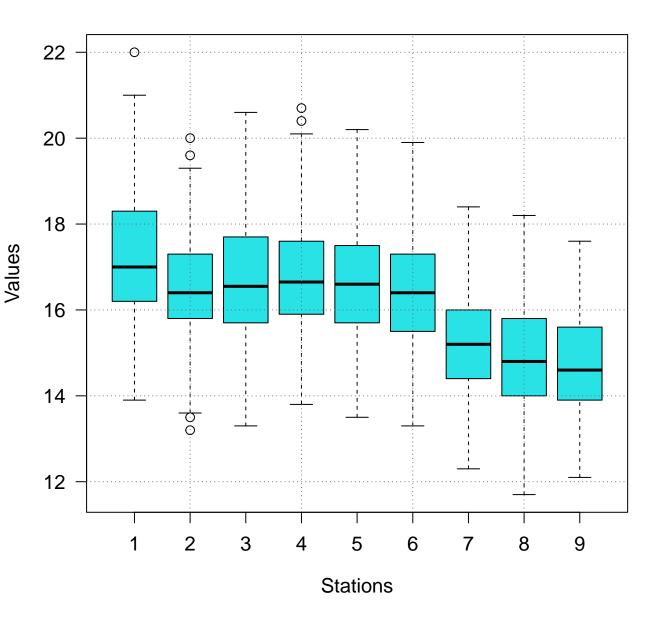
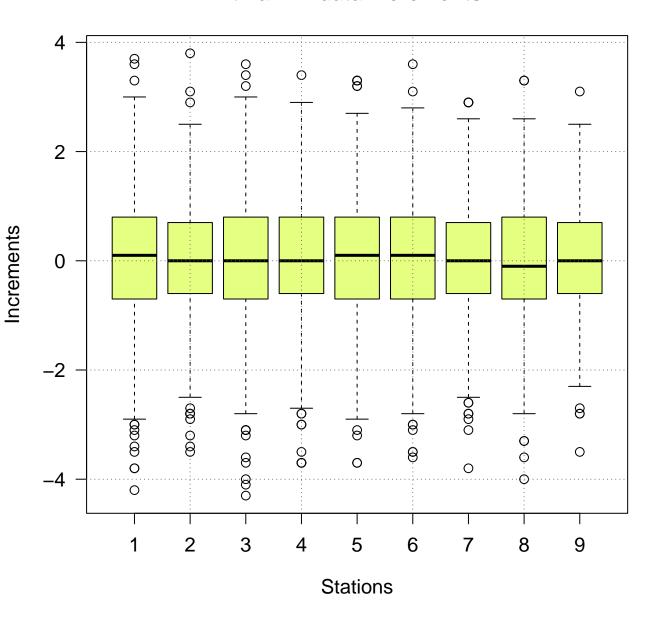
## CLIMATOL 4.0.0

Homogenization graphic output of tmax–m 1965–2019

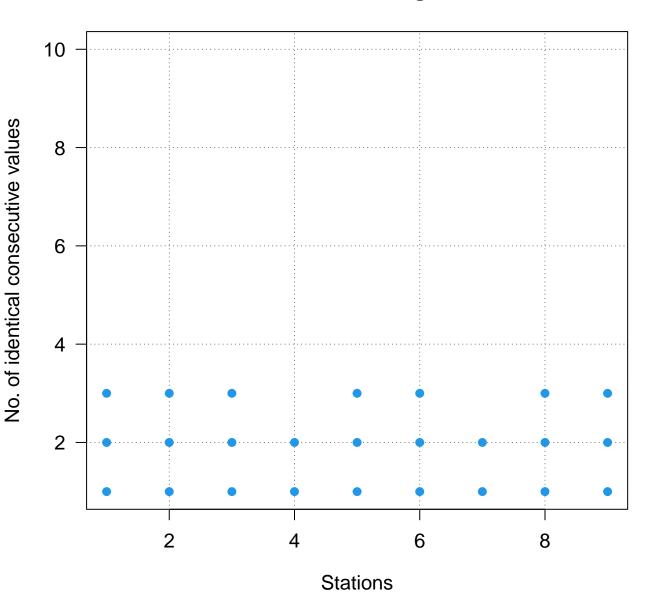
### tmax-m data



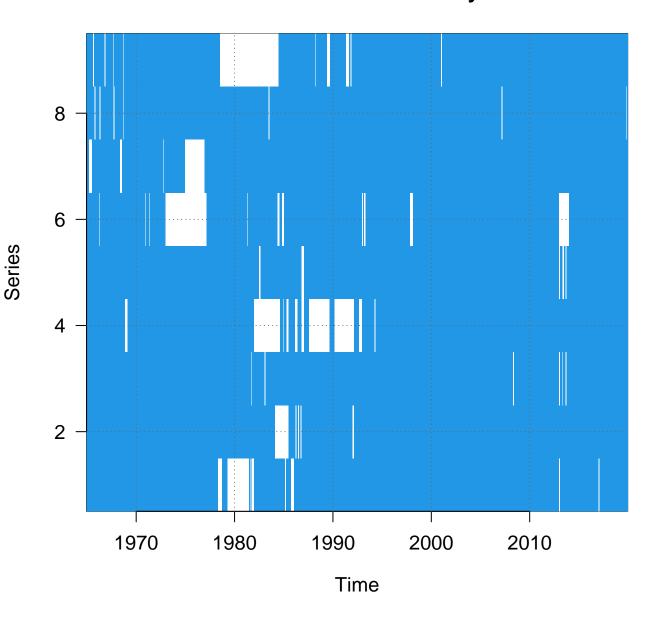
#### tmax-m data increments



## tmax-m run lengths



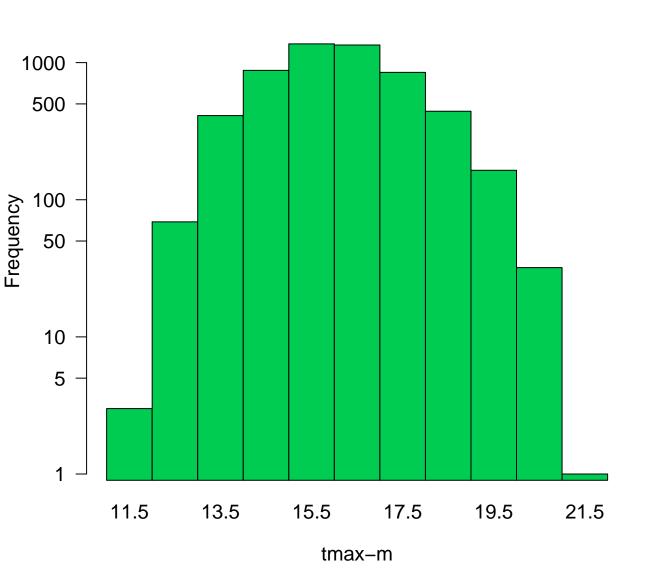
## tmax-m data availability



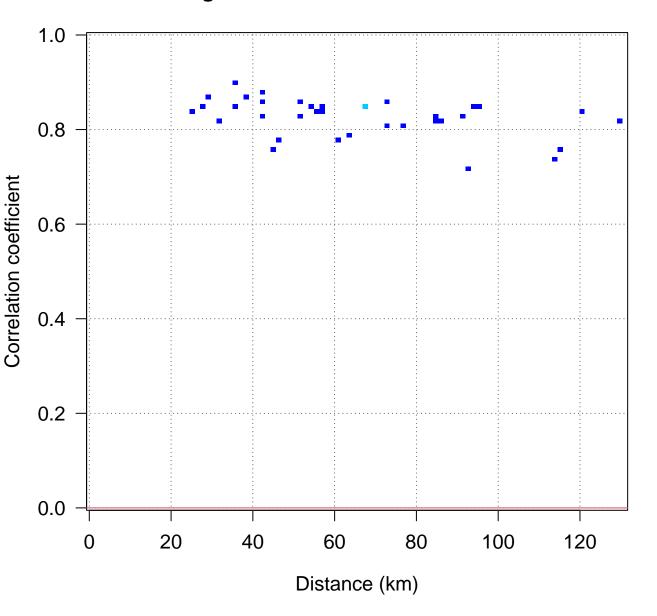
Time

Number of data

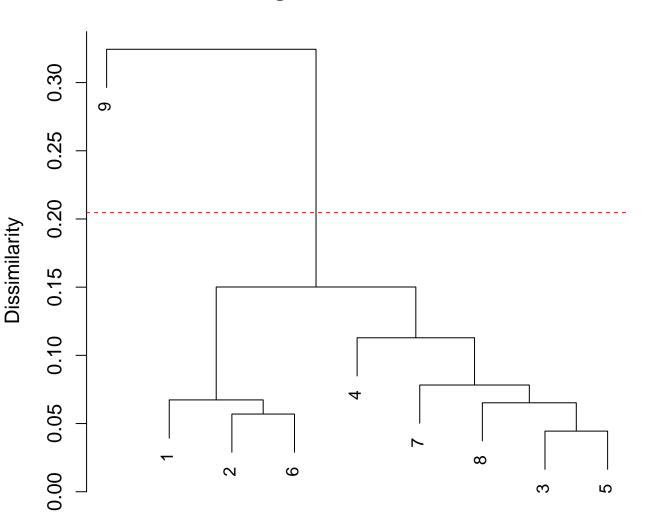
## Histogram of all data



#### Correlogram of first difference tmax-m series

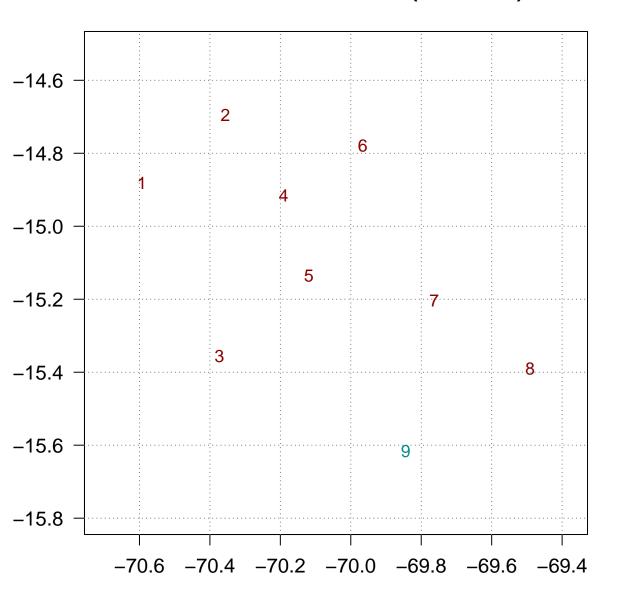


## **Dendrogram of station clusters**



**Stations** 

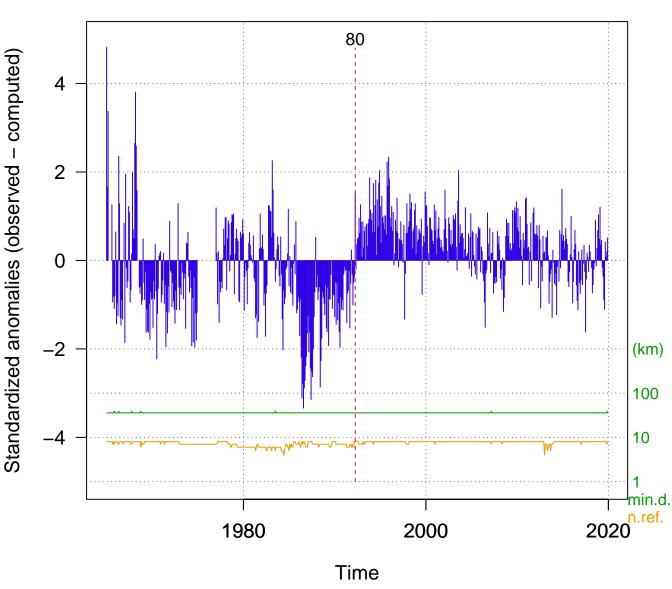
#### tmax-m station locations (2 clusters)



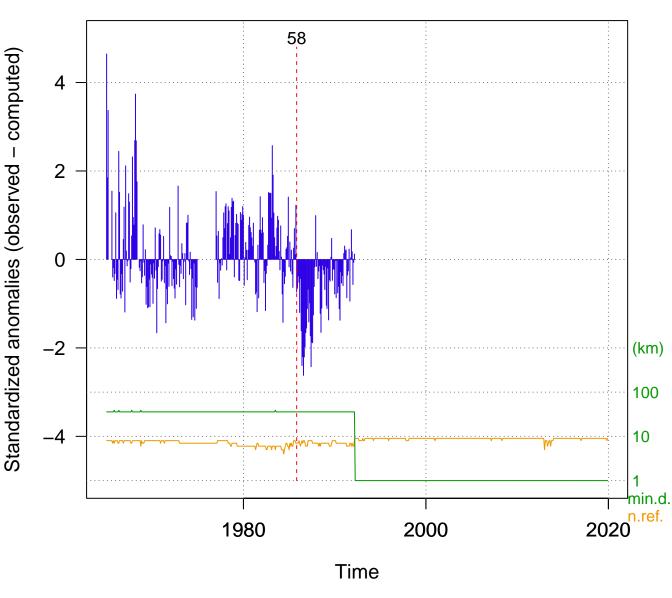
# Stage 1

Binary splits on 60 term stepped windows with std=3, SNHT>25 and wd=0 km

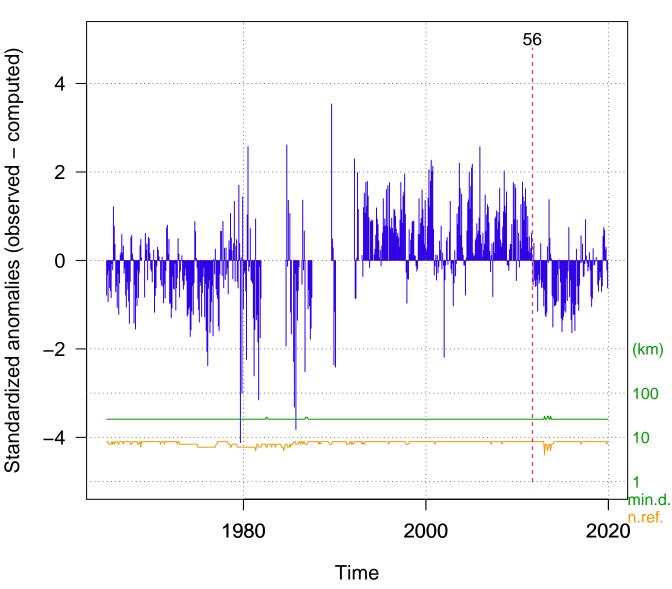
#### tmax-m 7 (ho00000786) HUANCANE



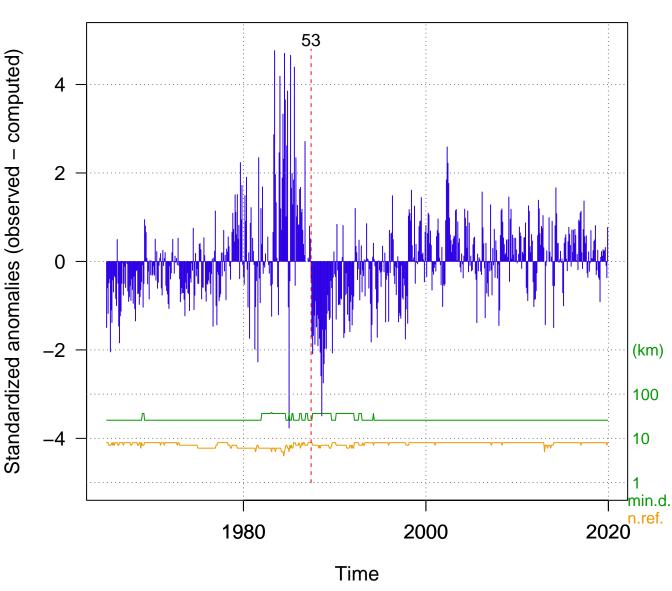
#### tmax-m 10 (ho00000786-2) HUANCANE-2



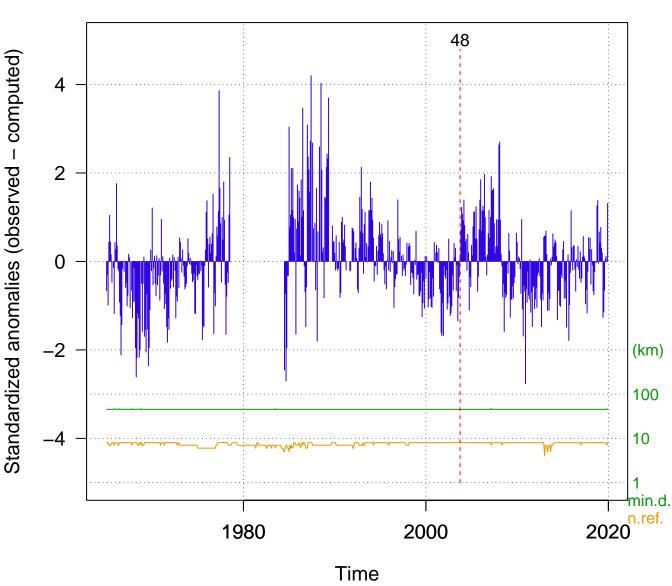
#### tmax-m 4 (ho00000781) AZANGARO



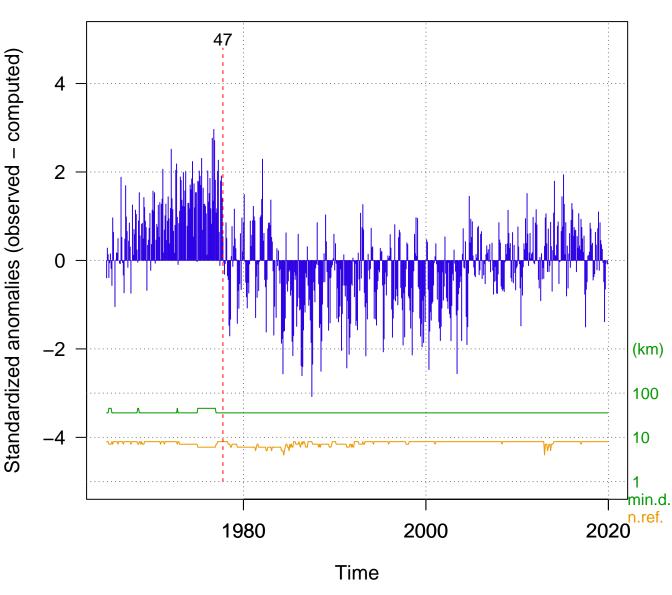
#### tmax-m 5 (ho00000783) ARAPA



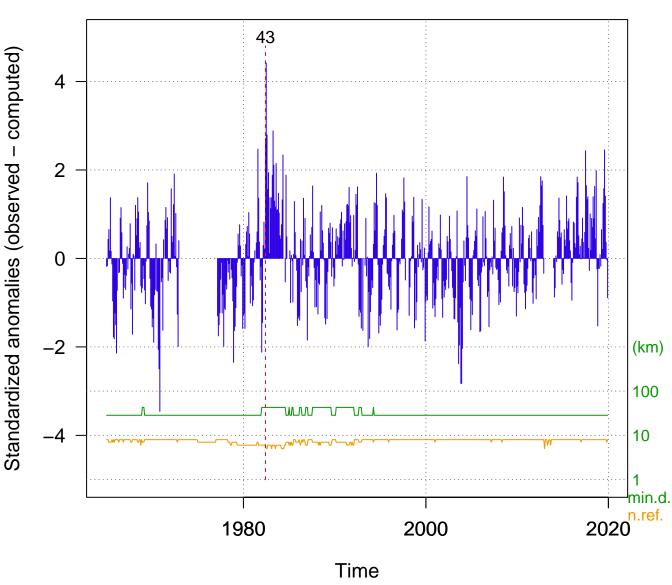
#### tmax-m 9 (ho00000788) CAPACHICA



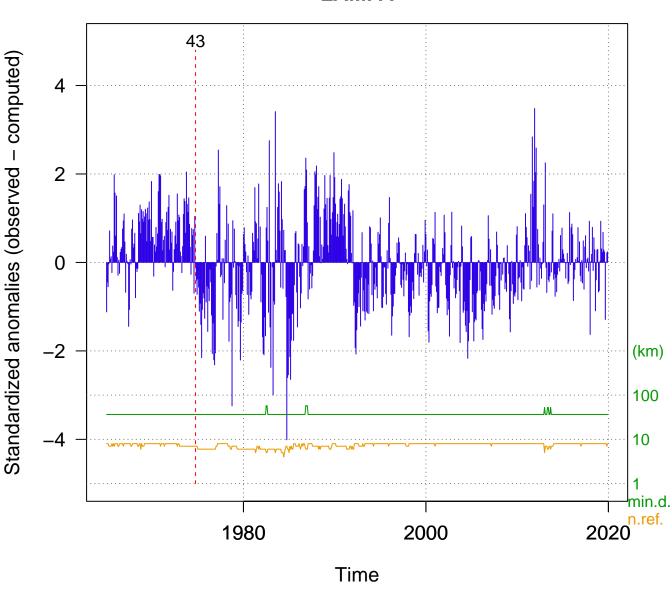
#### tmax-m 8 (ho00000787) HUARAYAMOHO



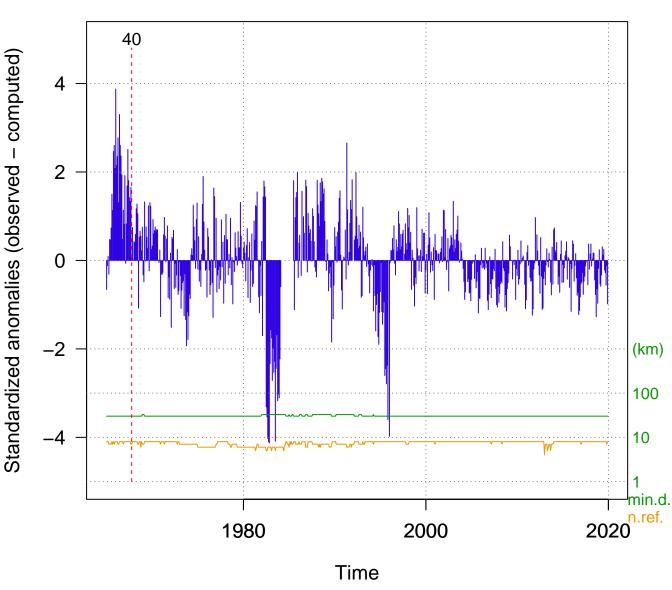
#### tmax-m 6 (ho00000785) MUNANI



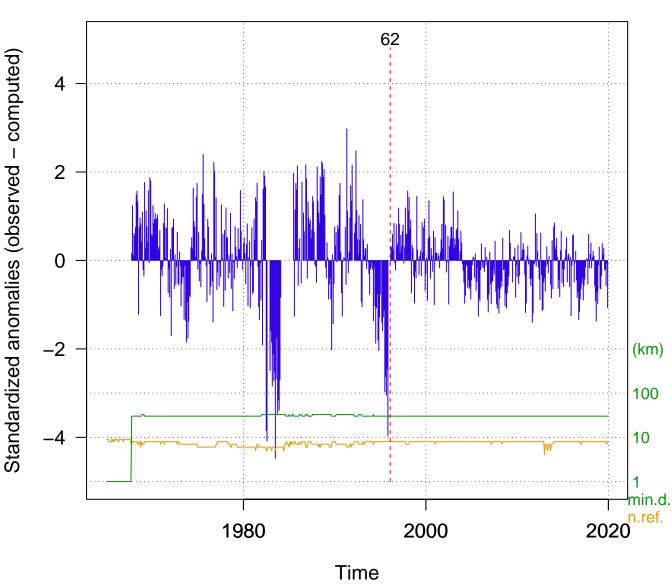
#### tmax-m 3 (ho00000779) LAMPA



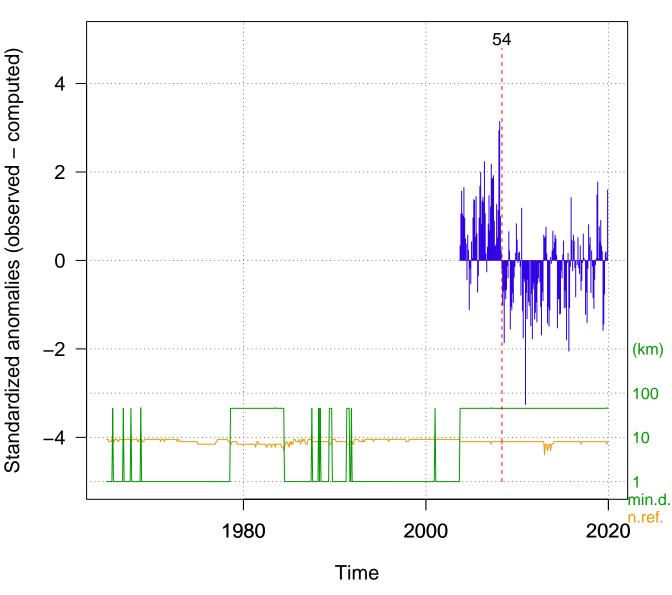
#### tmax-m 2 (ho00000778) PROGRESO



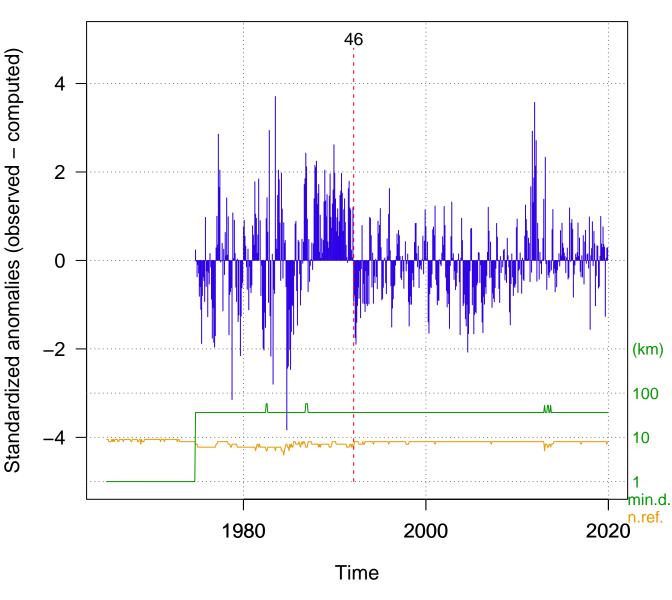
#### tmax-m 2 (ho00000778) PROGRESO



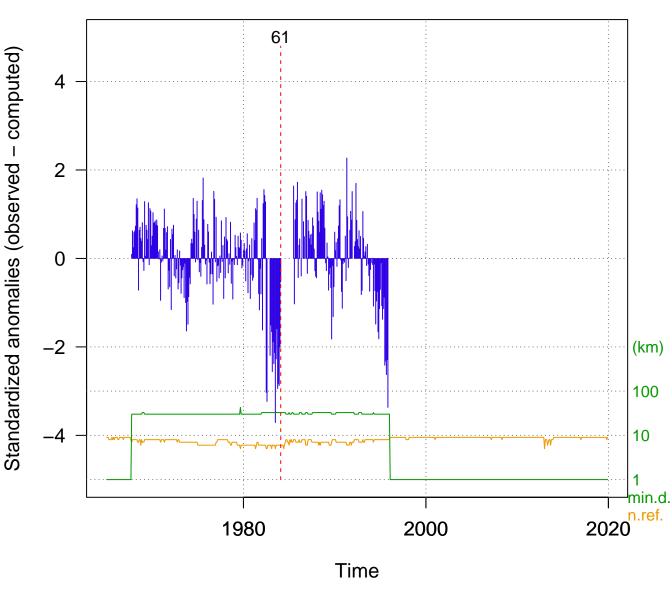
#### tmax-m 9 (ho00000788) CAPACHICA



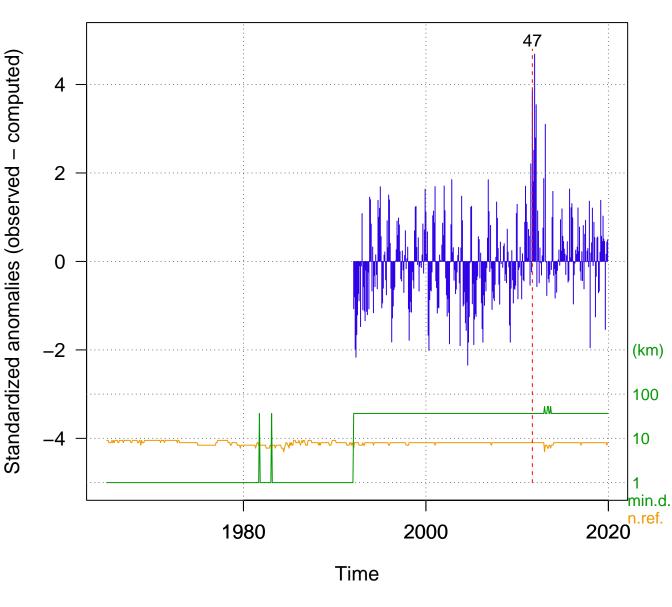
#### tmax-m 3 (ho00000779) LAMPA



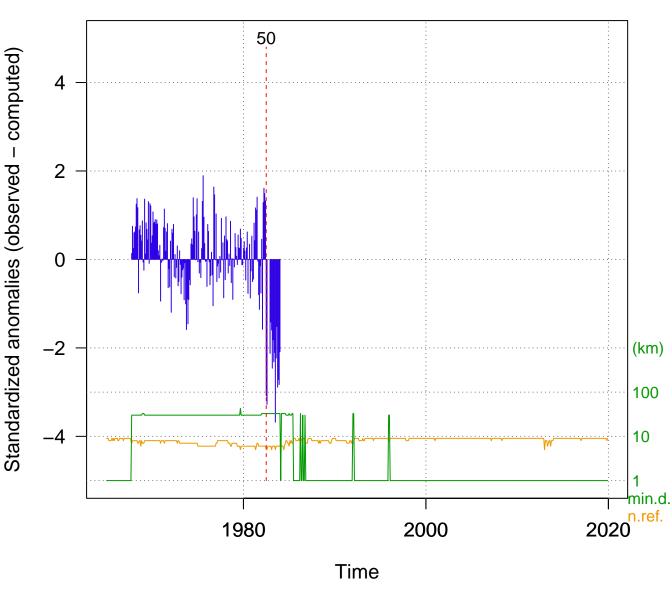
#### tmax-m 19 (ho00000778-3) PROGRESO-3



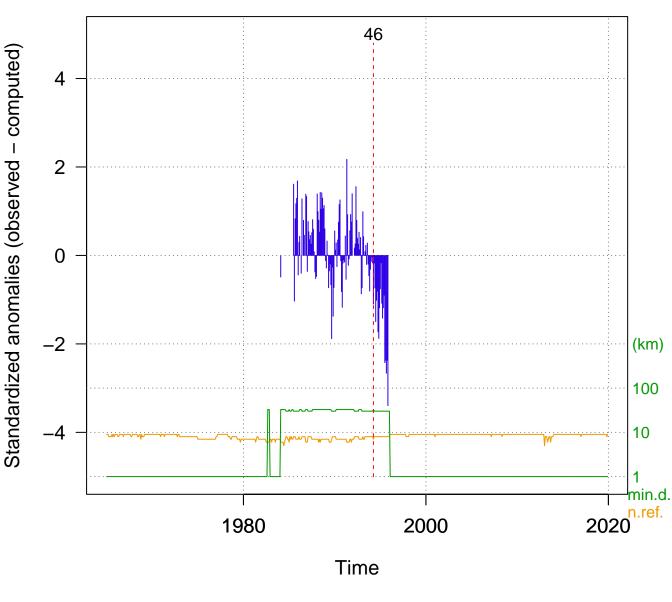
#### tmax-m 3 (ho00000779) LAMPA

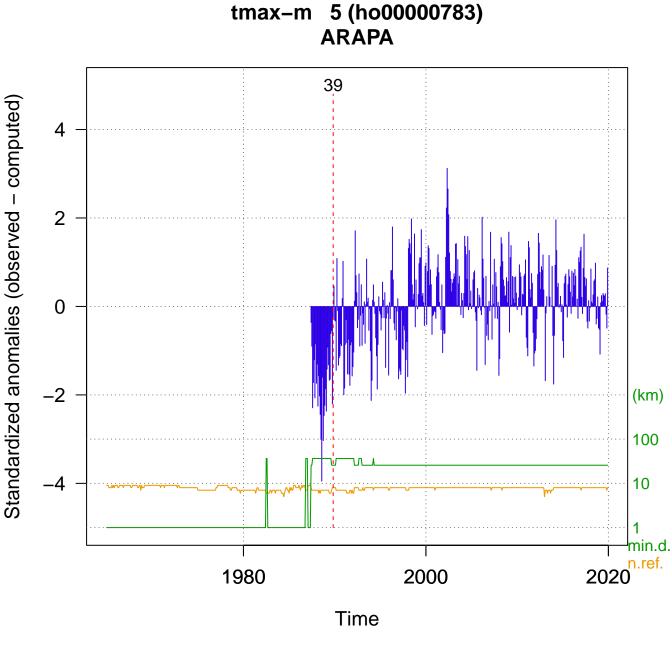


#### tmax-m 22 (ho00000778-4) PROGRESO-4

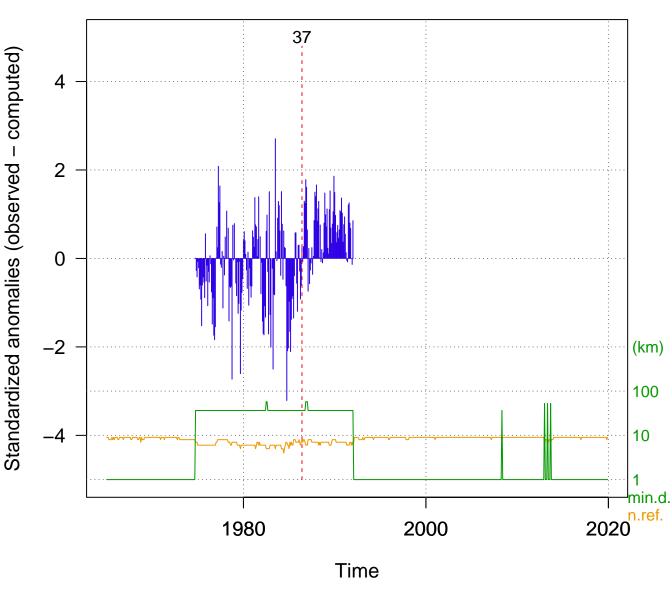


#### tmax-m 19 (ho00000778-3) PROGRESO-3

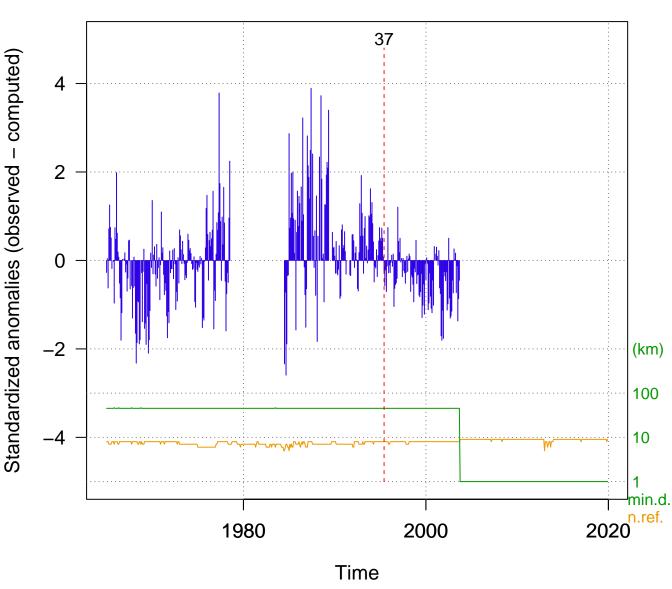




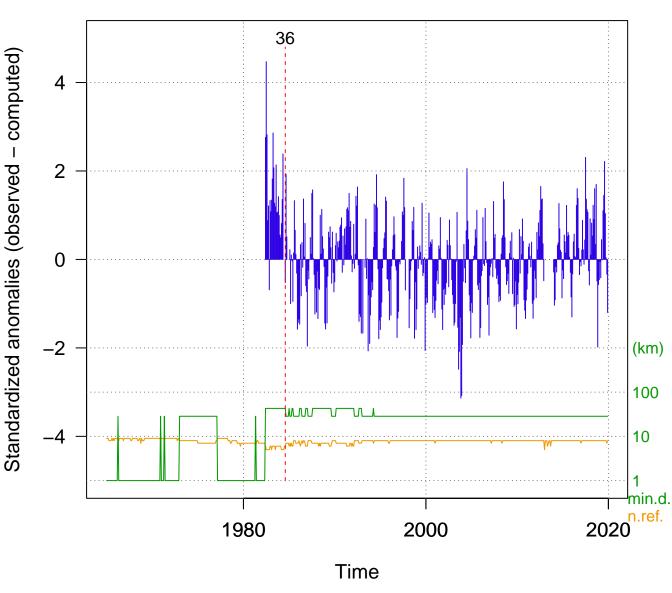
#### tmax-m 21 (ho00000779-3) LAMPA-3



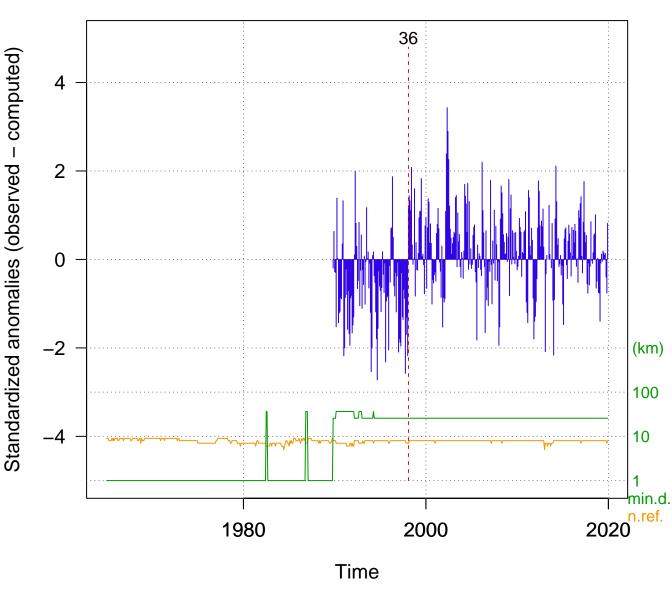
#### tmax-m 14 (ho00000788-2) CAPACHICA-2



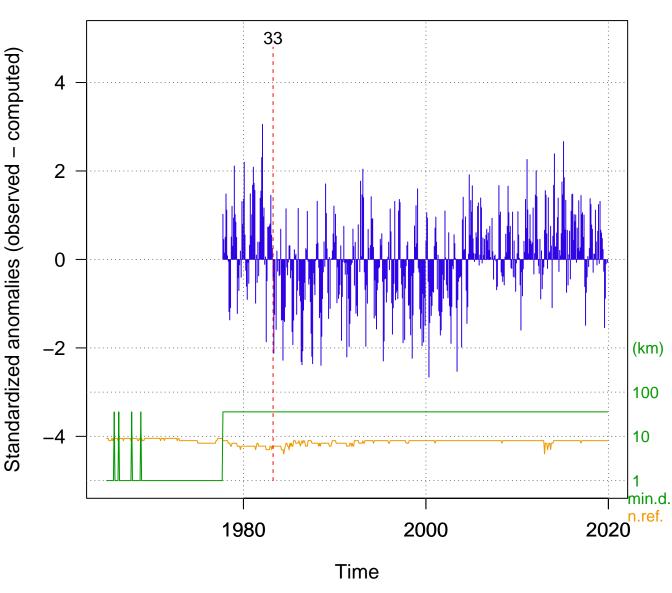
#### tmax-m 6 (ho00000785) MUNANI



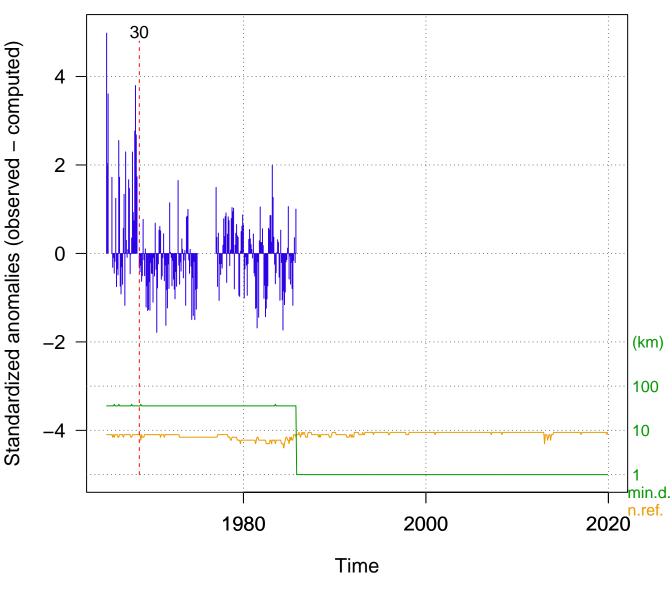
#### tmax-m 5 (ho00000783) ARAPA



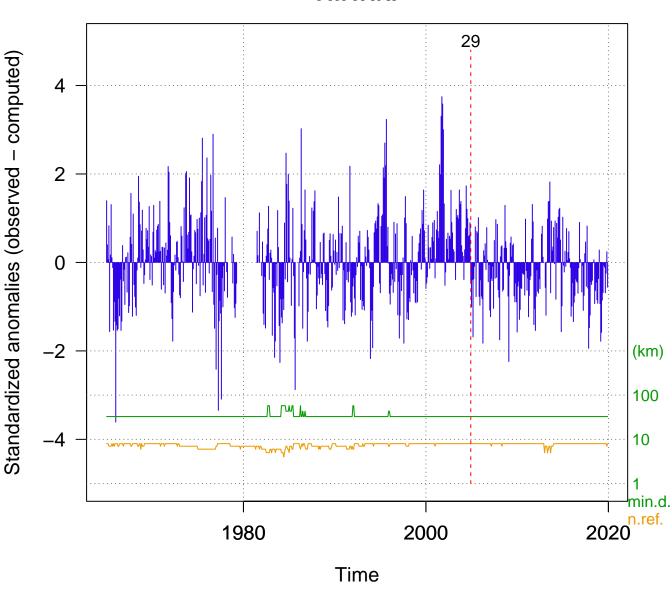
#### tmax-m 8 (ho00000787) HUARAYAMOHO



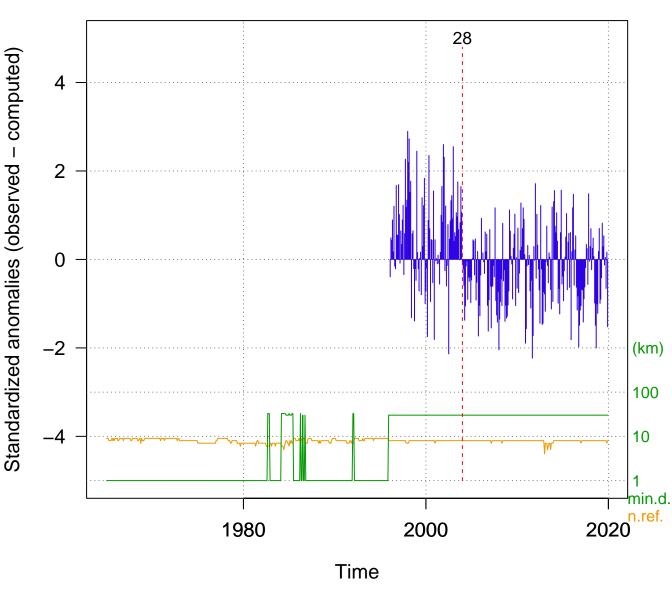
#### tmax-m 11 (ho00000786-3) HUANCANE-3



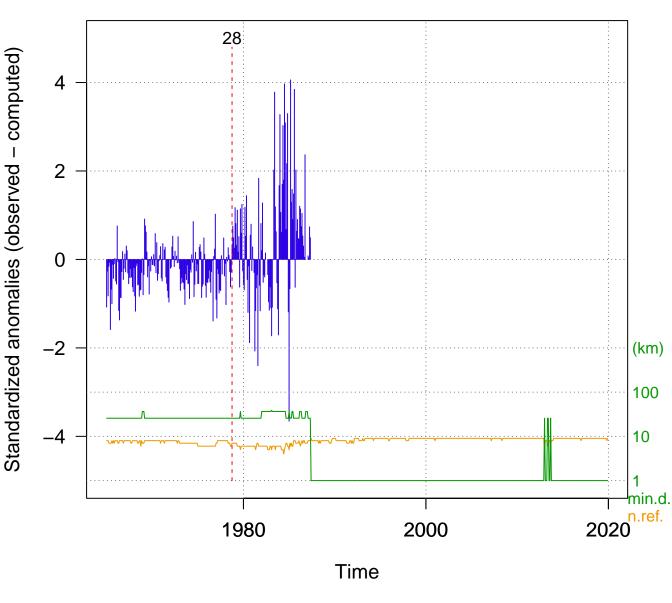
#### tmax-m 1 (ho00000776) AYAVIRI



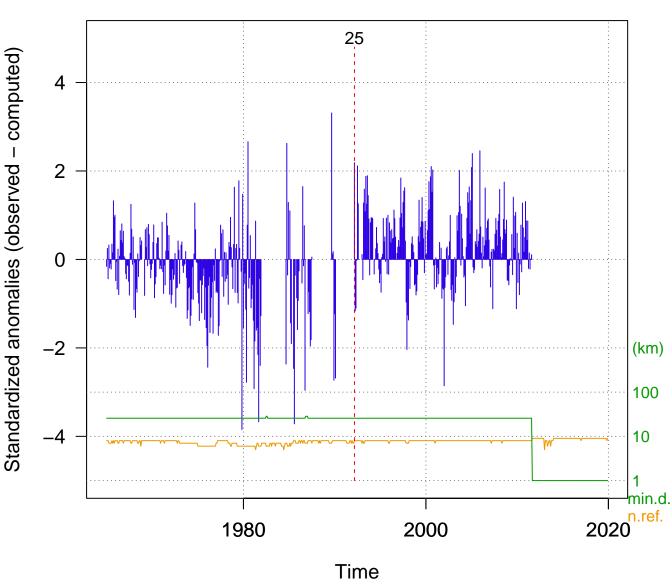
#### tmax-m 2 (ho00000778) PROGRESO



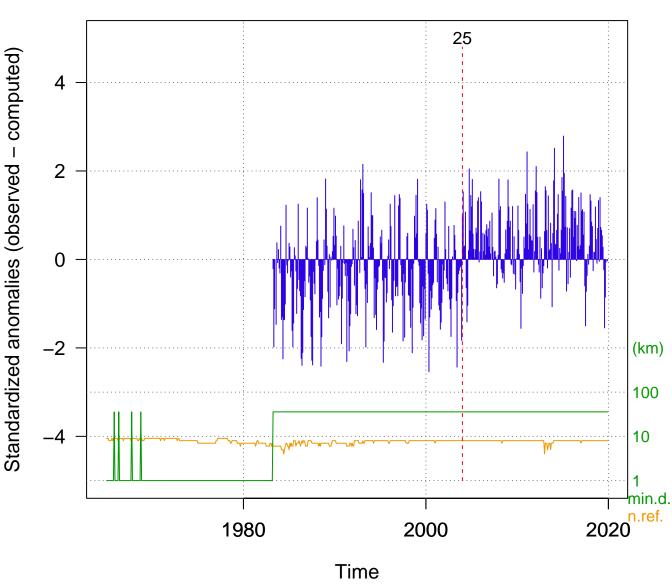
#### tmax-m 13 (ho00000783-2) ARAPA-2



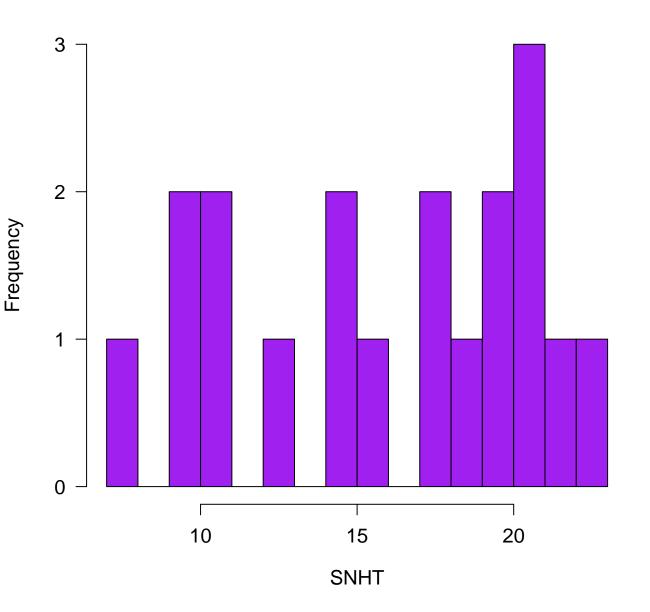
#### tmax-m 12 (ho00000781-2) AZANGARO-2



#### tmax-m 8 (ho00000787) HUARAYAMOHO



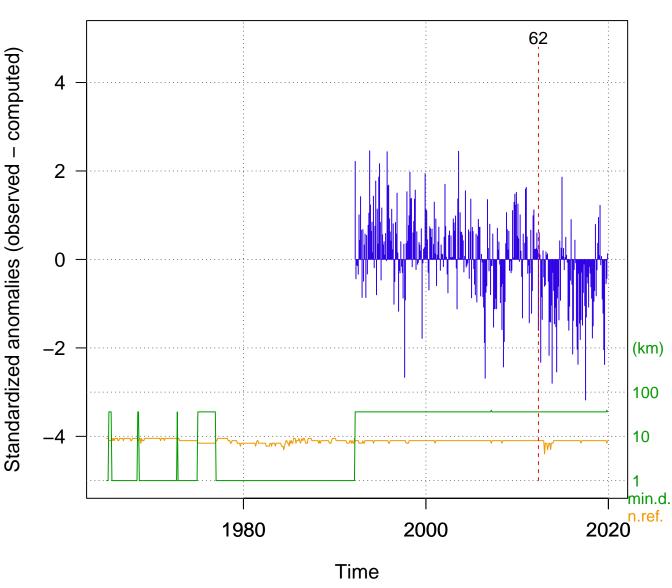
# **Histogram of maximum SNHT (Stage 1)**



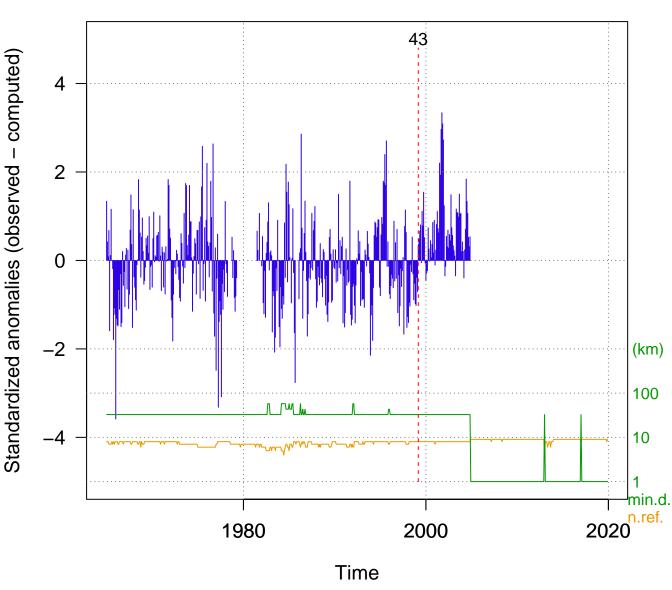
# Stage 2

Binary splits on whole series with std=3, SNHT>25 and wd=0 km

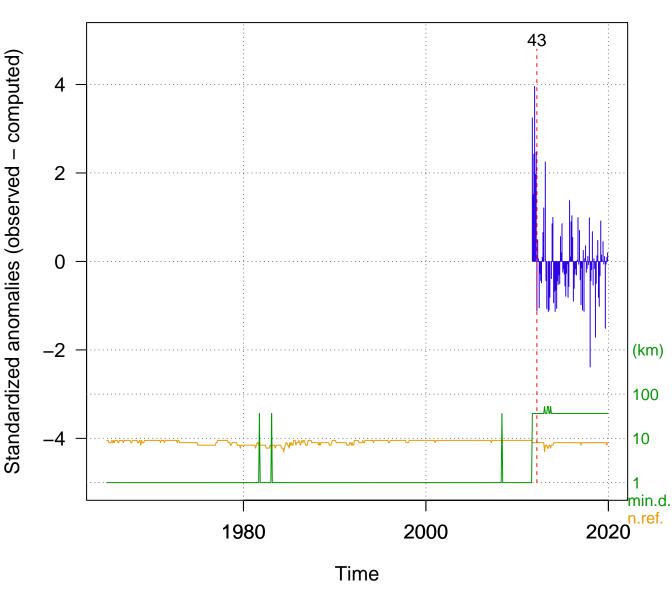
#### tmax-m 7 (ho00000786) HUANCANE



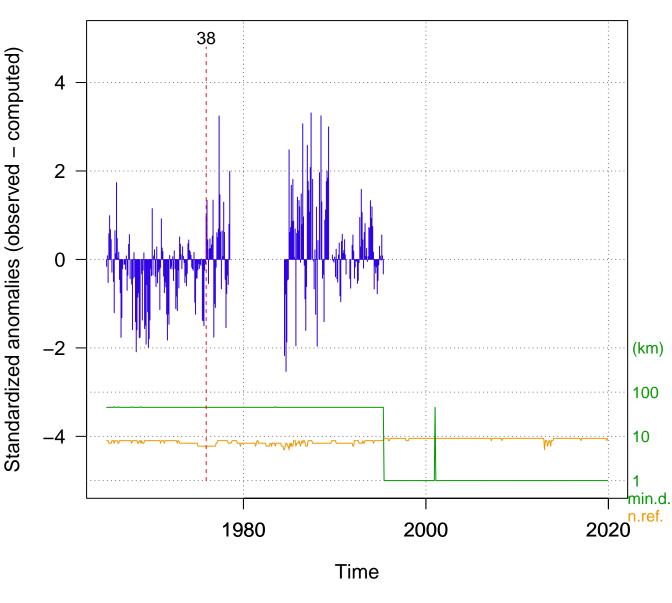
#### tmax-m 33 (ho00000776-2) AYAVIRI-2



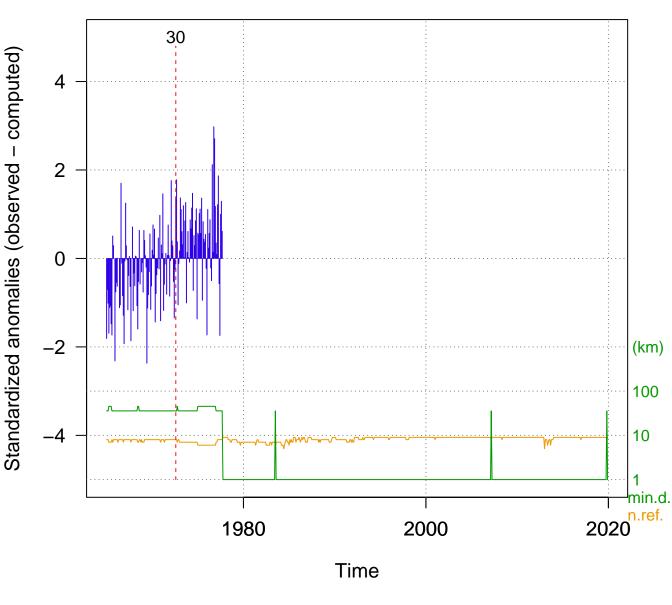
# tmax-m 3 (ho00000779) LAMPA



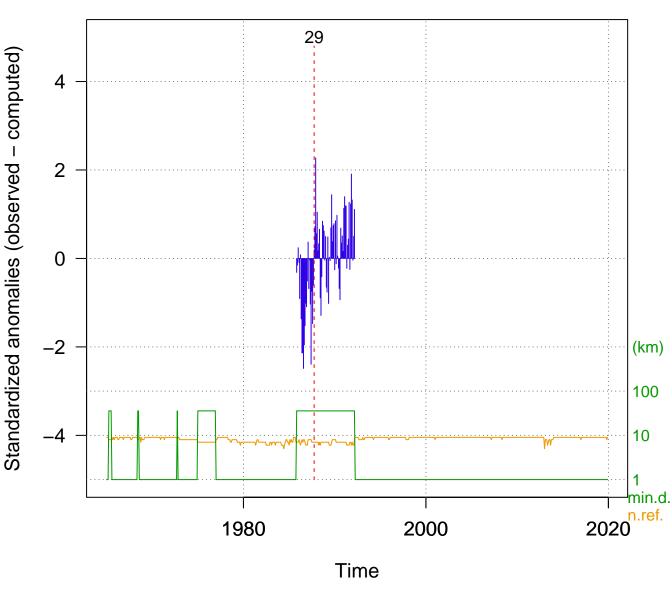
#### tmax-m 28 (ho00000788-4) CAPACHICA-4



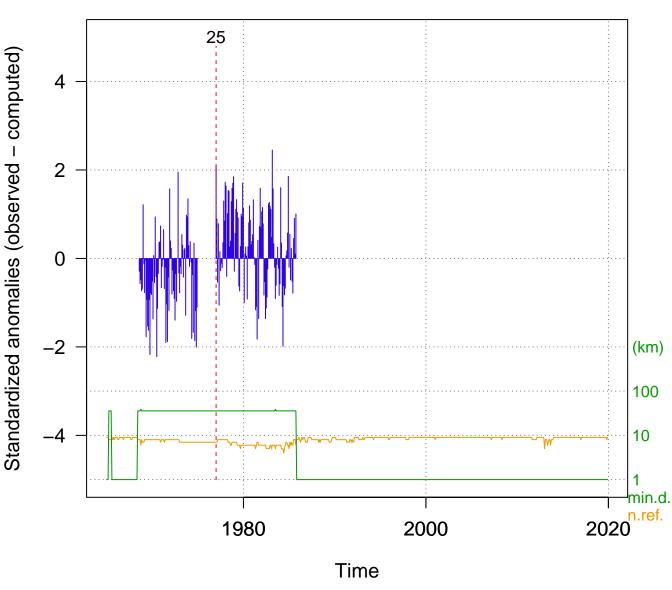
## tmax-m 15 (ho00000787-2) HUARAYAMOHO-2



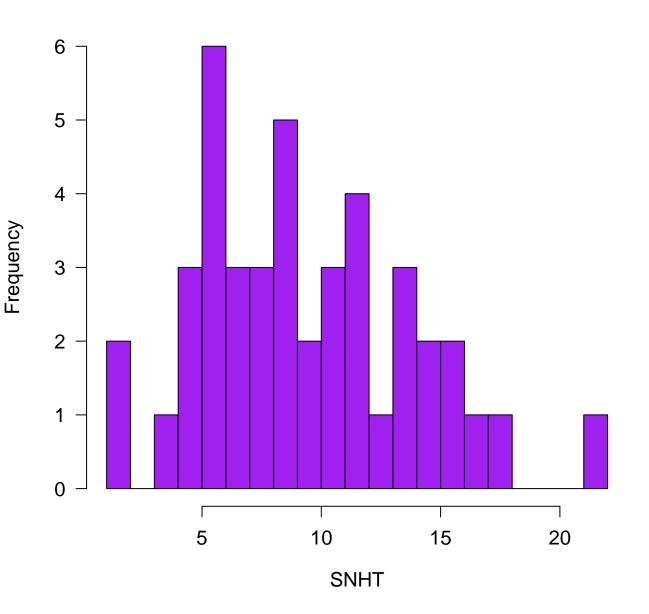
# tmax-m 10 (ho00000786-2) HUANCANE-2



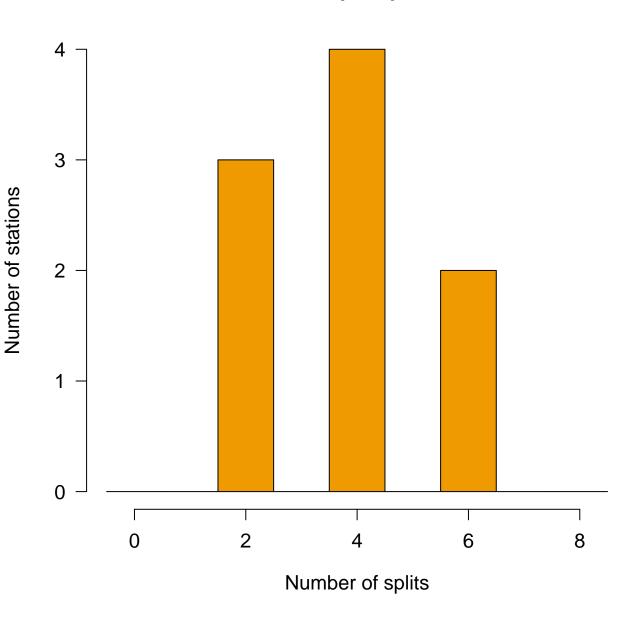
## tmax-m 11 (ho00000786-3) HUANCANE-3



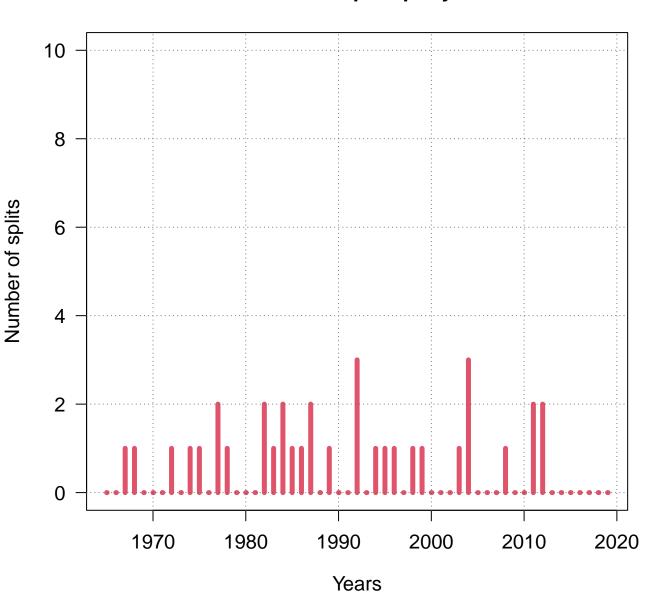
# **Histogram of maximum SNHT (Stage 2)**



# Number of splits per station



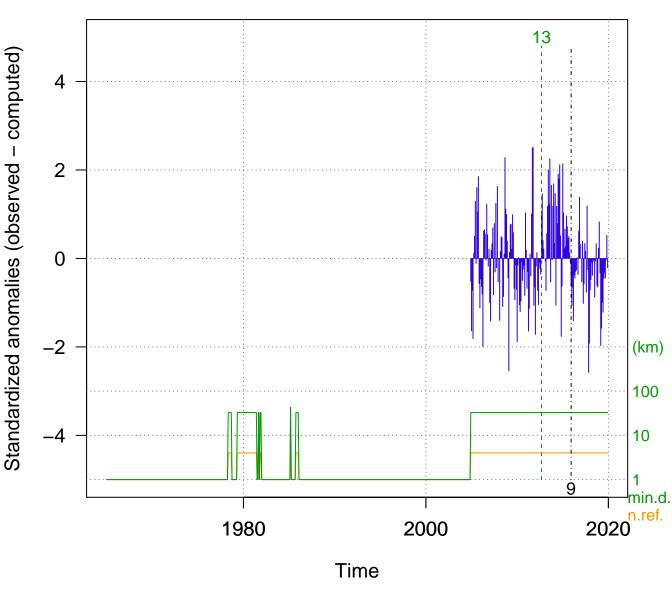
# Number of splits per year



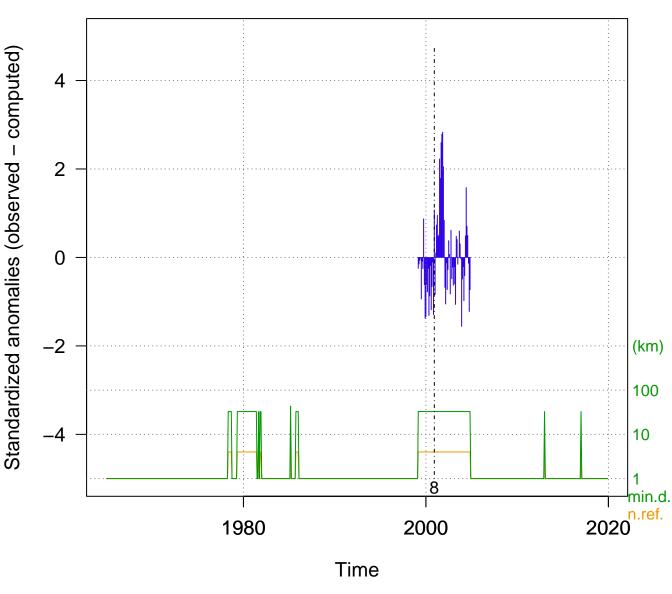
# Stage 3

Final anomalies of the homogenized series with wd = 100 km and nref = 4

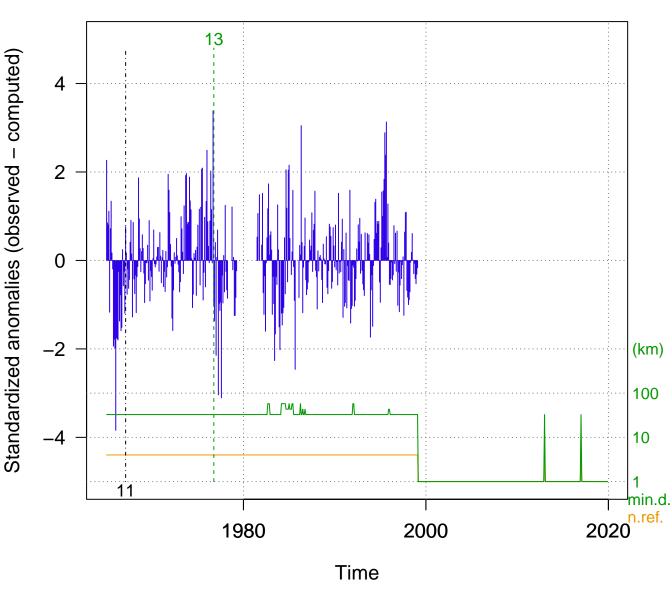
#### tmax-m 1 (ho00000776) AYAVIRI



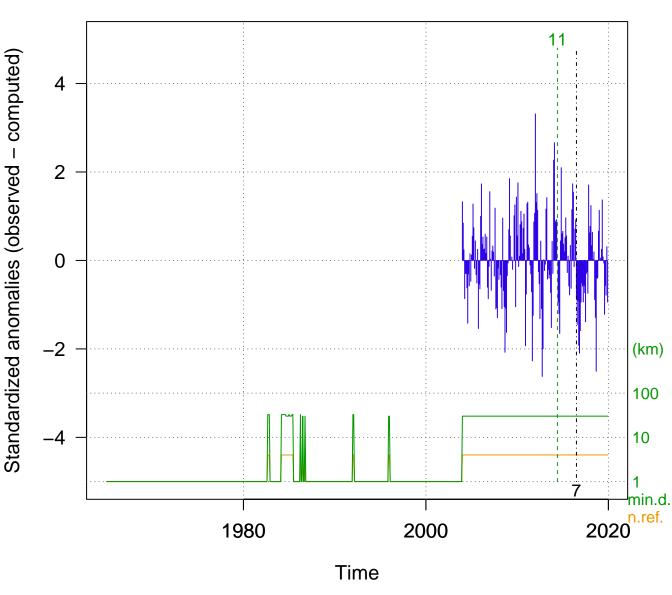
# tmax-m 33 (ho00000776-2) AYAVIRI-2



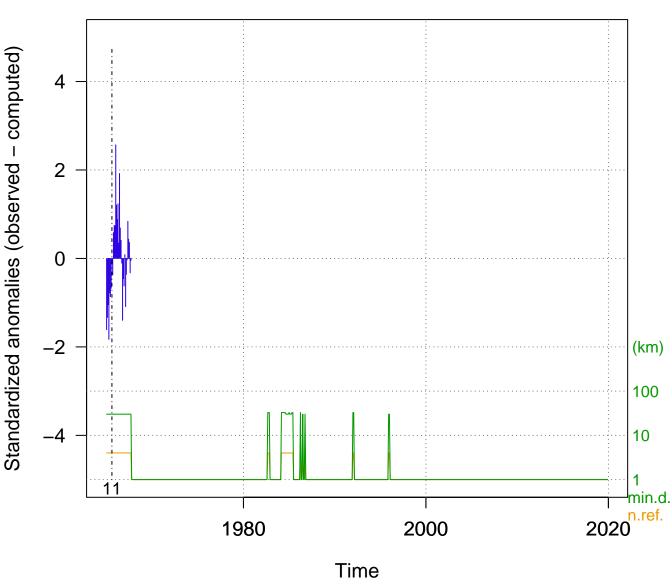
#### tmax-m 39 (ho00000776-3) AYAVIRI-3



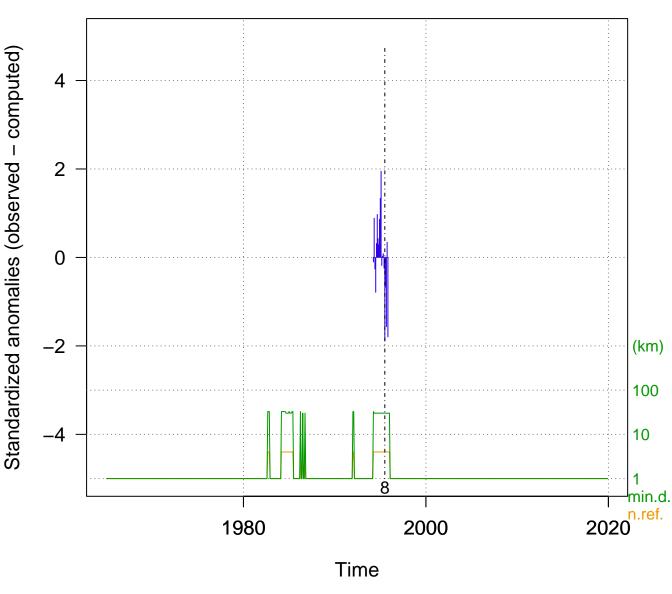
# tmax-m 2 (ho00000778) PROGRESO



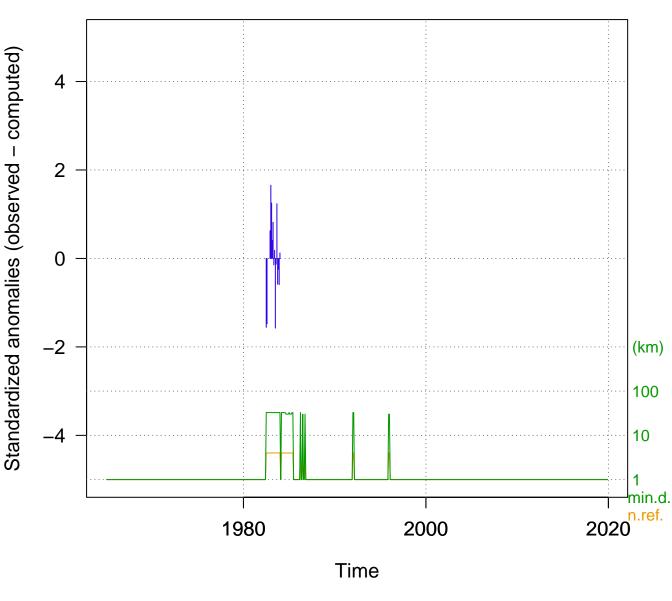
## tmax-m 18 (ho00000778-2) PROGRESO-2



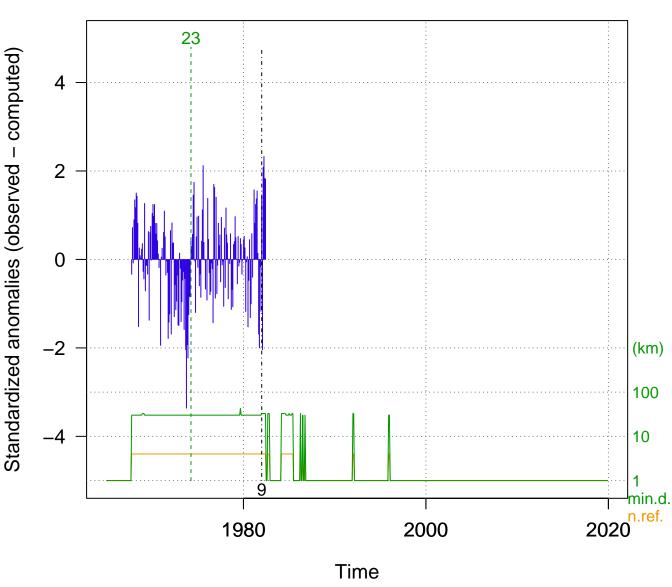
# tmax-m 19 (ho00000778-3) PROGRESO-3



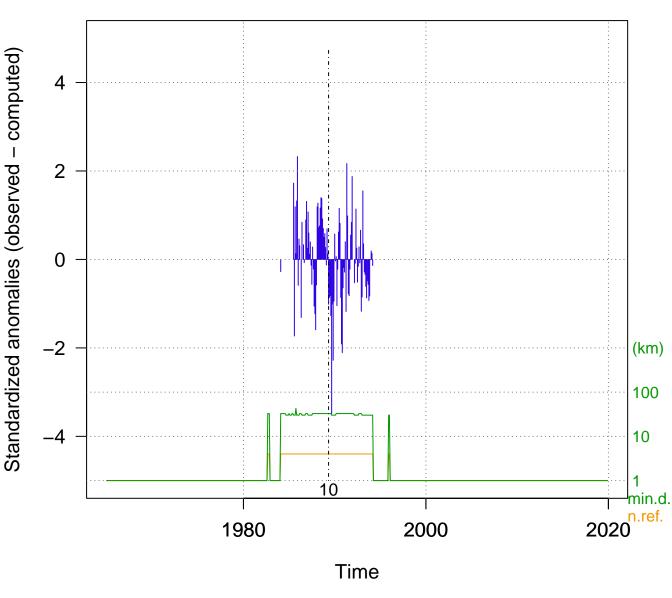
### tmax-m 22 (ho00000778-4) PROGRESO-4



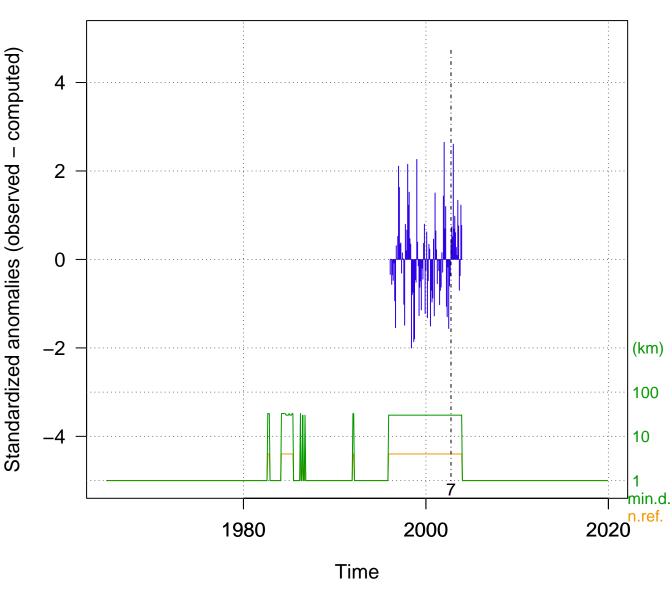
## tmax-m 24 (ho00000778-5) PROGRESO-5



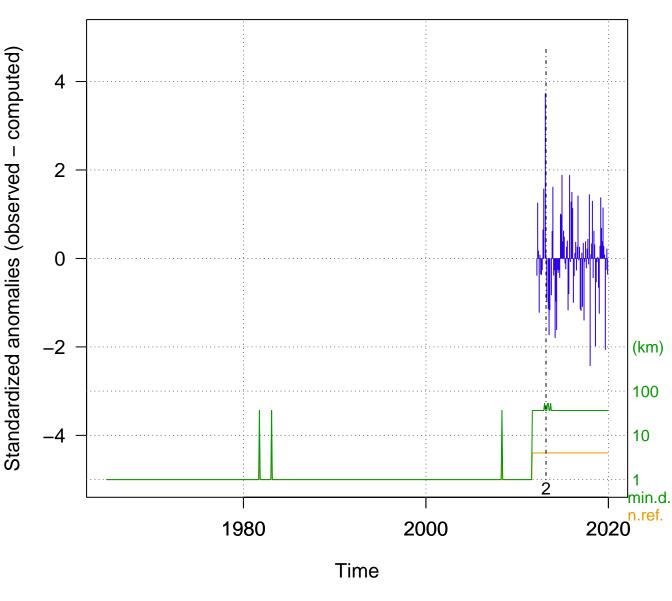
#### tmax-m 25 (ho00000778-6) PROGRESO-6



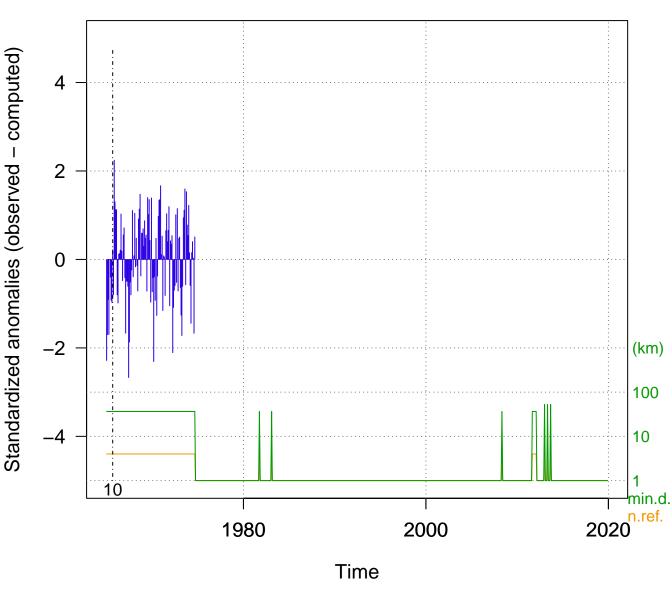
#### tmax-m 34 (ho00000778-7) PROGRESO-7



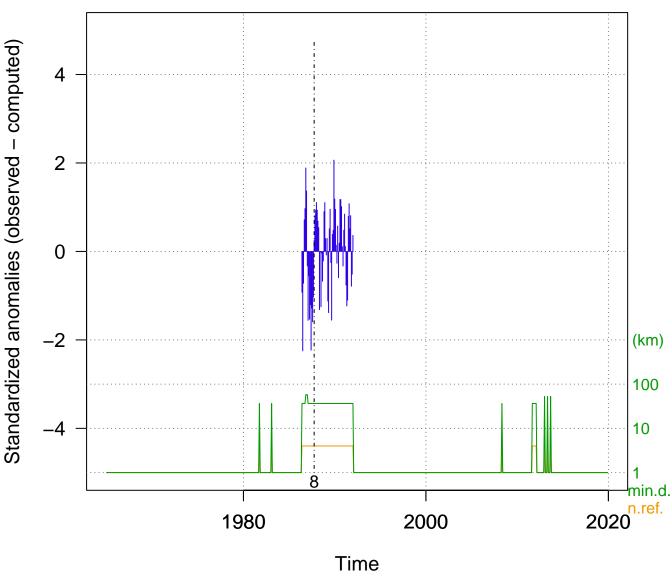
# tmax-m 3 (ho00000779) LAMPA



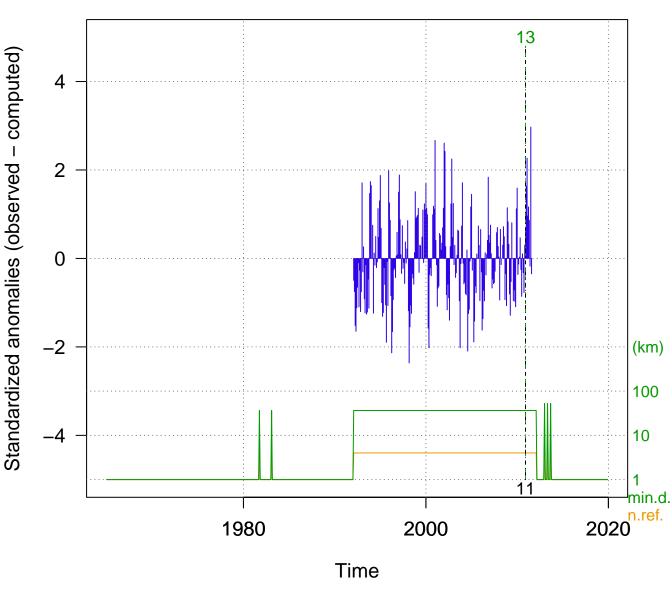
#### tmax-m 17 (ho00000779-2) LAMPA-2



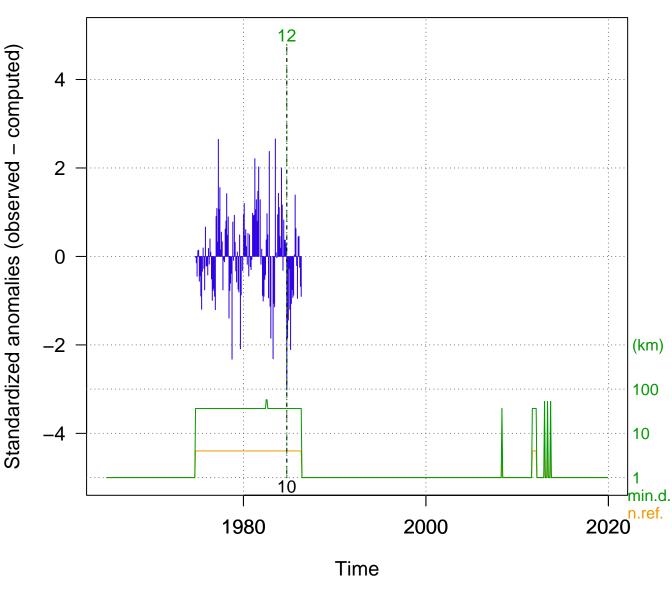
# tmax-m 21 (ho00000779-3) LAMPA-3



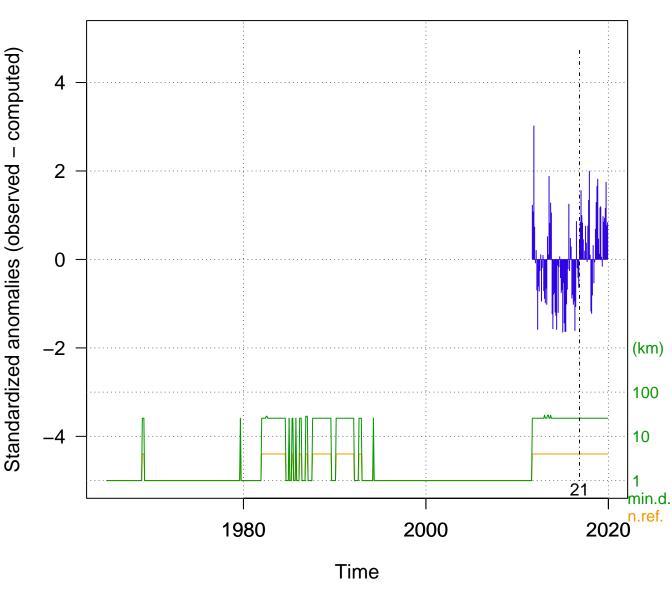
## tmax-m 23 (ho00000779-4) LAMPA-4



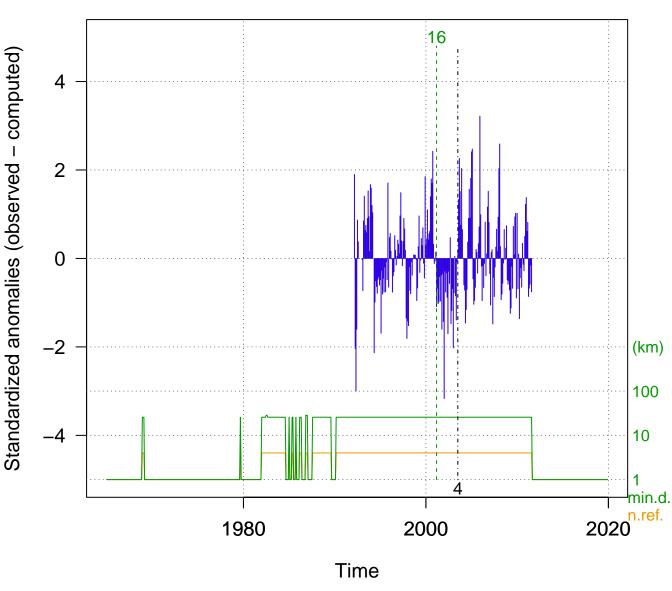
# tmax-m 27 (ho00000779-5) LAMPA-5



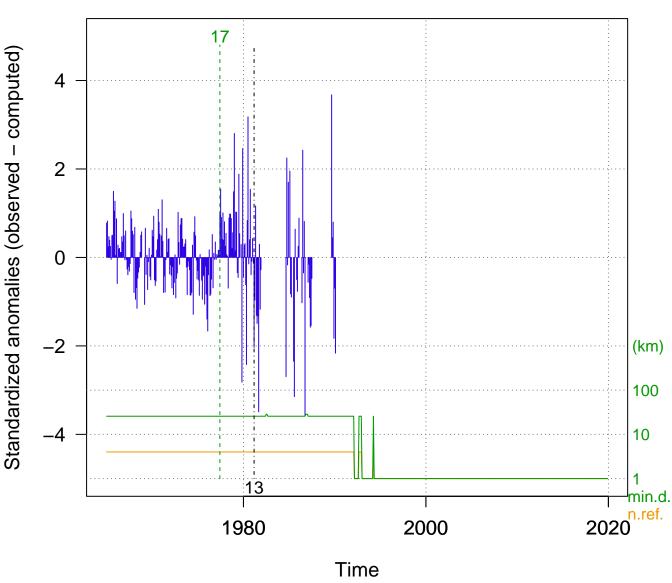
## tmax-m 4 (ho00000781) AZANGARO



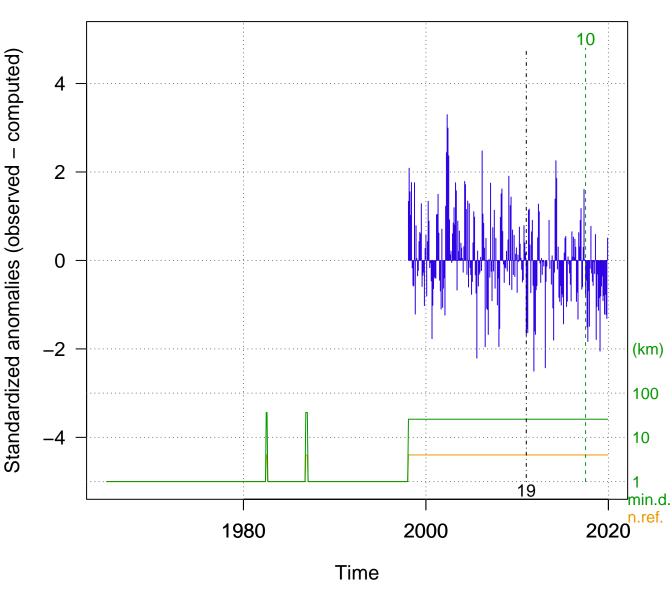
## tmax-m 12 (ho00000781-2) AZANGARO-2



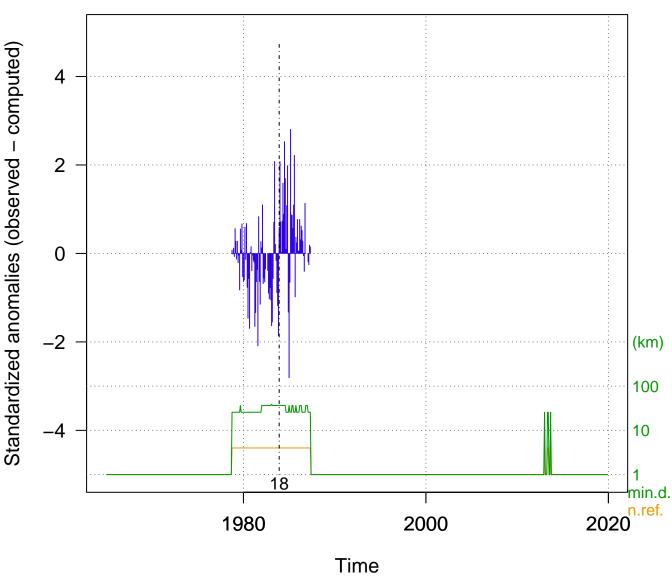
# tmax-m 36 (ho00000781-3) AZANGARO-3

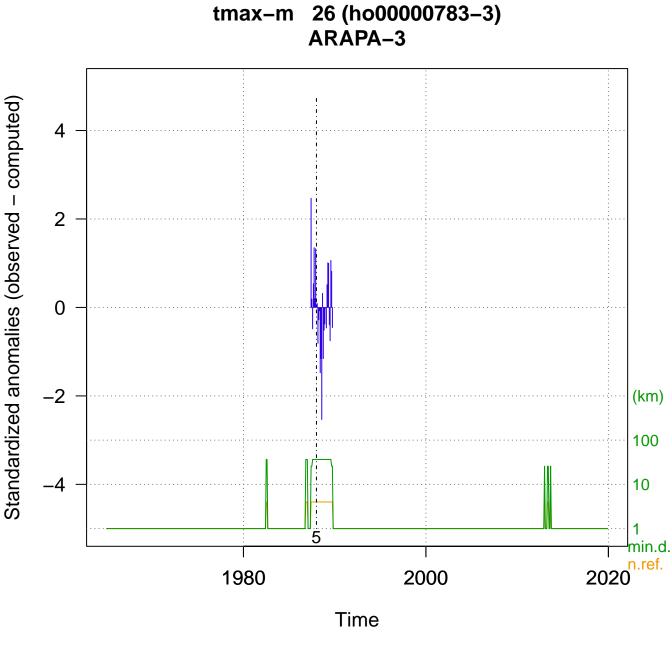


# tmax-m 5 (ho00000783) ARAPA



# tmax-m 13 (ho00000783-2) ARAPA-2





# 30 (ho00000783-4) tmax-m ARAPA-4 (km) 100 10 <sup>l</sup>min.d. 2020 n.ref. 2000 1980

Time

Standardized anomalies (observed - computed)

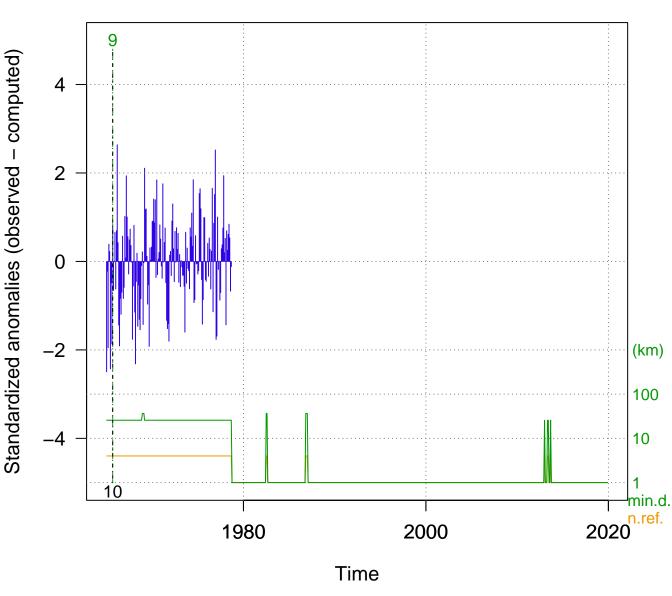
4

2

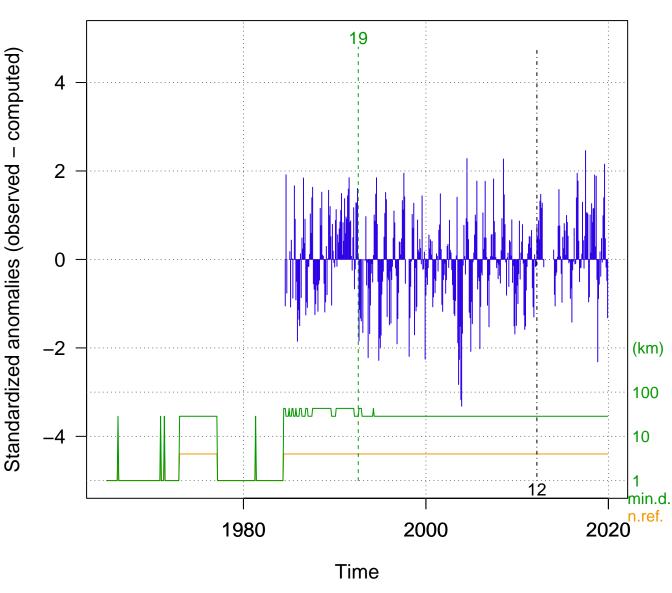
0

-2

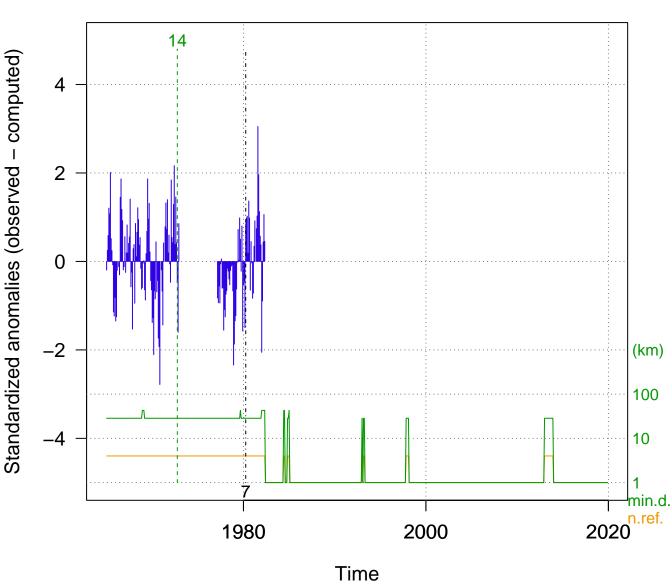
#### tmax-m 35 (ho00000783-5) ARAPA-5



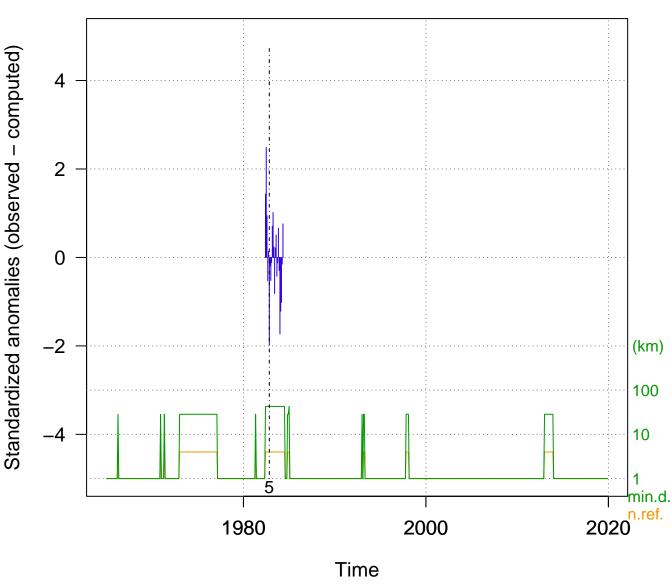
#### tmax-m 6 (ho00000785) MUNANI



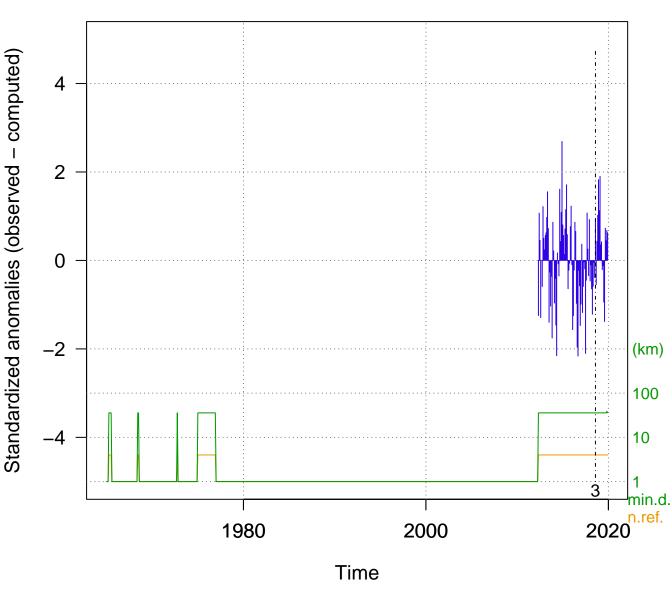
#### tmax-m 16 (ho00000785-2) MUNANI-2



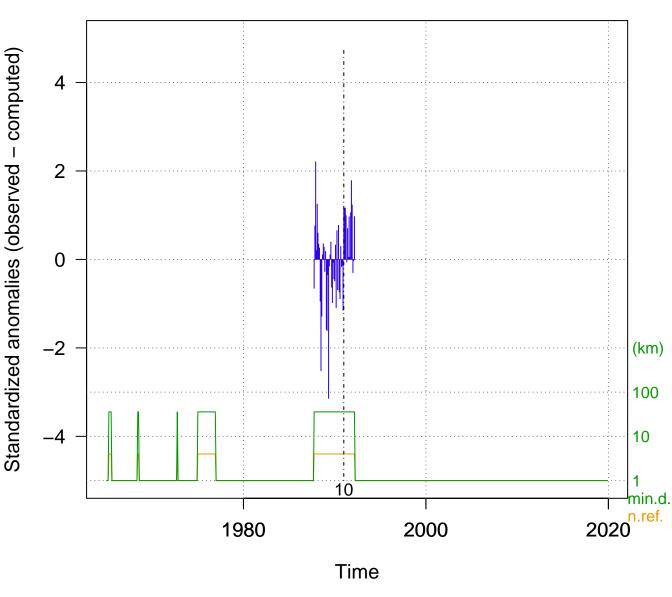
#### tmax-m 29 (ho00000785-3) MUNANI-3



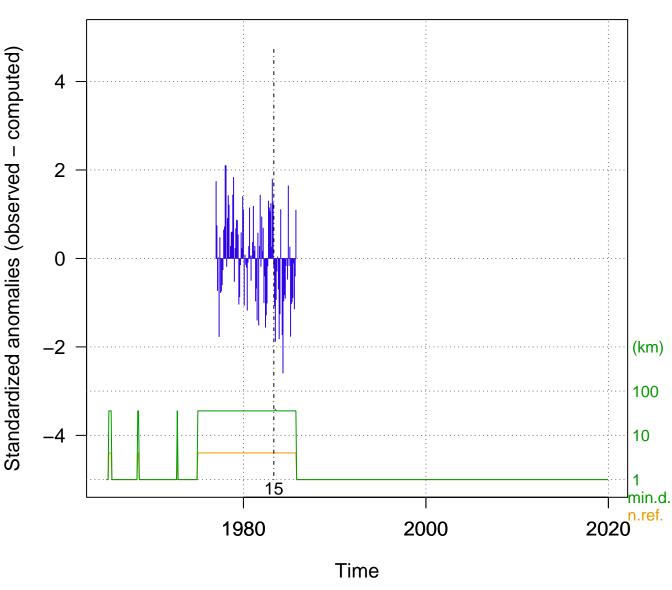
#### tmax-m 7 (ho00000786) HUANCANE



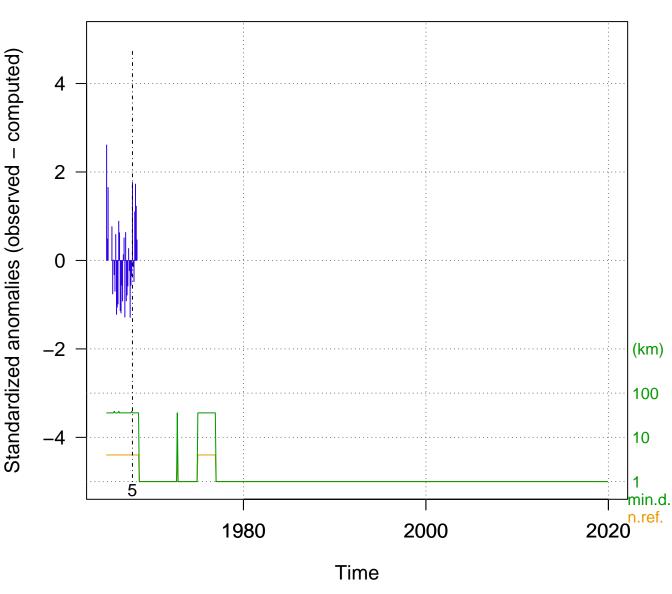
#### tmax-m 10 (ho00000786-2) HUANCANE-2



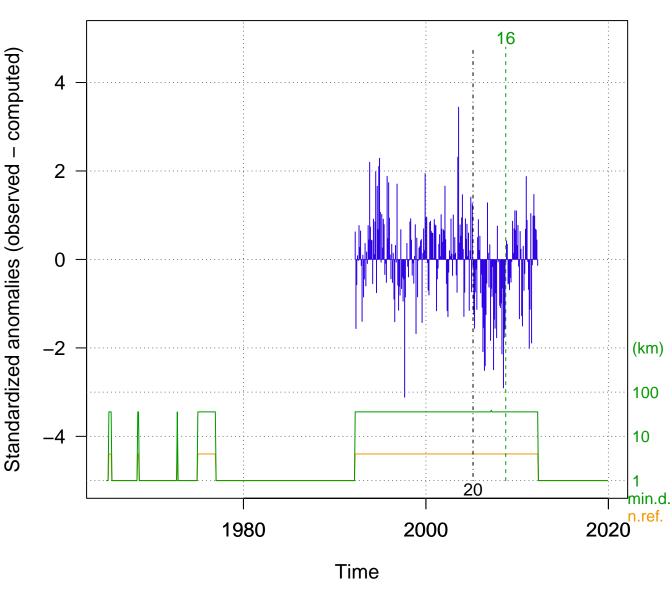
#### tmax-m 11 (ho00000786-3) HUANCANE-3



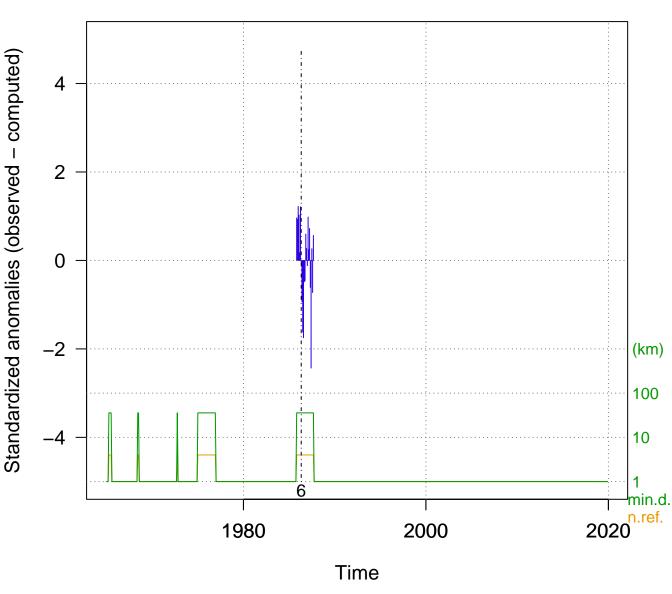
#### tmax-m 32 (ho00000786-4) HUANCANE-4



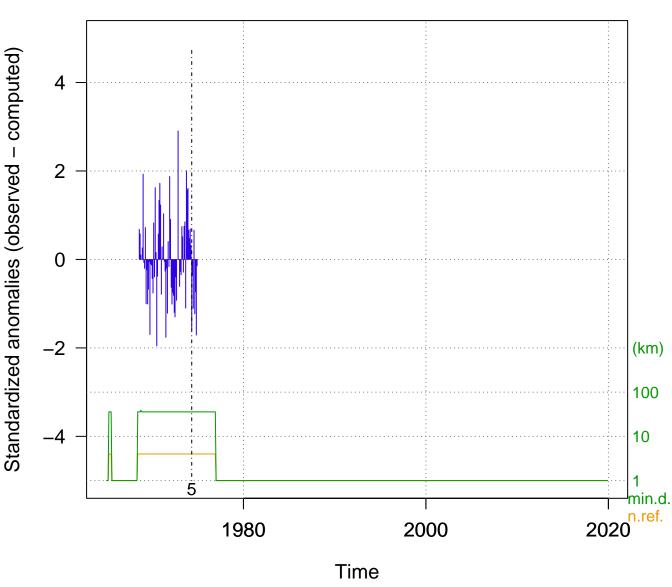
#### tmax-m 38 (ho00000786-5) HUANCANE-5



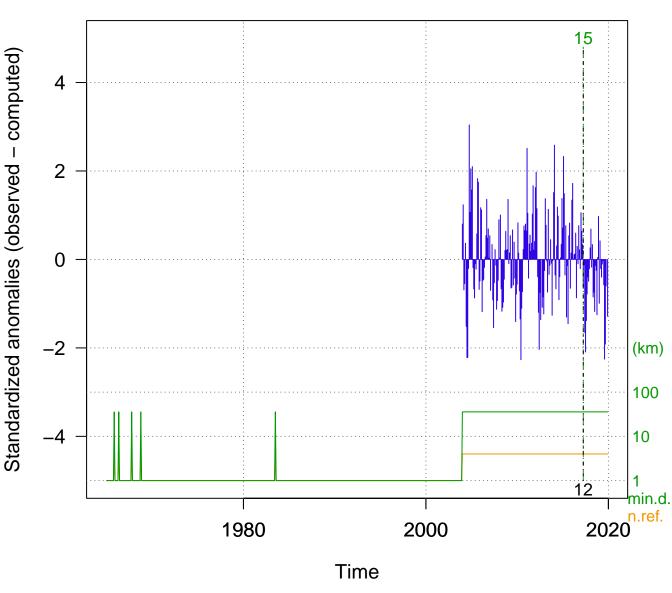
#### tmax-m 42 (ho00000786-6) HUANCANE-6



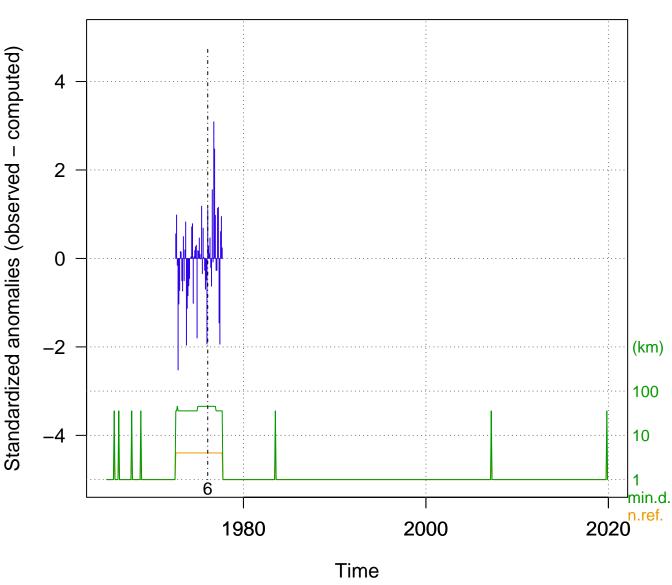
#### tmax-m 43 (ho00000786-7) HUANCANE-7



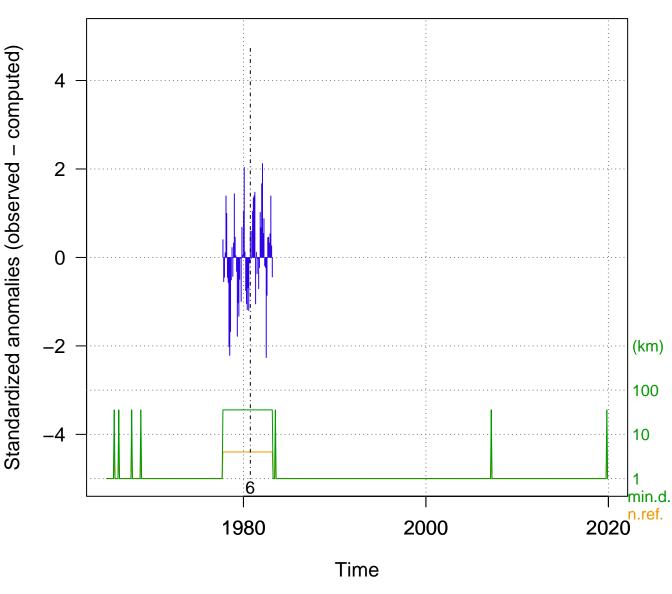
#### tmax-m 8 (ho00000787) HUARAYAMOHO



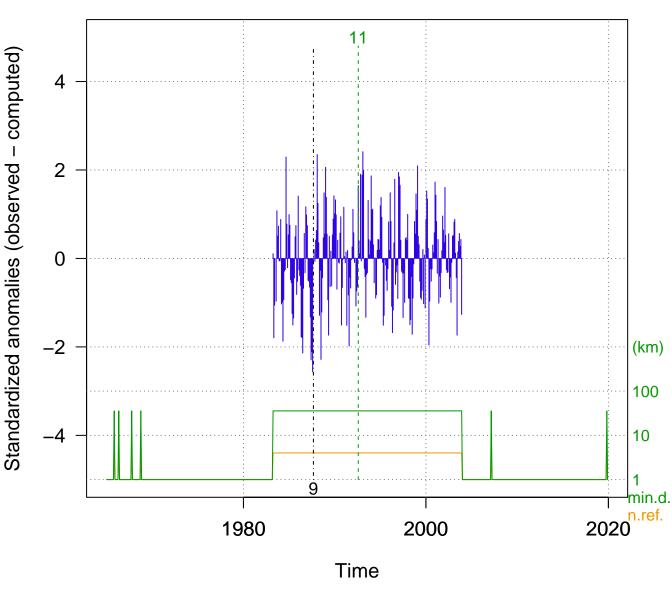
#### tmax-m 15 (ho00000787-2) HUARAYAMOHO-2



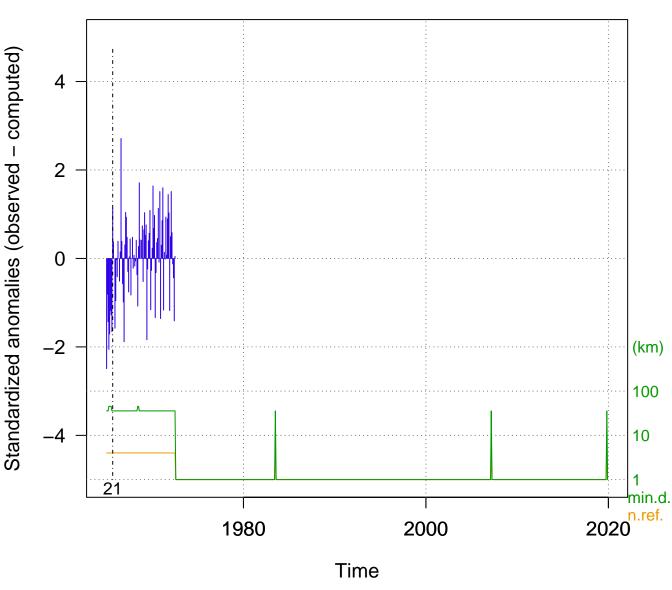
#### tmax-m 31 (ho00000787-3) HUARAYAMOHO-3



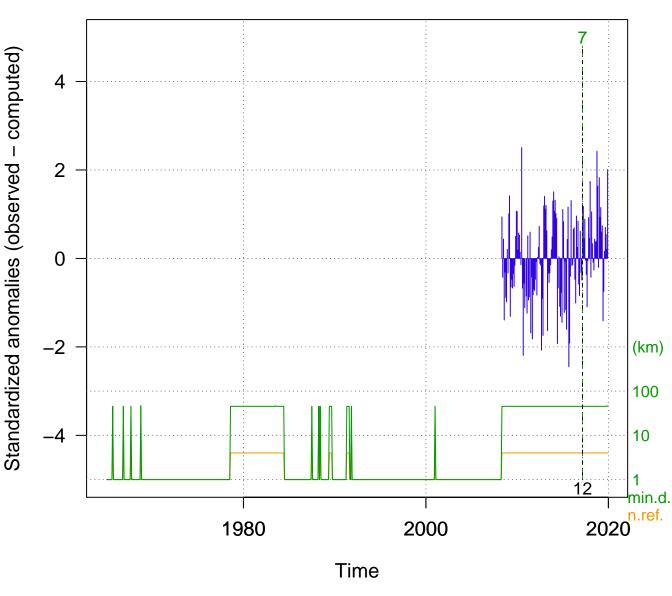
#### tmax-m 37 (ho00000787-4) HUARAYAMOHO-4



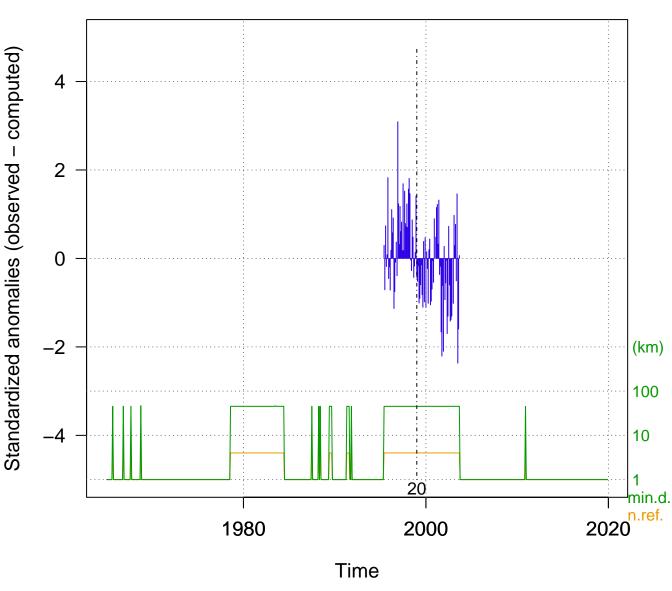
#### tmax-m 41 (ho00000787-5) HUARAYAMOHO-5



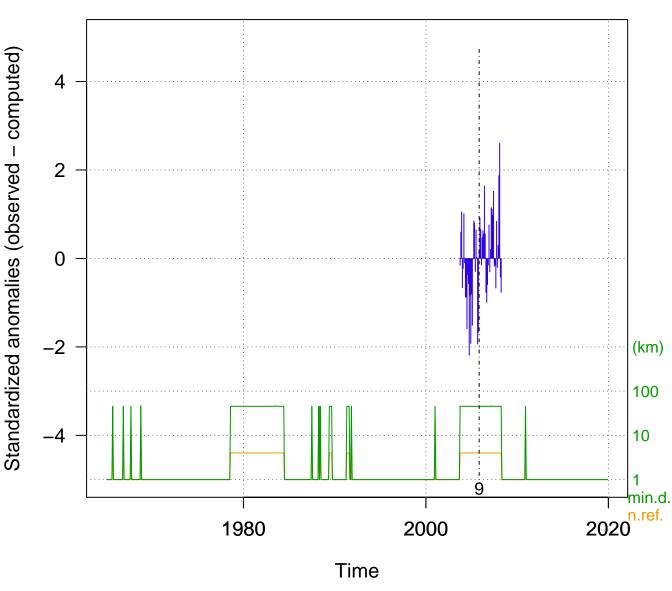
#### tmax-m 9 (ho00000788) CAPACHICA



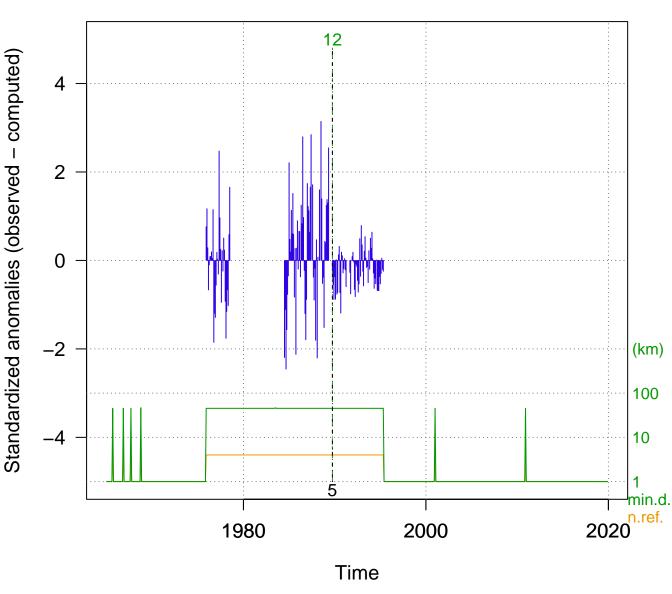
#### tmax-m 14 (ho00000788-2) CAPACHICA-2



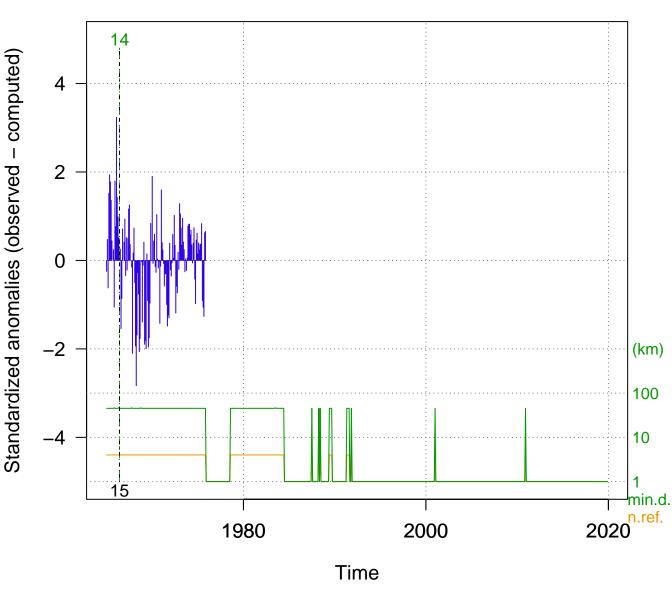
#### tmax-m 20 (ho00000788-3) CAPACHICA-3



#### tmax-m 28 (ho00000788-4) CAPACHICA-4



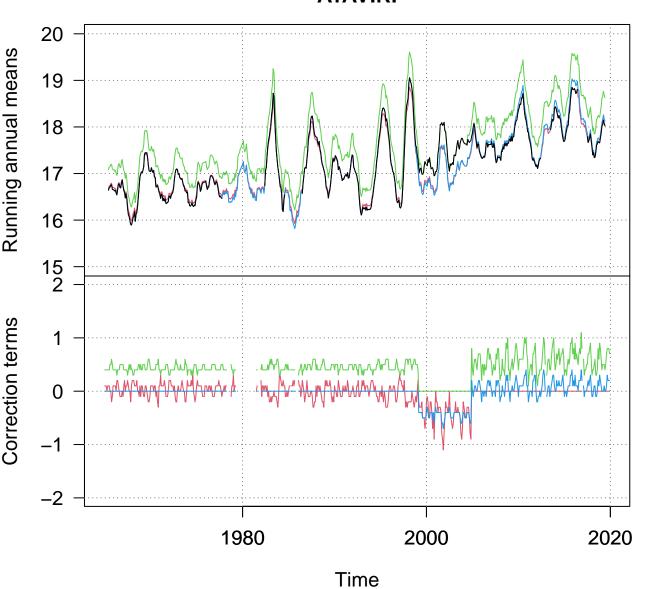
#### tmax-m 40 (ho00000788-5) CAPACHICA-5



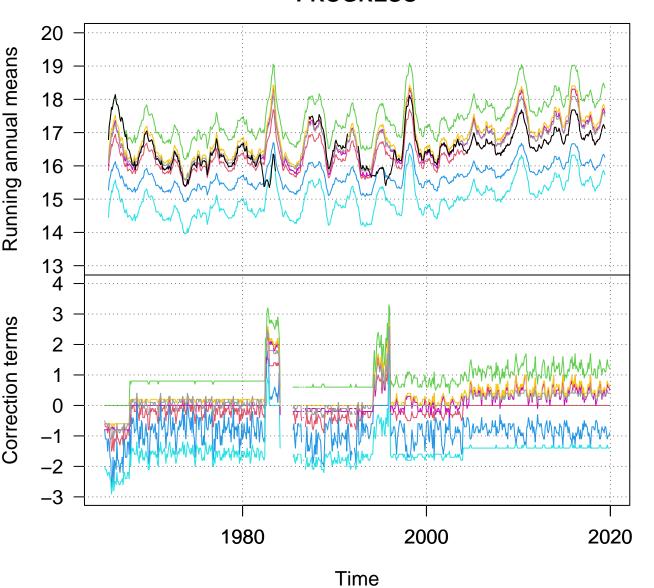
# Final graphics

Adjusted series and applied corrections

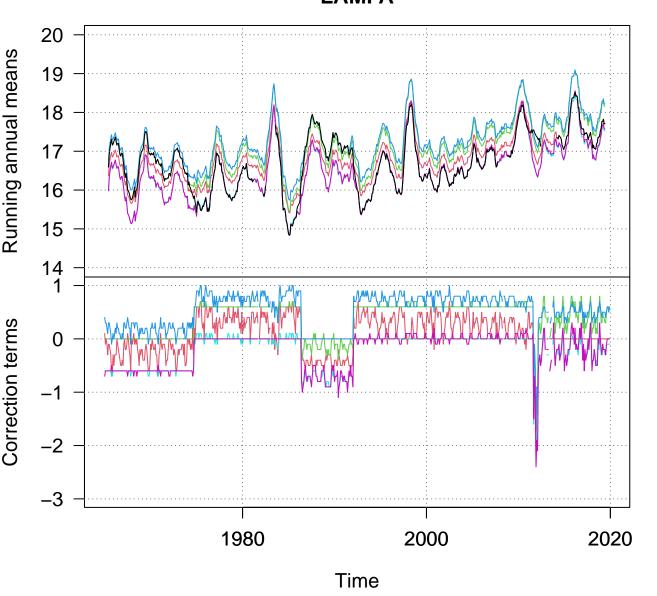
#### tmax-m 1 (ho00000776) AYAVIRI



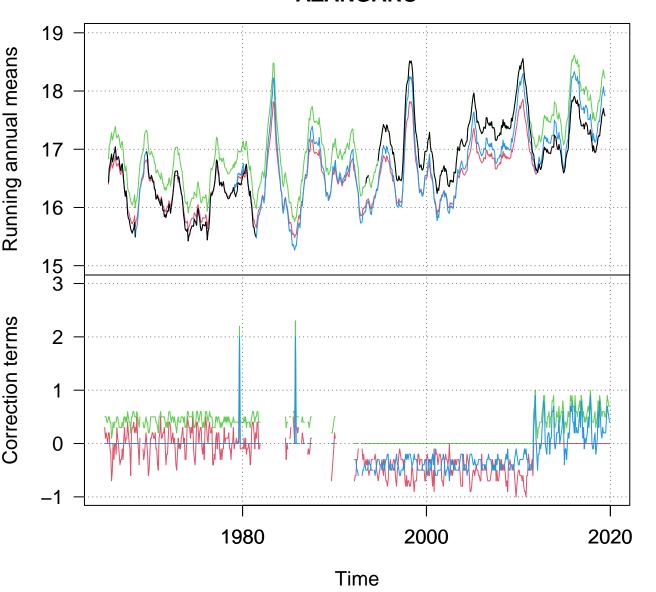
#### tmax-m 2 (ho00000778) PROGRESO



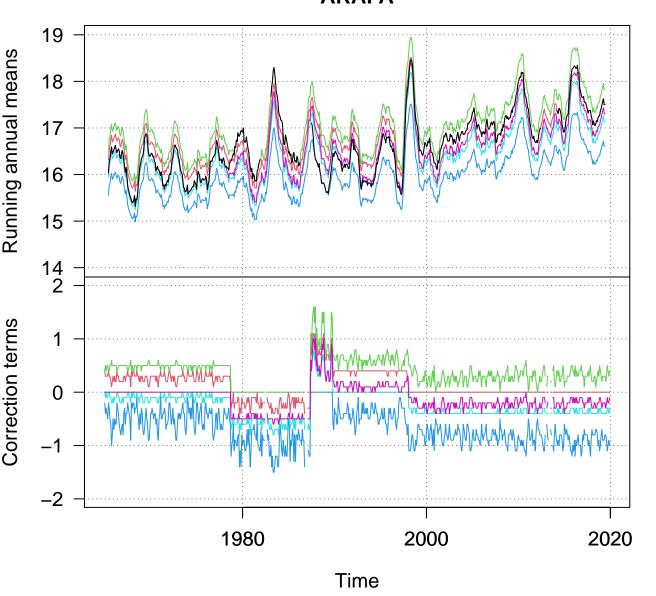
#### tmax-m 3 (ho00000779) LAMPA



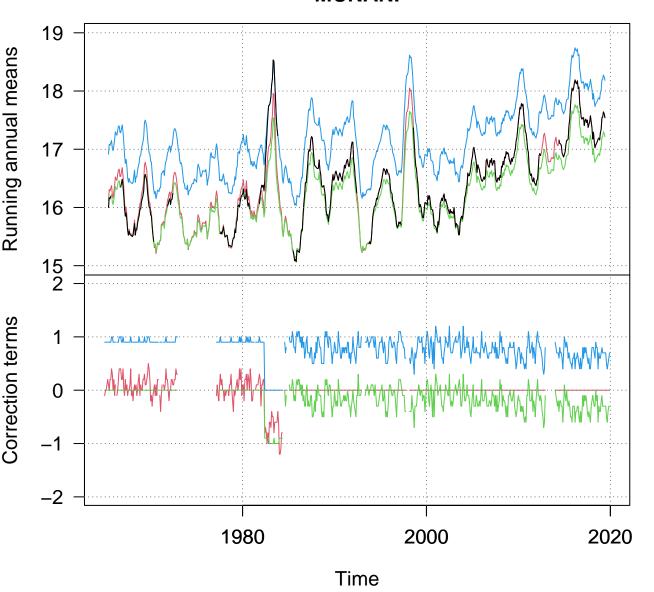
#### tmax-m 4 (ho00000781) AZANGARO



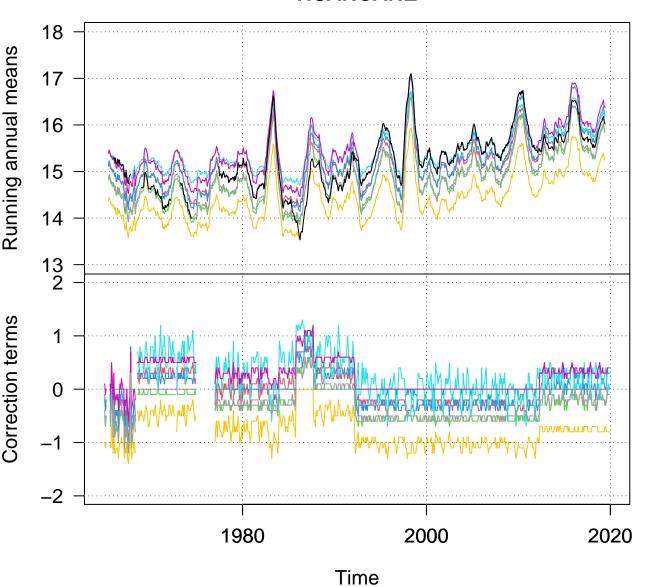
#### tmax-m 5 (ho00000783) ARAPA



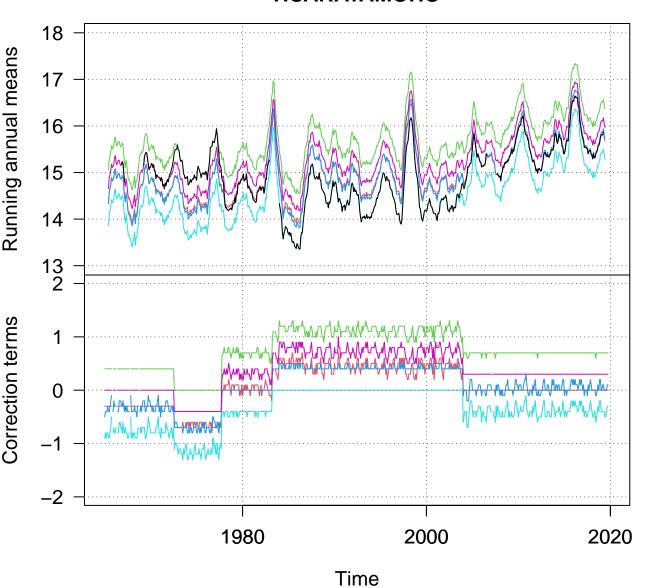
#### tmax-m 6 (ho00000785) MUNANI



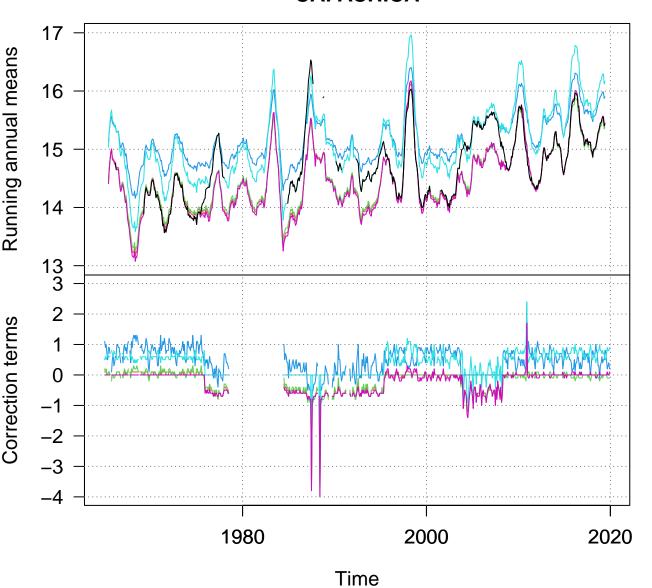
#### tmax-m 7 (ho00000786) HUANCANE



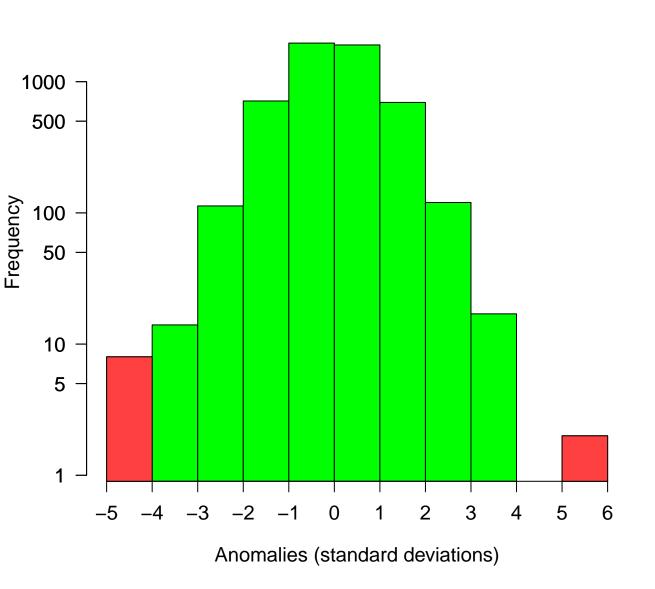
#### tmax-m 8 (ho00000787) HUARAYAMOHO



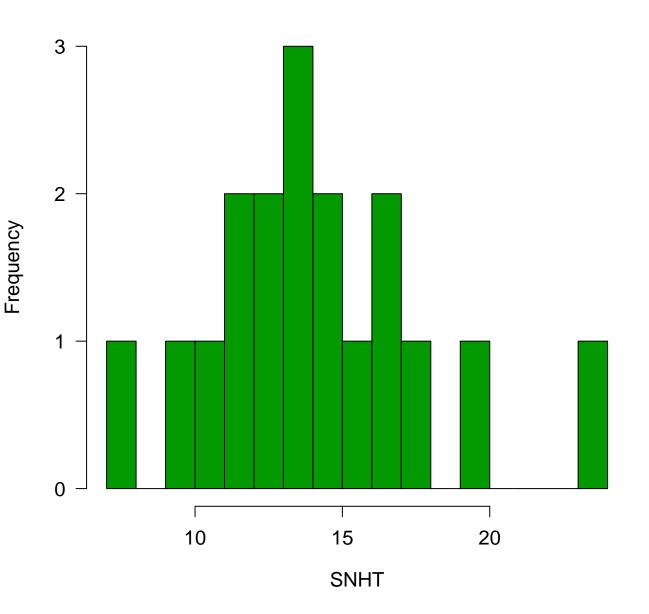
#### tmax-m 9 (ho00000788) CAPACHICA



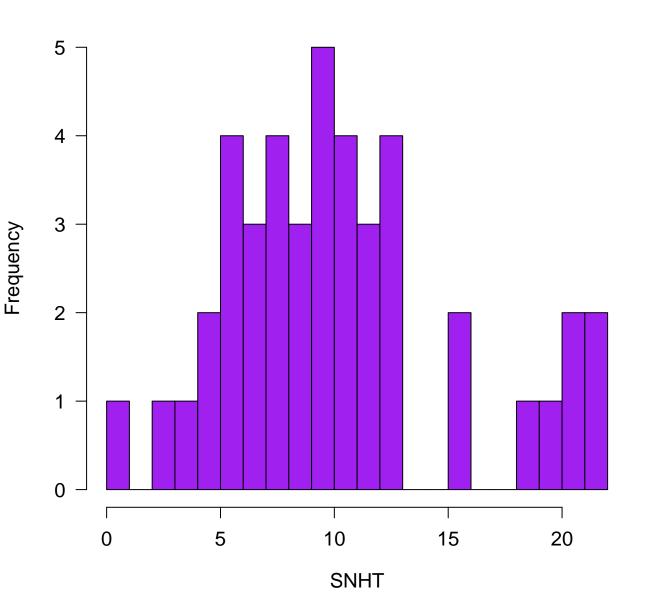
#### Histogram of standardized anomalies



# Histogram of maximum windowed SNHT



# Histogram of maximum global SNHT



### **Station's quality/singularity**

