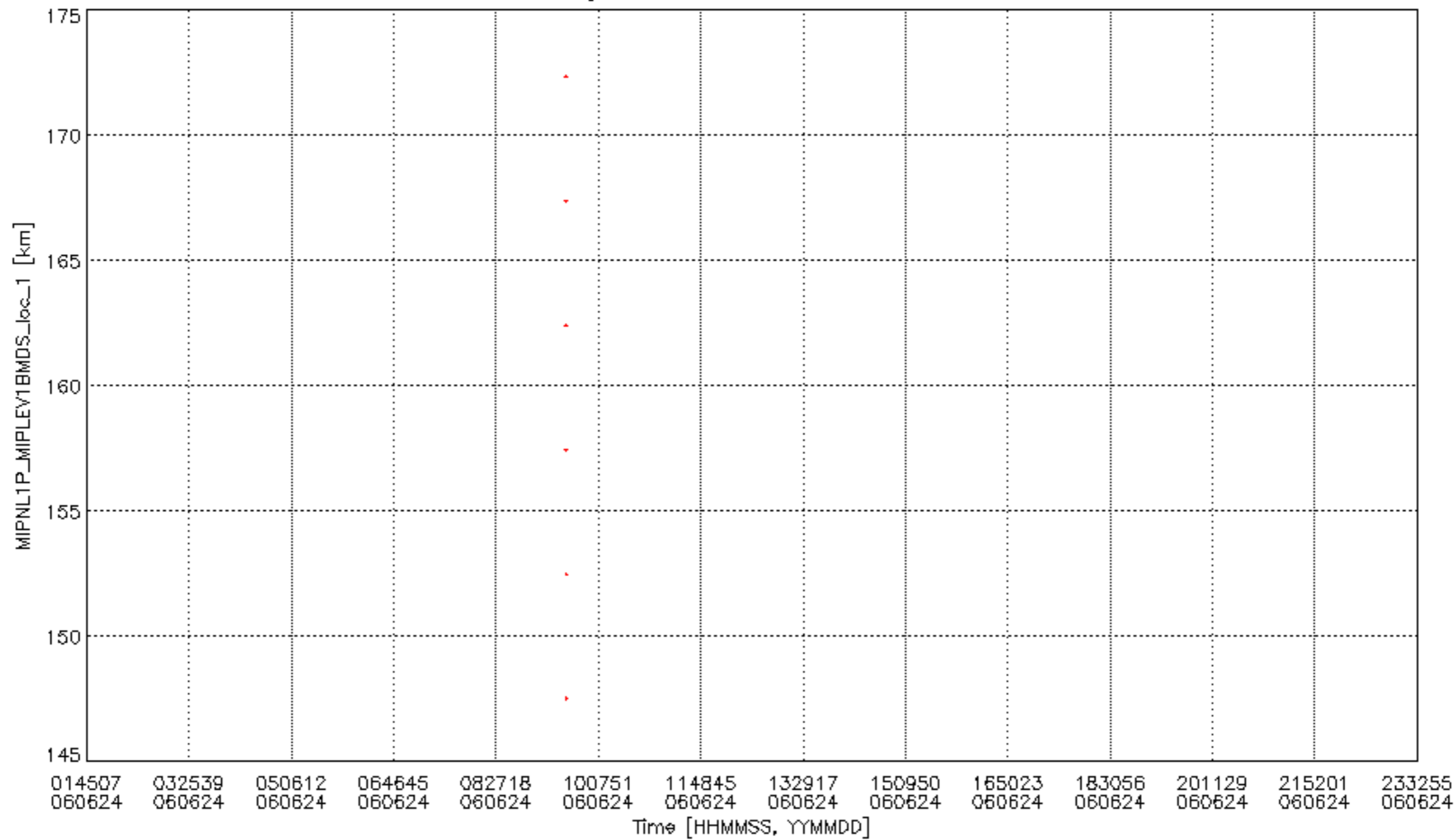




Plot of MIPNL1P\_SCAINFADS\_nesr\_data [W/(cm<sup>2</sup>.sr.cm<sup>-1</sup>)] 1 of 1



Plot of MIPNL1P\_MIPLEV1BMDS\_loc\_1 against time.  
The vertical grid lines indicate estimated anx events.



Plot of MIPNL1P\_MIPLEV1BMDS\_Joc\_1 against relative time within orbit.  
 The colours indicate distinct orbits (see legend for anx).

