DELTA TOOL FORECAST PLOTS APPLICATION EXAMPLES (on demo dataset)

FORECAST TARGET PLOT

1) One model, all stations, Single mode

Data selection

MOD1, PM10, all stations, Single mode

Analysis

Target (Assess&Forecast)/Forecast_Target Plot (OU) O3/NO2/PM

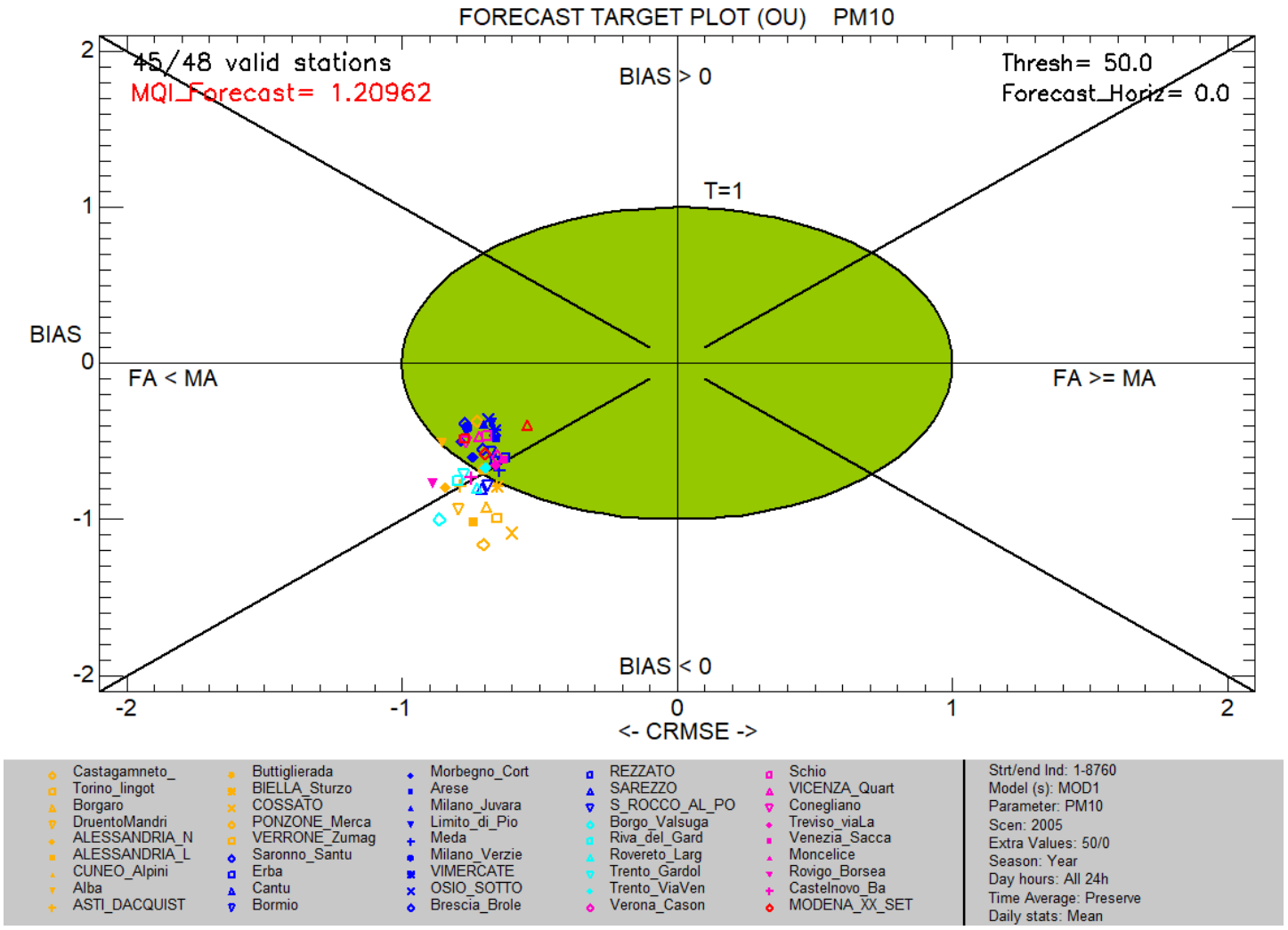
Extra Values=50#0# Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

Click on the points to get information and data



2) One model, filtered stations, Single mode

Data selection

MOD1, PM10, Filter by Siting="plane", Single mode

Point out the correspondence of "Region;Station Type;Area Type;Siting;" fields in the startup.ini file with the *Filtering and selection* section of the *Data section* window.

Point out that these filtering categories are used to filter or group (see example 6) stations. The names of the categories are not mandatory. If other categories suit better user's stations, they can be defined here.

Analysis

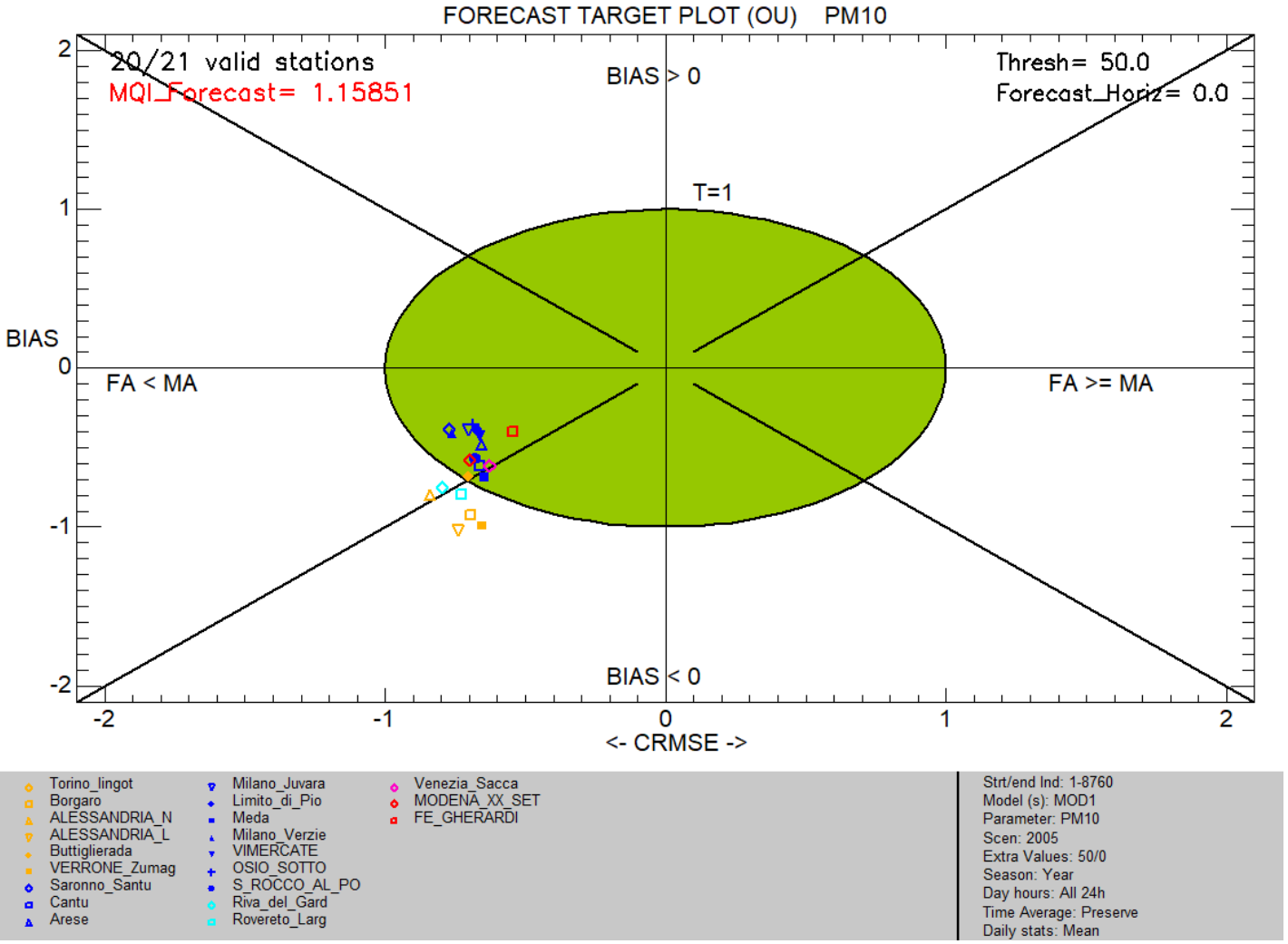
Target (Assess&Forecast)/Forecast_Target Plot (OU) O3/NO2/PM

Extra Values=50#0# Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*



3) <u>One model, filtered stations ("all stations apart from…" or "some groups of stations together"), Single mode</u>

<u>Data selection</u>

MOD1, PM10, Filter by Region="all apart from PIE and TRE", Single mode

Show how I can do if I want to make my analysis with "all stations apart from…" or "some groups of stations together".

Remove stations from "Selected Stations", Filter Region="EMR" and Add stations, Filter Region= "LOM" and Add stations, and so on…. Select all apart from "PIE" and "TRE"

<u>Analysis</u>

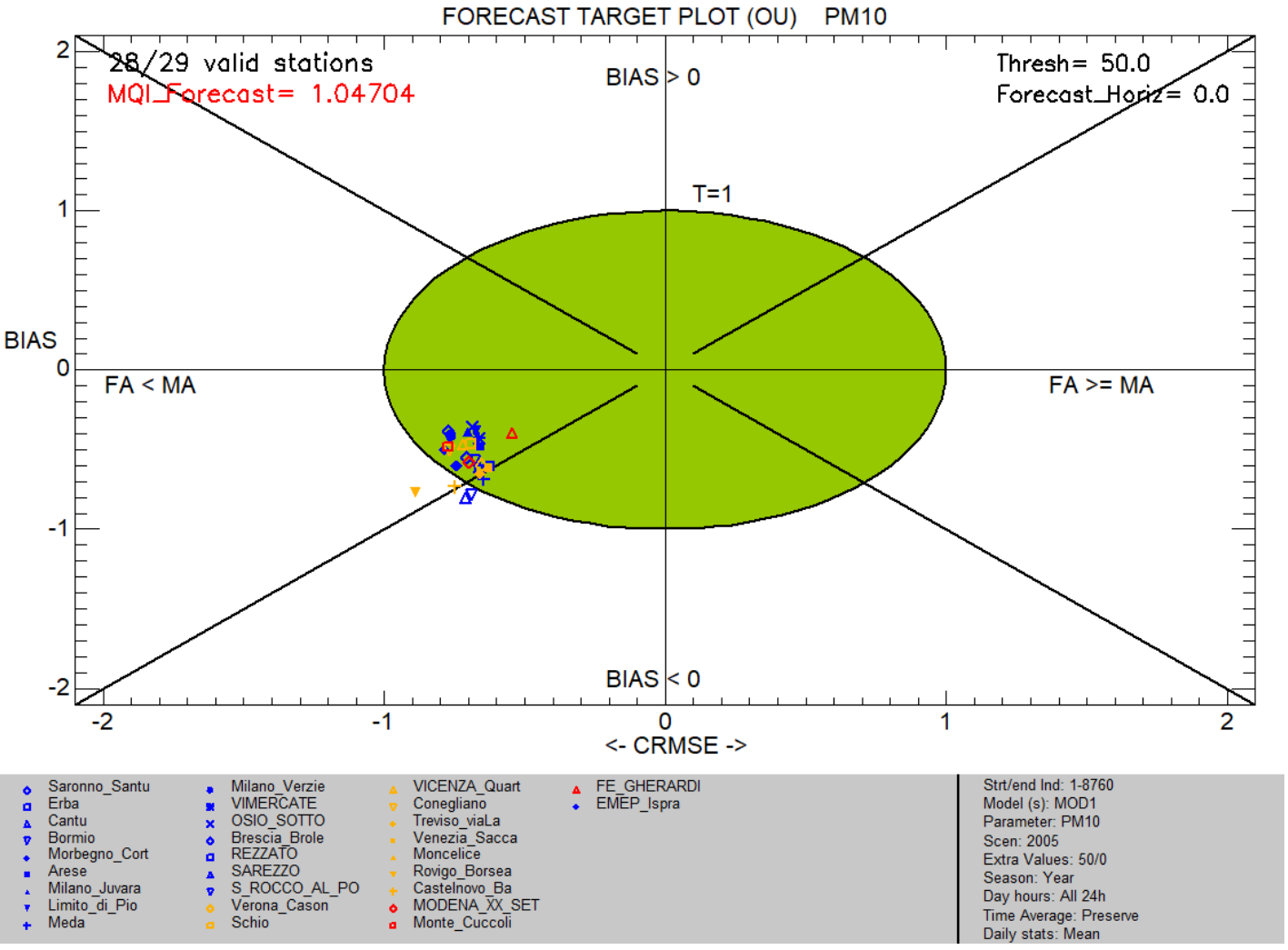
Target (Assess&Forecast)/Forecast_Target Plot (OU) O3/NO2/PM

Extra Values=50#0# Time Avg= preserve (none) Daily stats= Mean

<u>Execute</u>

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*



4) Multiple models, all stations, Single mode

Data selection

MOD1&MOD2, NO2, all stations, Single mode

Analysis

Target (Assess&Forecast)/Forecast_Target Plot (OU) O3/NO2/PM

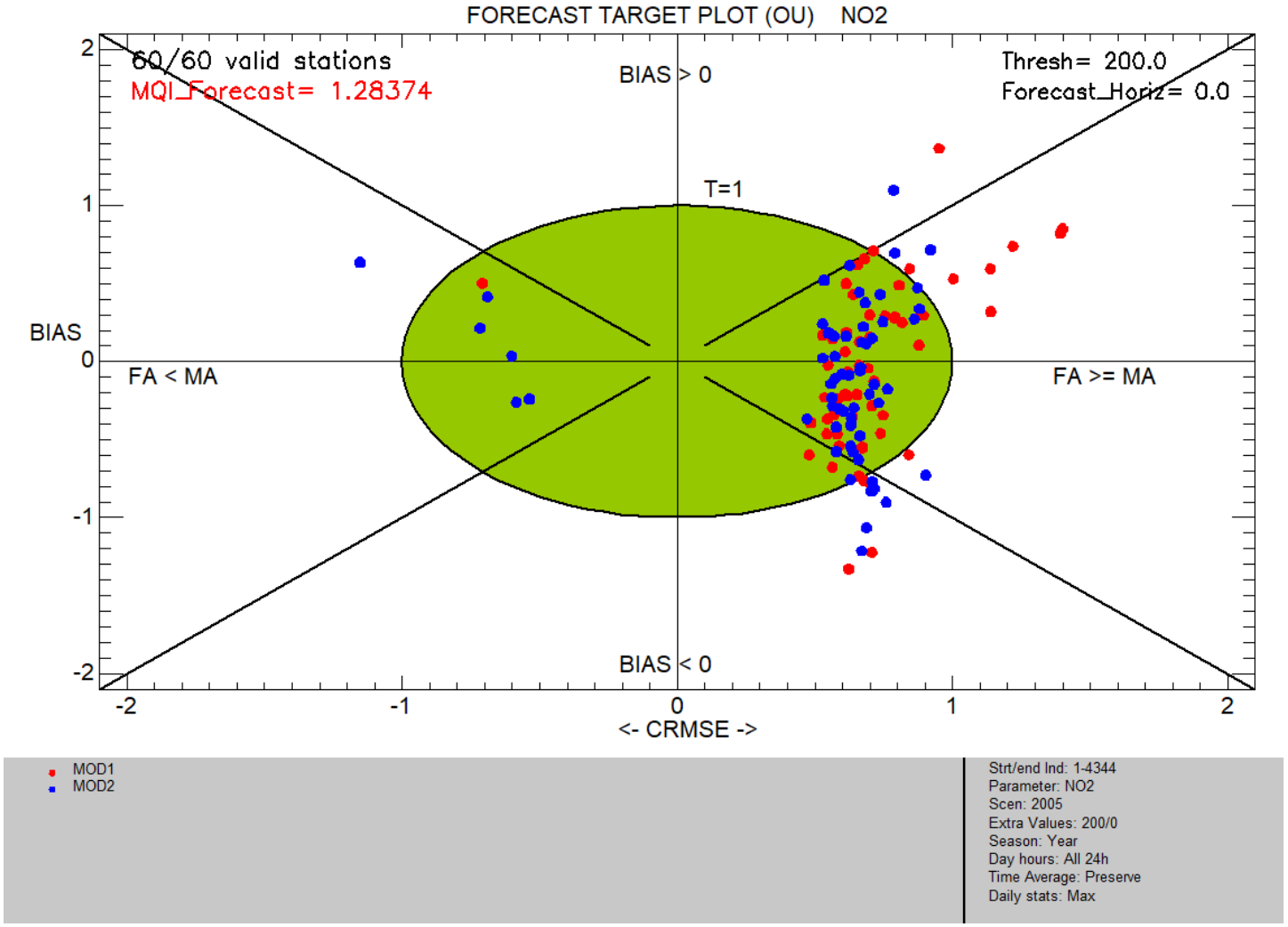
Extra Values=200#0# Time Avg= preserve (none) Daily stats= Max

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

Click on the points to get information and data and to find the differences between MOD1 & MOD2 performances



5) One model, all stations, Single mode, time period shorter than the whole year

Data selection

MOD1, O3, all stations, Single mode

Analysis

Target (Assess&Forecast)/Forecast_Target Plot (OU) O3/NO2/PM

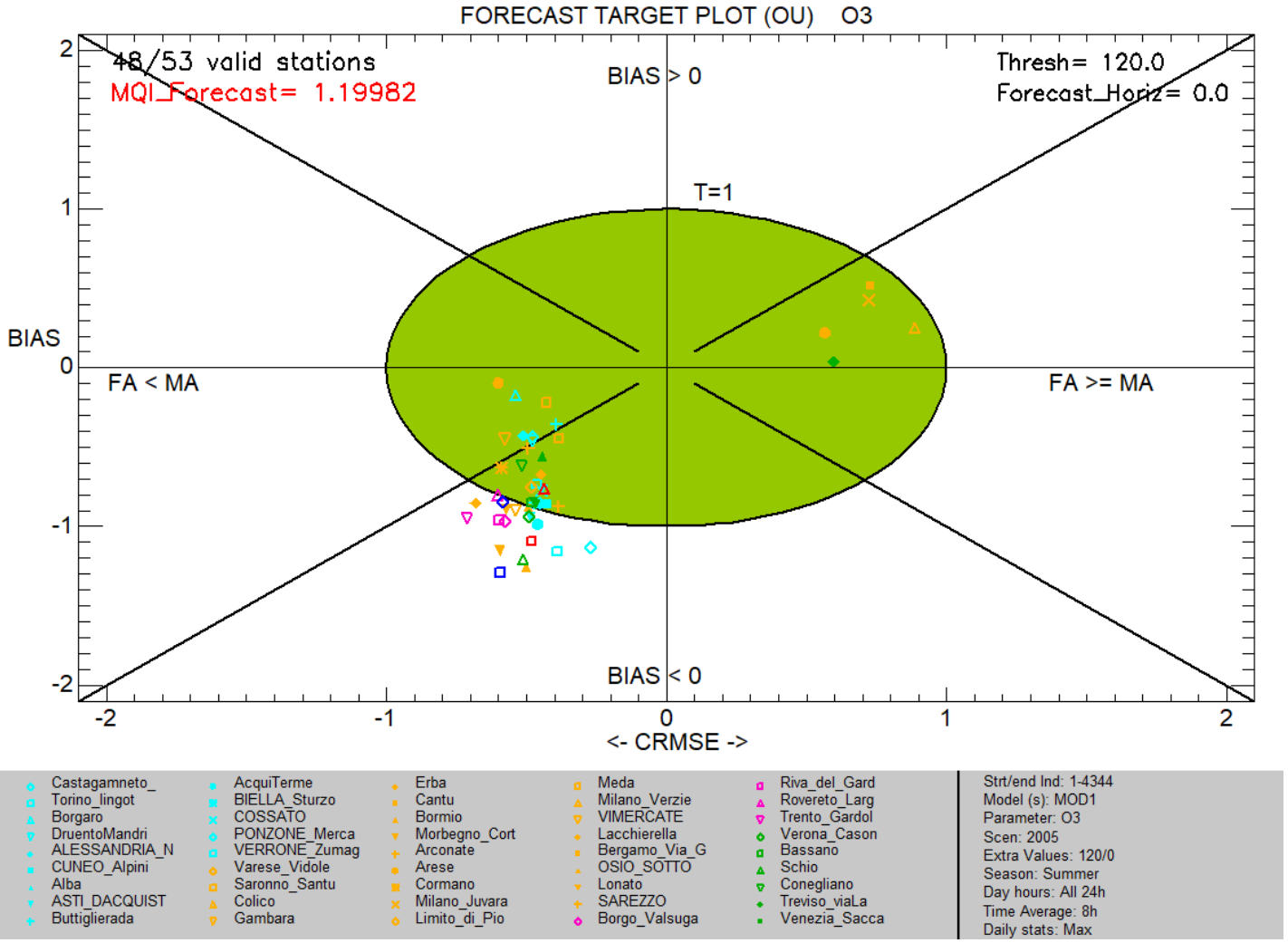
Extra Values=120#0# Time Avg=8h running Daily stats= Max

Select Season= Summer (JJA)

Execute

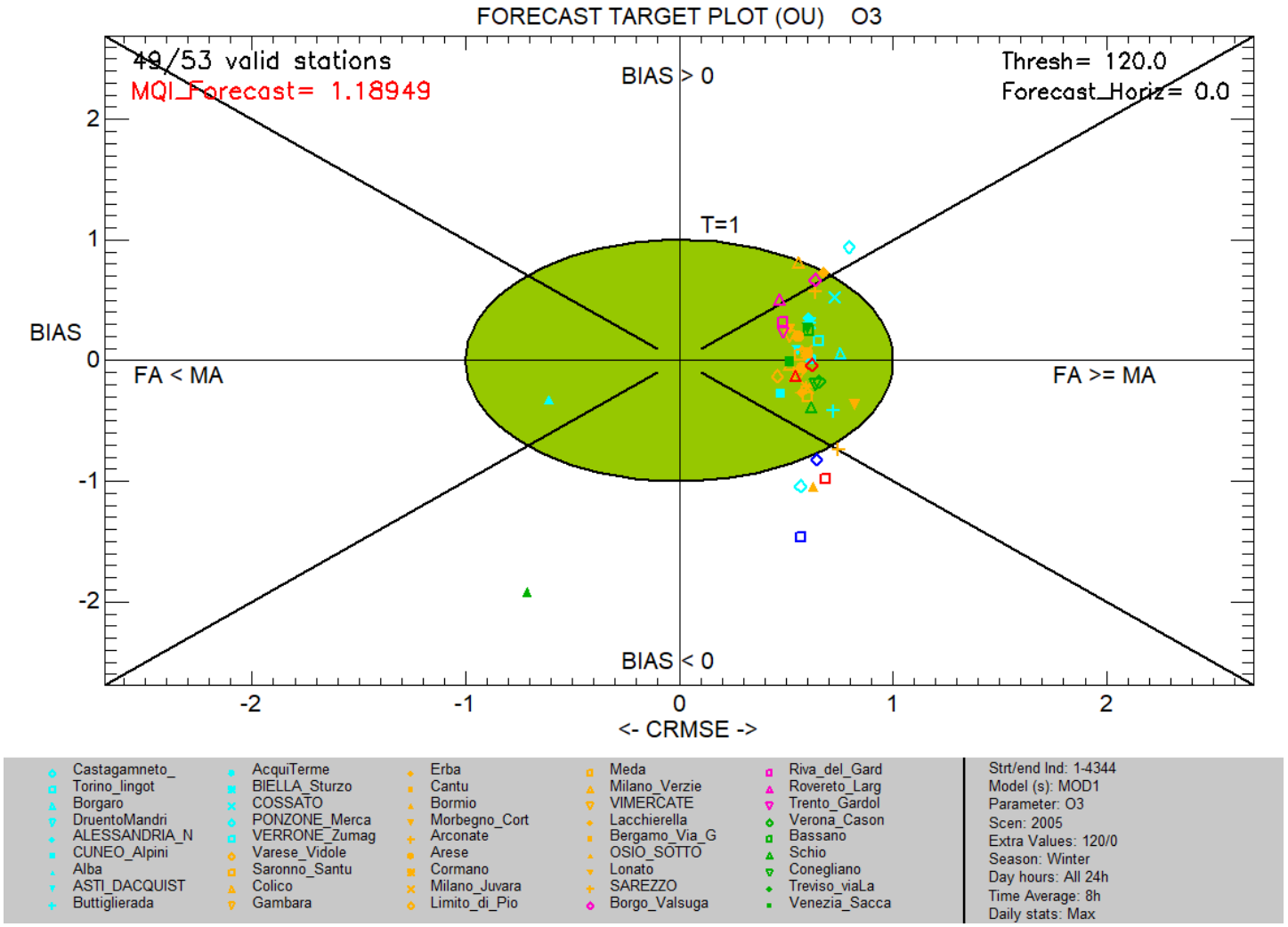
Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

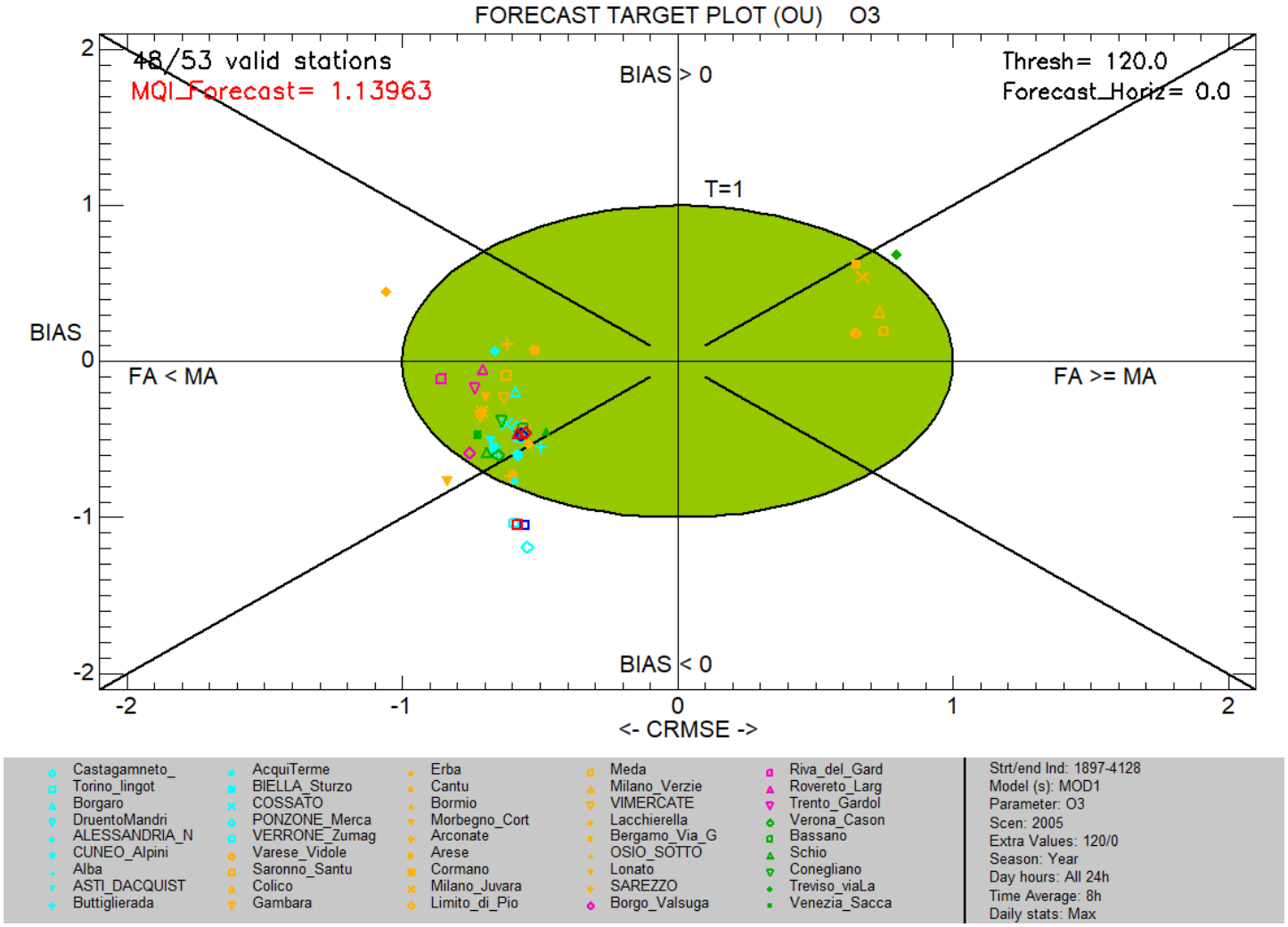


And then

repeat Analysis selecting Season=Winter (DJF) and Execute



repeat Analysis selecting from 21/03 (hour=0) to 21/06 (hour=23) and Execute



6) One model, all stations, Group mode

Data selection

MOD1, NO2, all stations, Group mode

Select "rural", then "suburban", then "urban" and *Add* after choosing *Group mode* (choose *Worst Indic in 90% stat*)

Analysis

Target (Assess&Forecast)/Forecast_Target Plot (OU) O3/NO2/PM

Extra Values=200#0# Time Avg= preserve (none) Daily stats= Max

Execute

Saving the Results: *File* → *Save image*

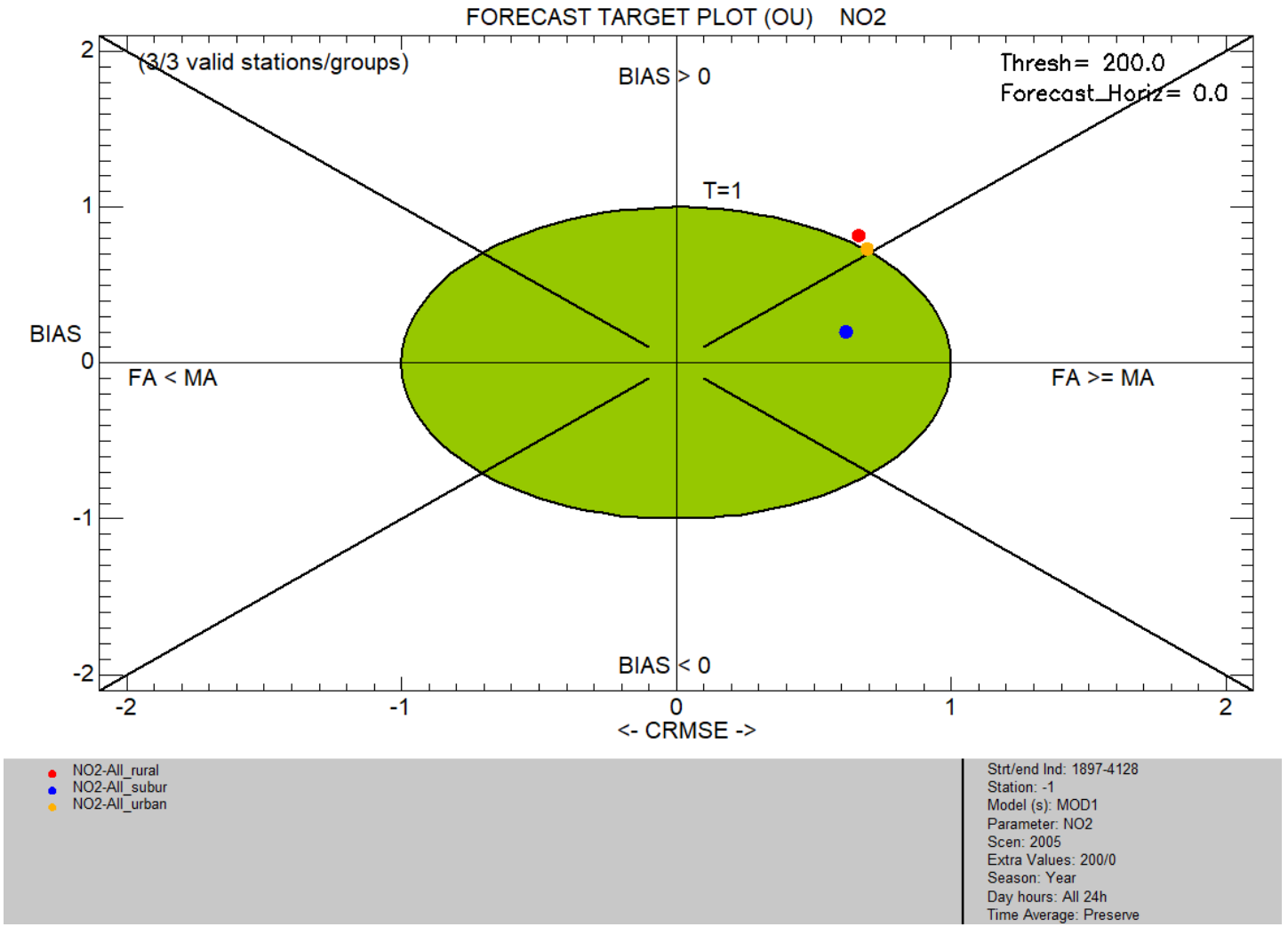
Help → *Edit DumpFile* → *File* → *Save as*

Show how to save this Data selection by selecting from the upper Toolbar *Data section* → *Save data*

Show how to restore this Data selection. Close DeltaTool and start it again.

From the upper Toolbar *Data section* → *Restore data*

Click on Group mode. Then Analysis. Then Execute



FORECAST MPI PLOT

1) One model, all stations, Single mode

Data selection

MOD2, NO2, all stations, Single mode

Analysis

Forecast_MPI/Forecast_MPI (OU) Plot O3/NO2/PM

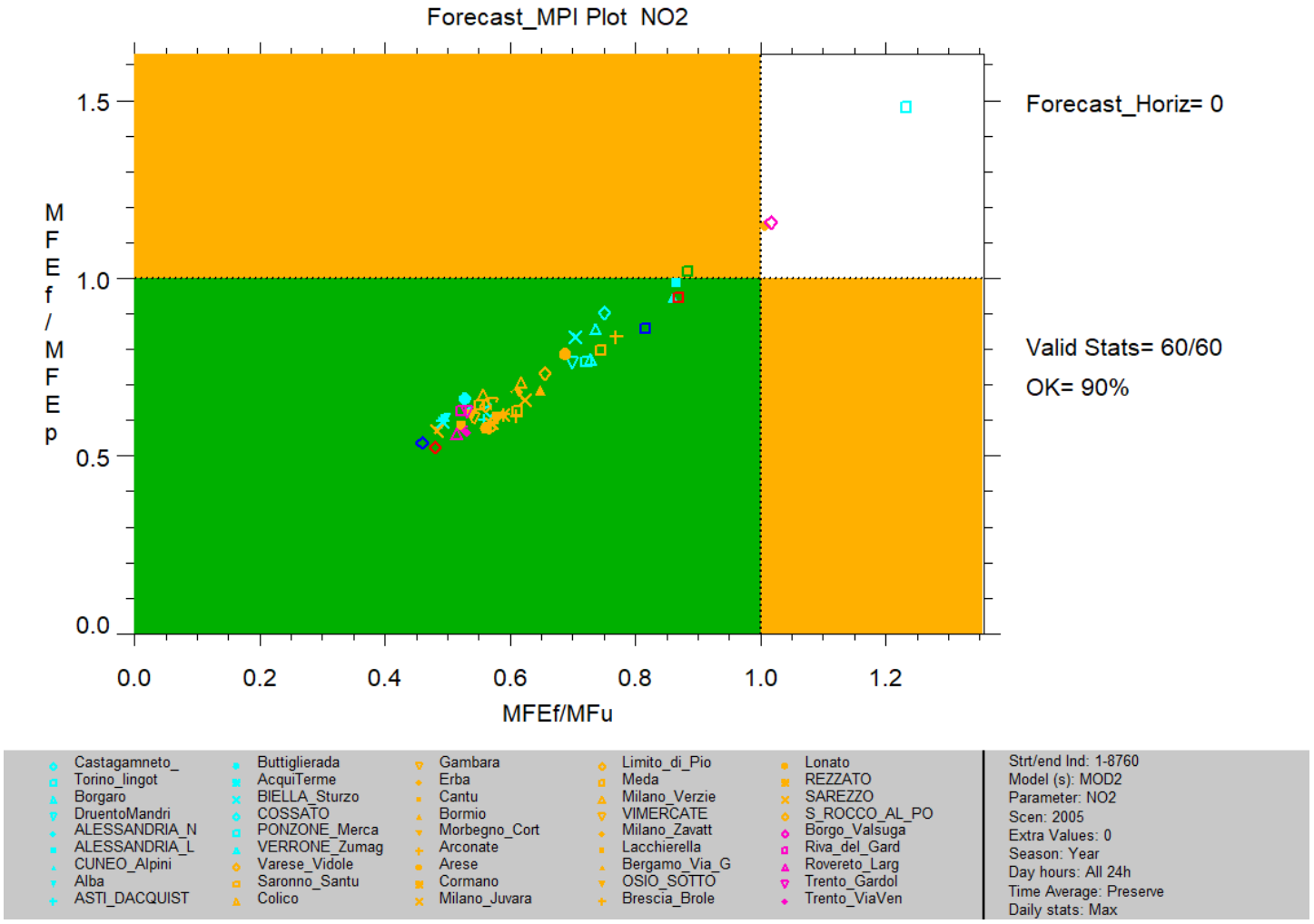
Extra Values=0# Time Avg= preserve (none) Daily stats= Max

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

Click on the points to get information and data



FORECAST SUMMARY REPORT

1) One model, all stations, Single mode

Data selection

MOD2, PM10, all stations, Single mode

Analysis

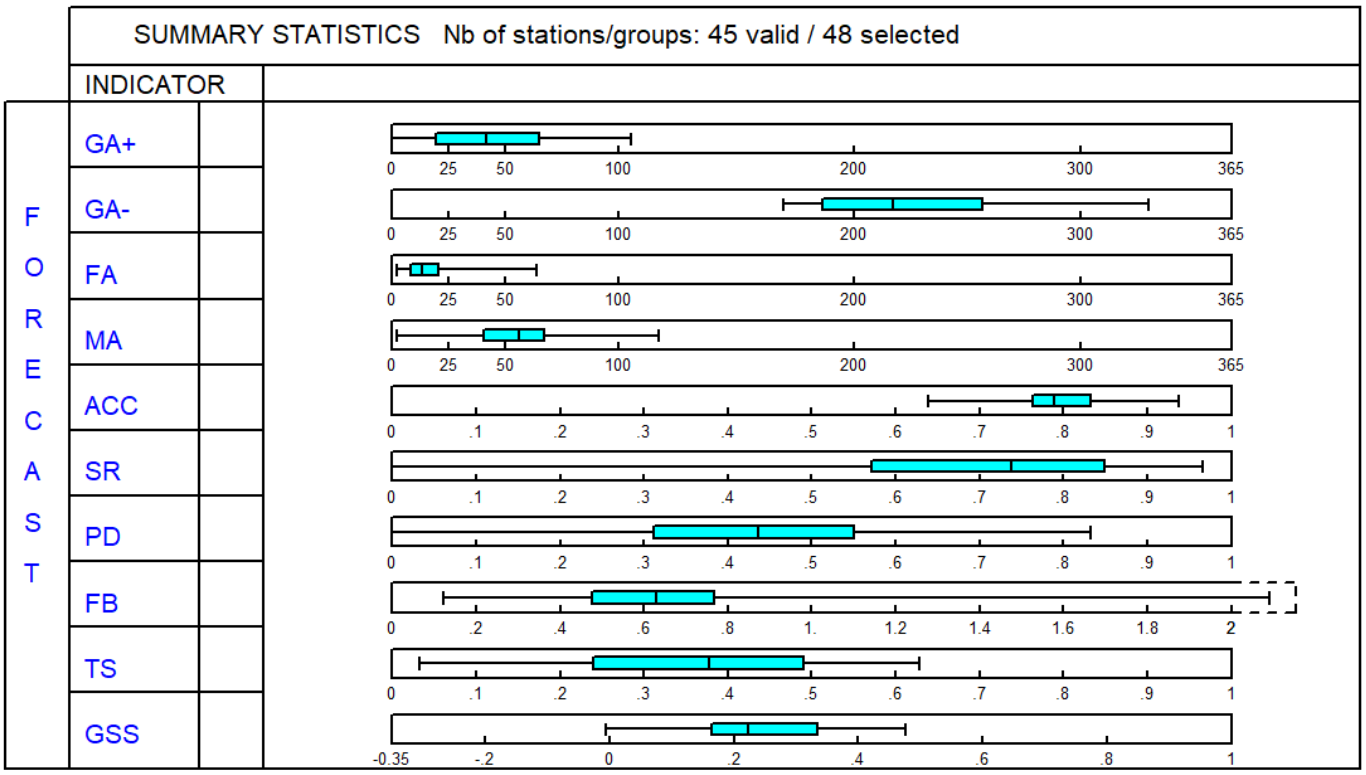
Summary Report & print (OU)/Forecast Summary O3/NO2/PM

Extra Values=50# Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

(.csv file is saved before plot is produced)



2) One model, less than 10 stations, Single mode

Data selection

MOD2, PM10, Filter by Region="VEN", Single mode

Analysis

Summary Report & print (OU)/Forecast Summary O3/NO2/PM

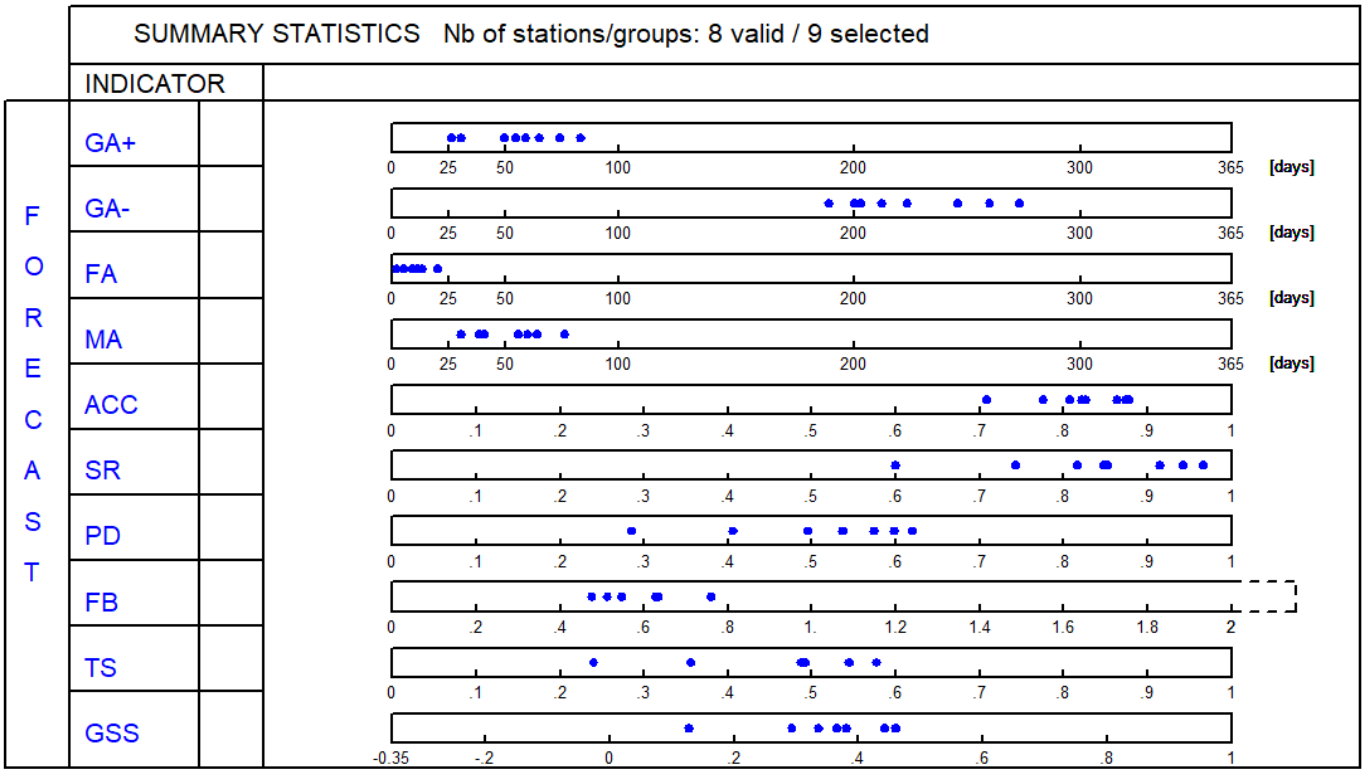
Extra Values=50# Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

(.csv file is saved before plot is produced)

Here every point represents a station. Click on the points to get information and data



FORECAST SUMMARY P-NORMALIZED REPORT

1) One model, all stations, Single mode

Data selection

MOD2, PM10, all stations, Single mode

Analysis

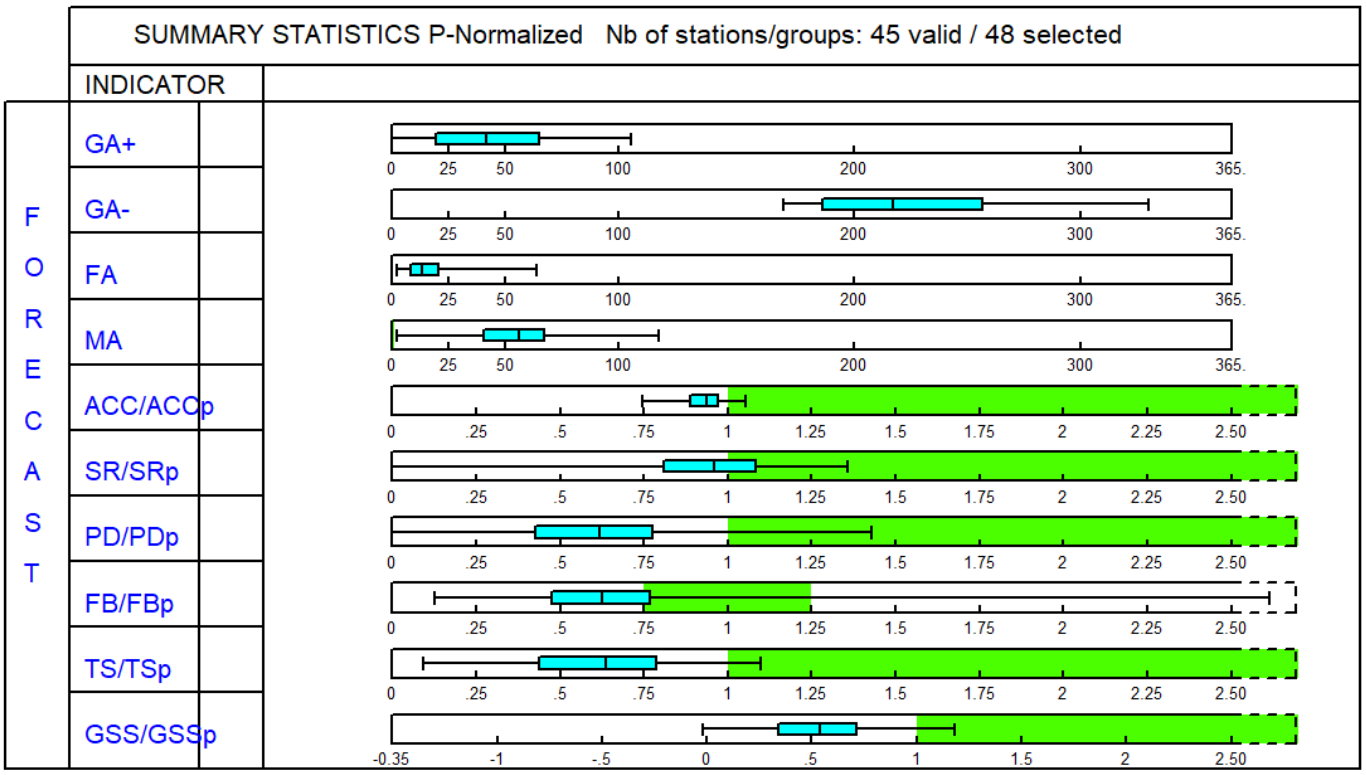
Summary Report & print (OU)/Forecast Summary P-Normalized O3/NO2/PM

Extra Values=50#0# Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

(.csv file is saved before plot is produced)



2) One model, less than 10 stations, Single mode

Data selection

MOD2, PM10, Filter by Region="VEN", Single mode

Analysis

Summary Report & print (OU)/Forecast Summary P-Normalized O3/NO2/PM

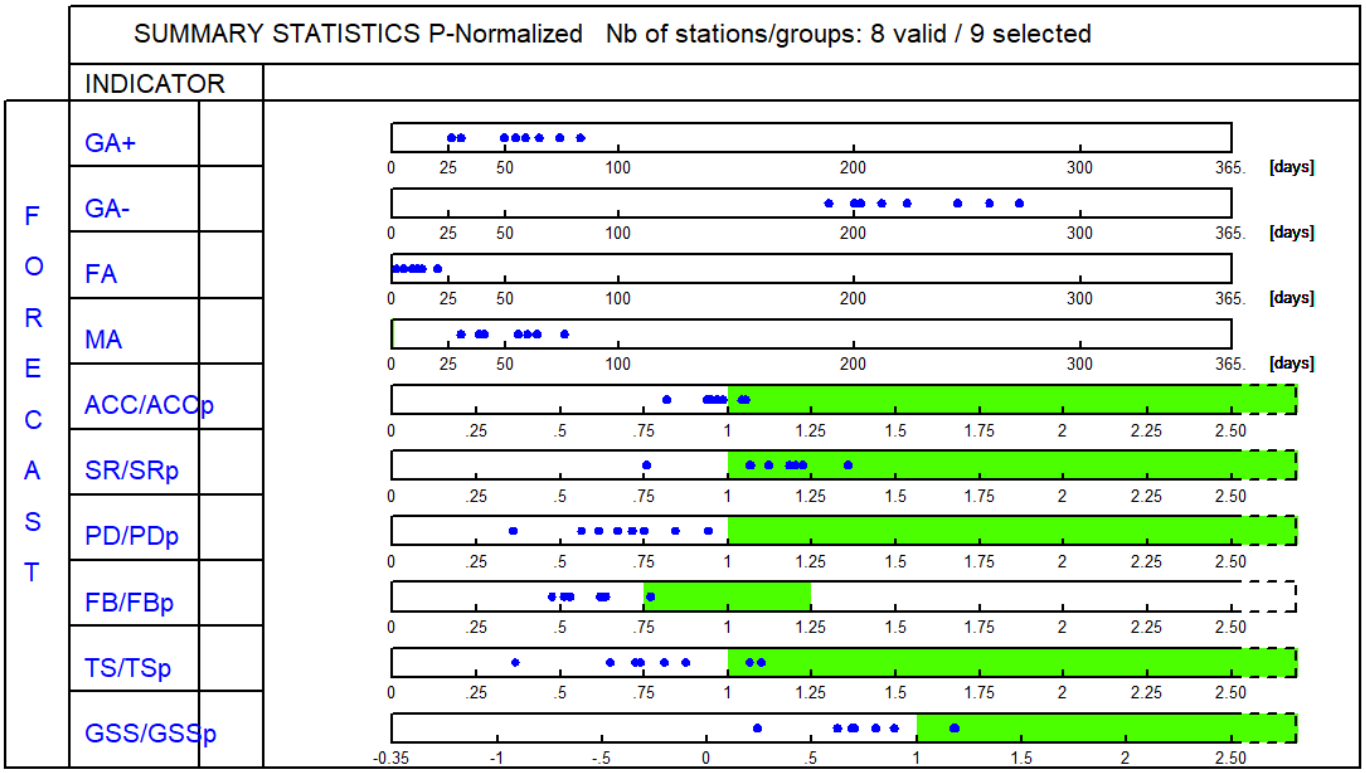
Extra Values=50#0# Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

(.csv file is saved before plot is produced)

Here every point represents a station. Click on the points to get information and data



FORECAST THRESHOLD PERFORMANCE PLOT

1) One model, all stations, Single mode

Data selection

MOD2, O3, all stations, Single mode

Analysis

Forecast Performance/ Forecast Threshold Performance Plot

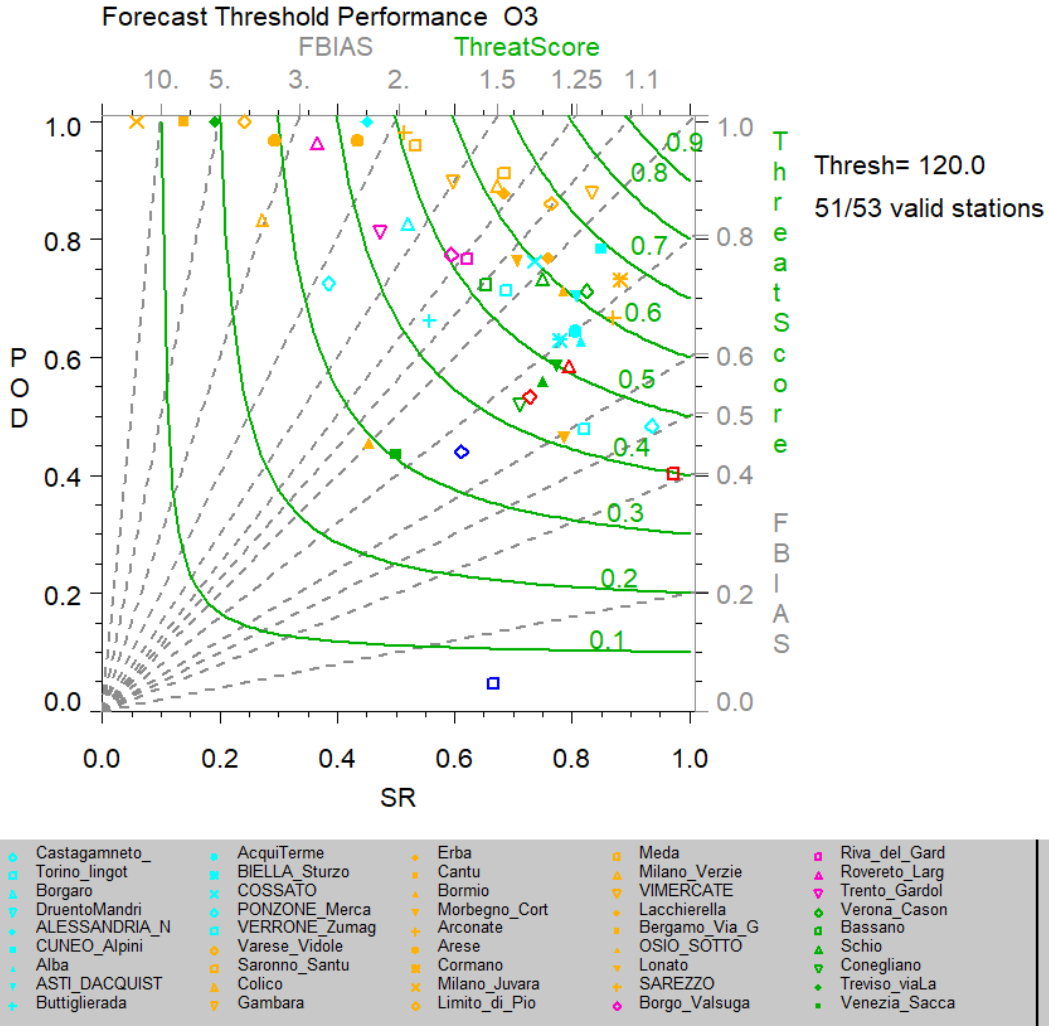
Extra Values=120# Time Avg=8h running Daily stats= Max

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

Click on the points to get information and data



FORECAST THRESHOLD NORMALIZED PERFORMANCE PLOT

1) One model, all stations, Single mode

Data selection

MOD2, O3, all stations, Single mode

Analysis

Forecast Performance/ Forecast Threshold Normalized Performance Plot

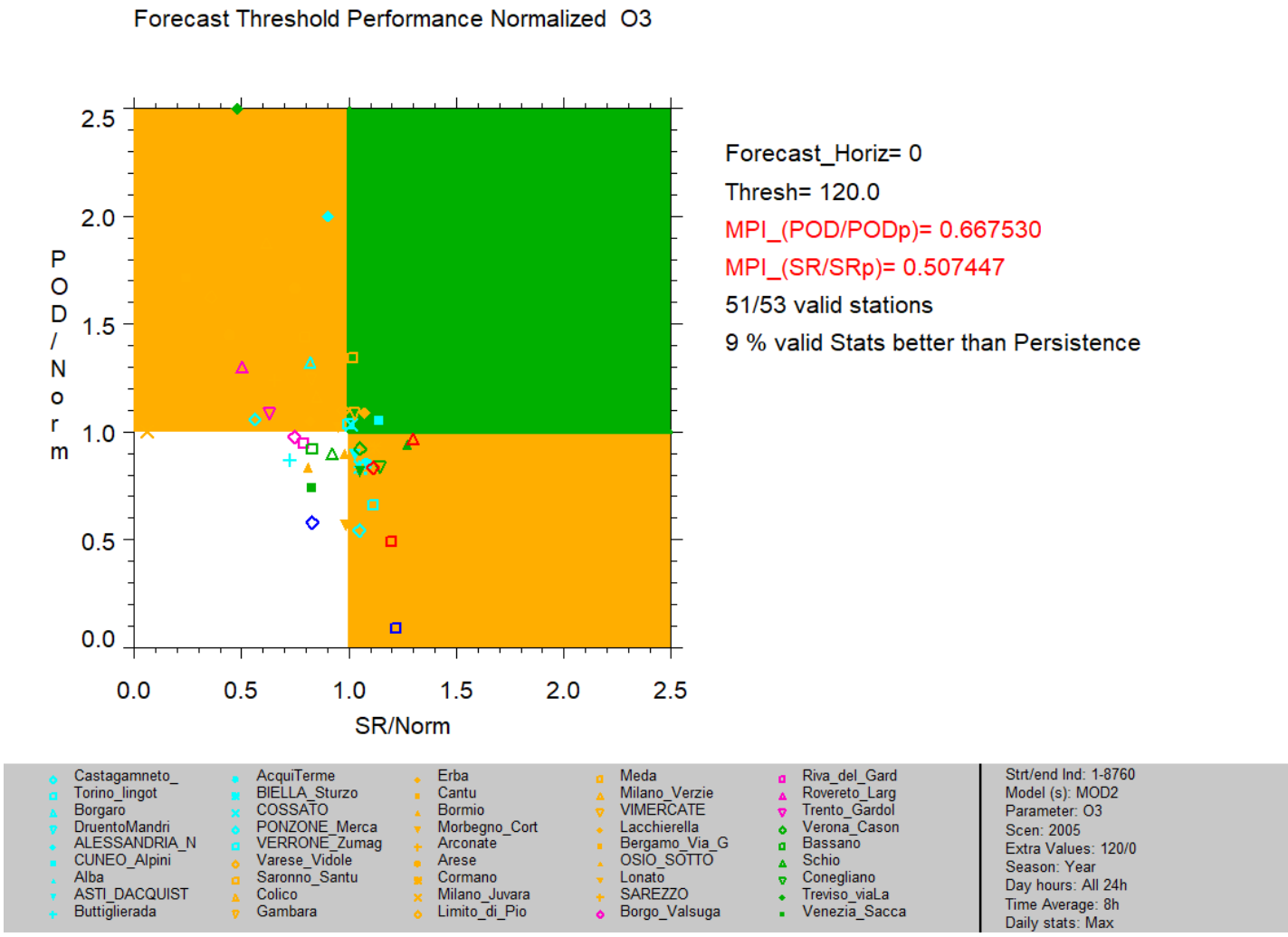
Extra Values=120#0# Time Avg=8h running Daily stats= Max

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

Click on the points to get information and data



BAR PLOTS FOR EXCEEDANCES INDICATORS (POD, SR, POD&SR, ACCURACY)

1) FORECAST POD: Multiple models, filtered stations, Single mode

Data selection

MOD1&MOD2, PM10, Filter by Region="VEN", Single mode

Analysis

BarPlot/Forecast POD

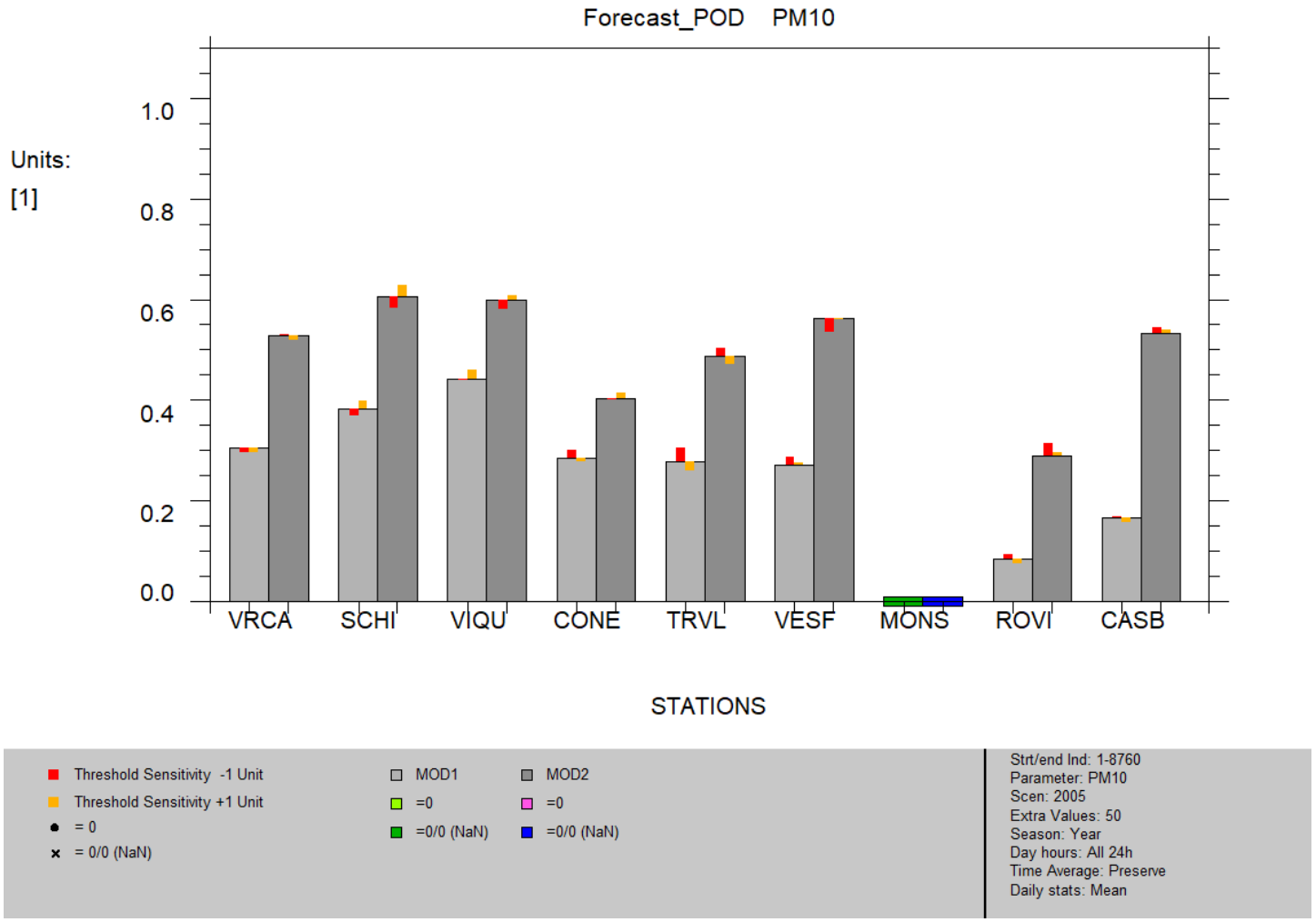
Extra Values=50# Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

Click on the points to get information and data



2) FORECAST SR: Multiple models, filtered stations, Single mode

Data selection

MOD1&MOD2, PM10, Filter by Region="VEN", Single mode

Analysis

BarPlot/Forecast SR

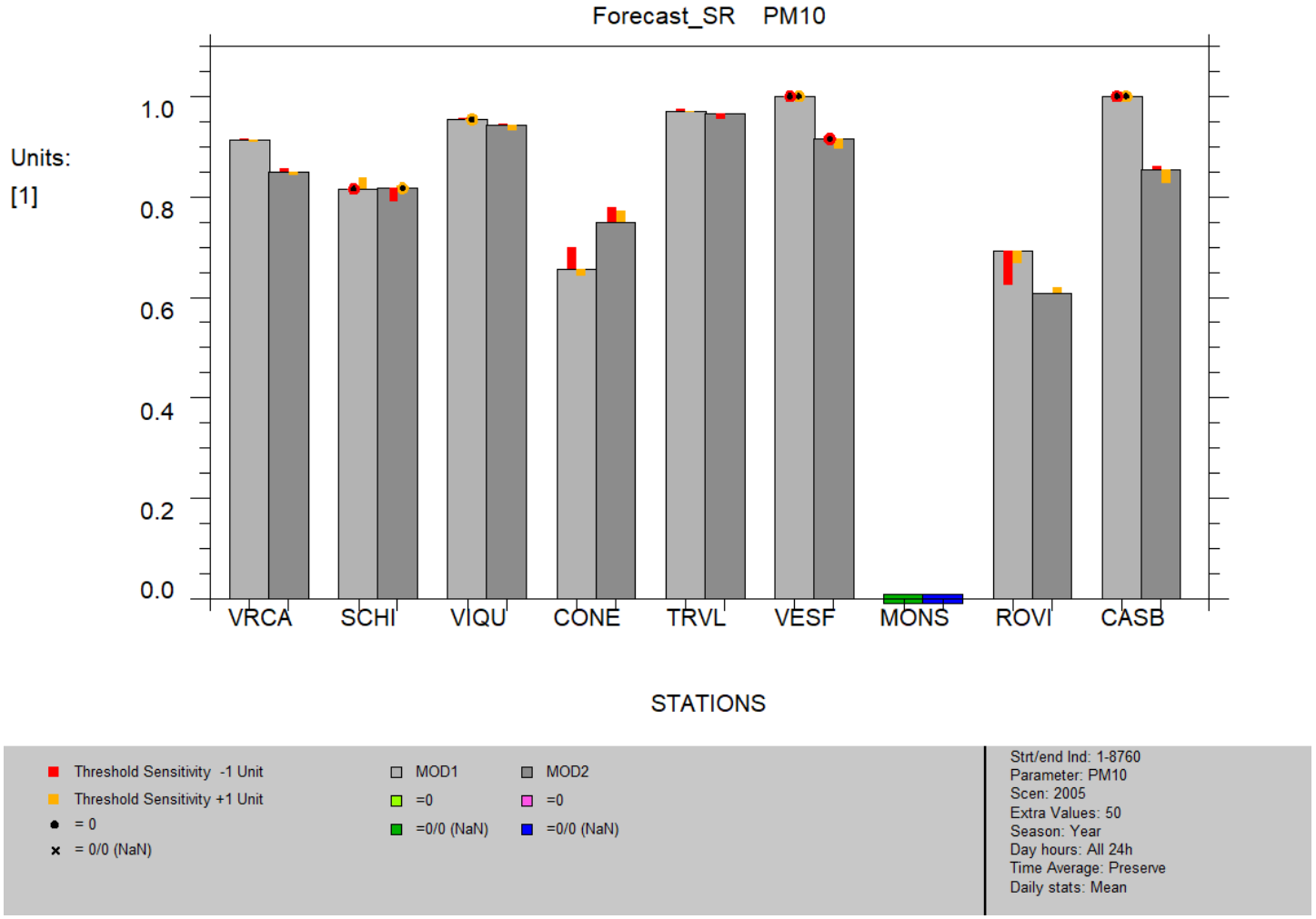
Extra Values=50# Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

Click on the points to get information and data



3) FORECAST POD&SR: One model, filtered stations, Single mode

Data selection

MOD1, PM10, Filter by Region="VEN", Single mode

Analysis

BarPlot/Forecast POD&SR

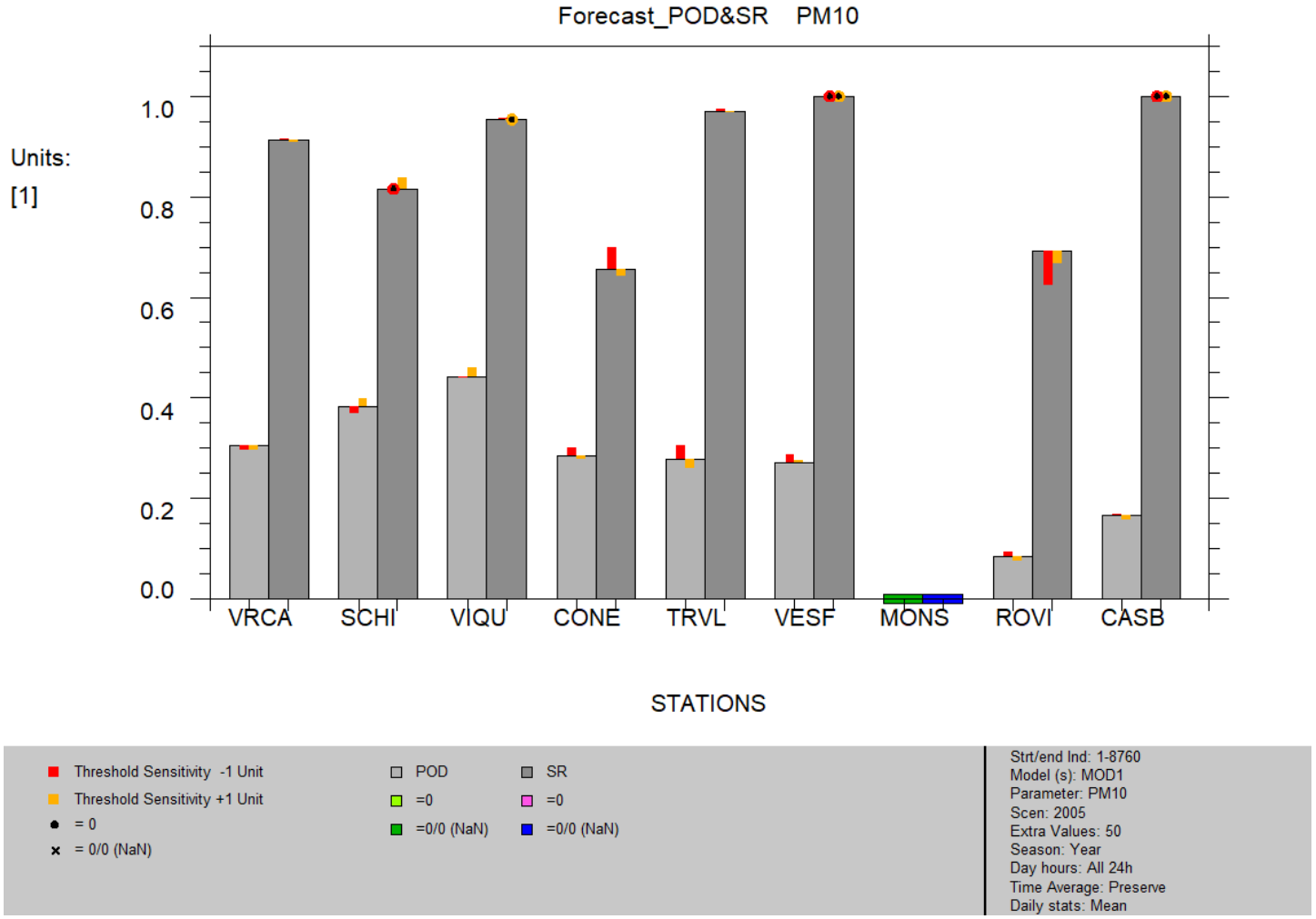
Extra Values=50# Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

Click on the points to get information and data



4) FORECAST ACCURACY: Multiple models, filtered stations, Single mode

Data selection

MOD1&MOD2, PM10, Filter by Region=”VEN”, Single mode

Analysis

BarPlot/Forecast Accuracy

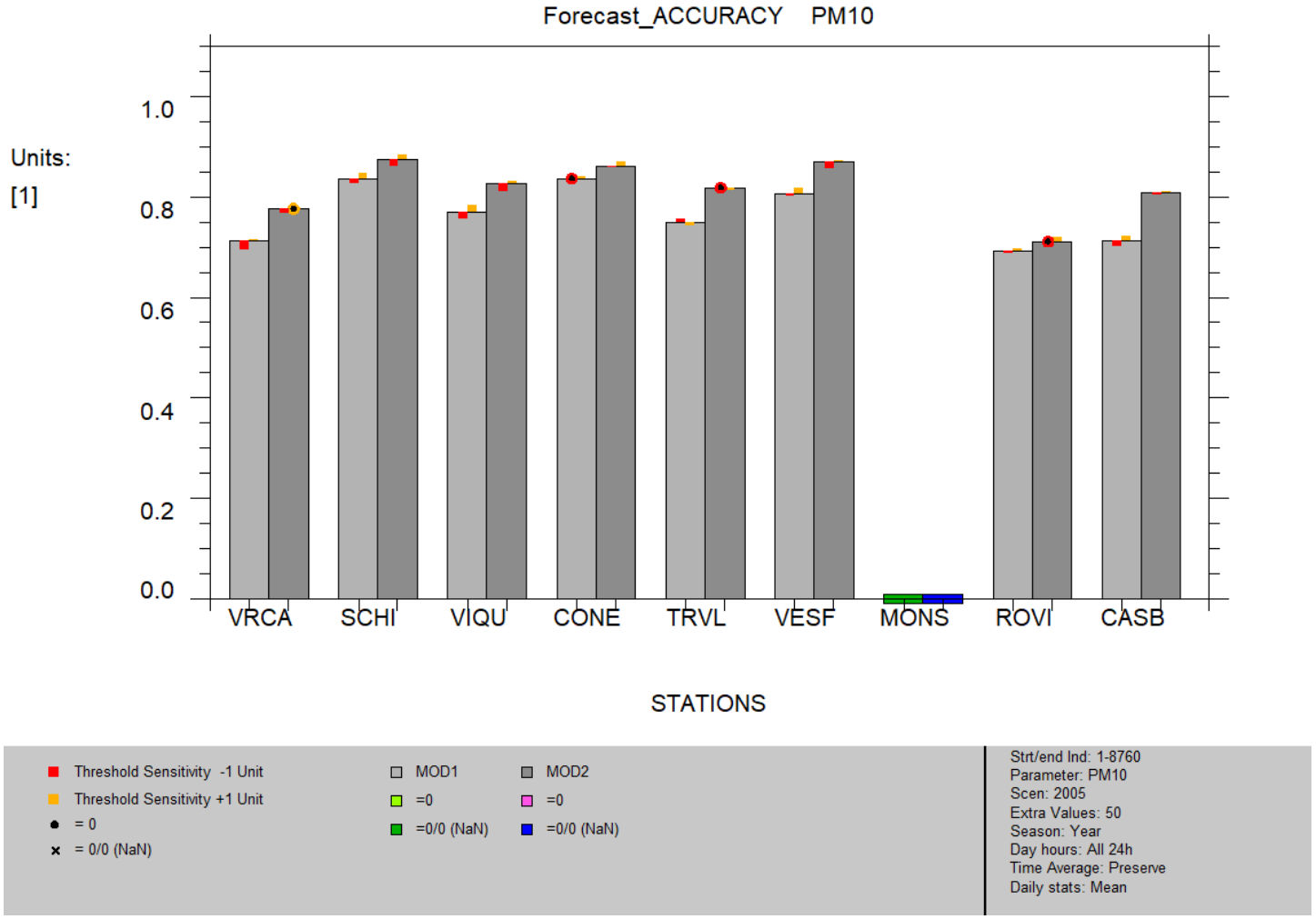
Extra Values=50# Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

Click on the points to get information and data



FORECAST AQI PLOT

1) One model, all stations, Single mode

Data selection

MOD2, PM2.5, all stations, Single mode

Analysis

Forecast_AQI/Forecast_AQI

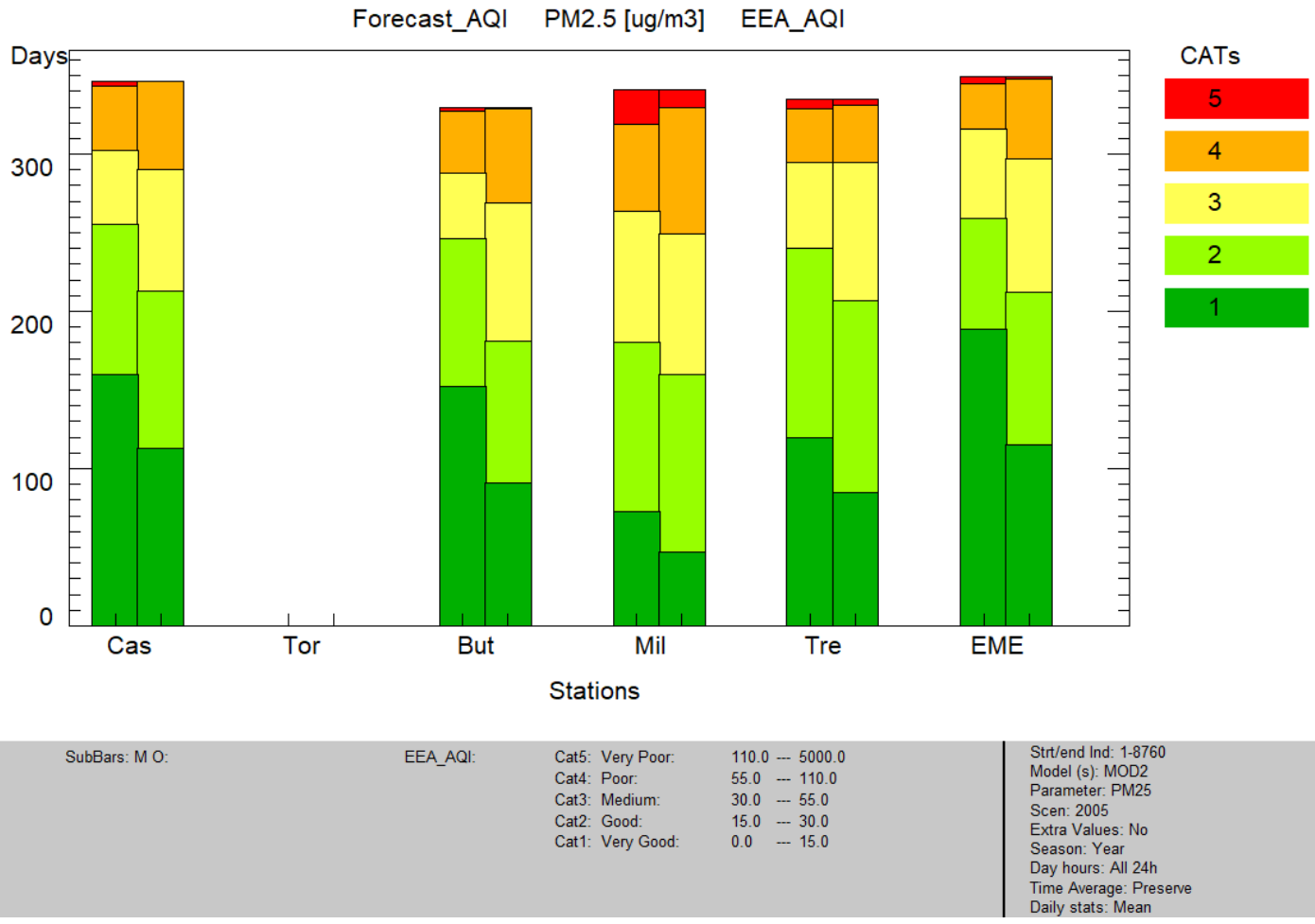
Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*

Click on the points to get information and data



2) One model, all stations, Group mode

Data selection

MOD1, PM10, all stations, Group mode

Select "hilly", then "plane", then "valley" and *Add* after choosing *Group mode* (choose *Mean of 100% stat*)

Analysis

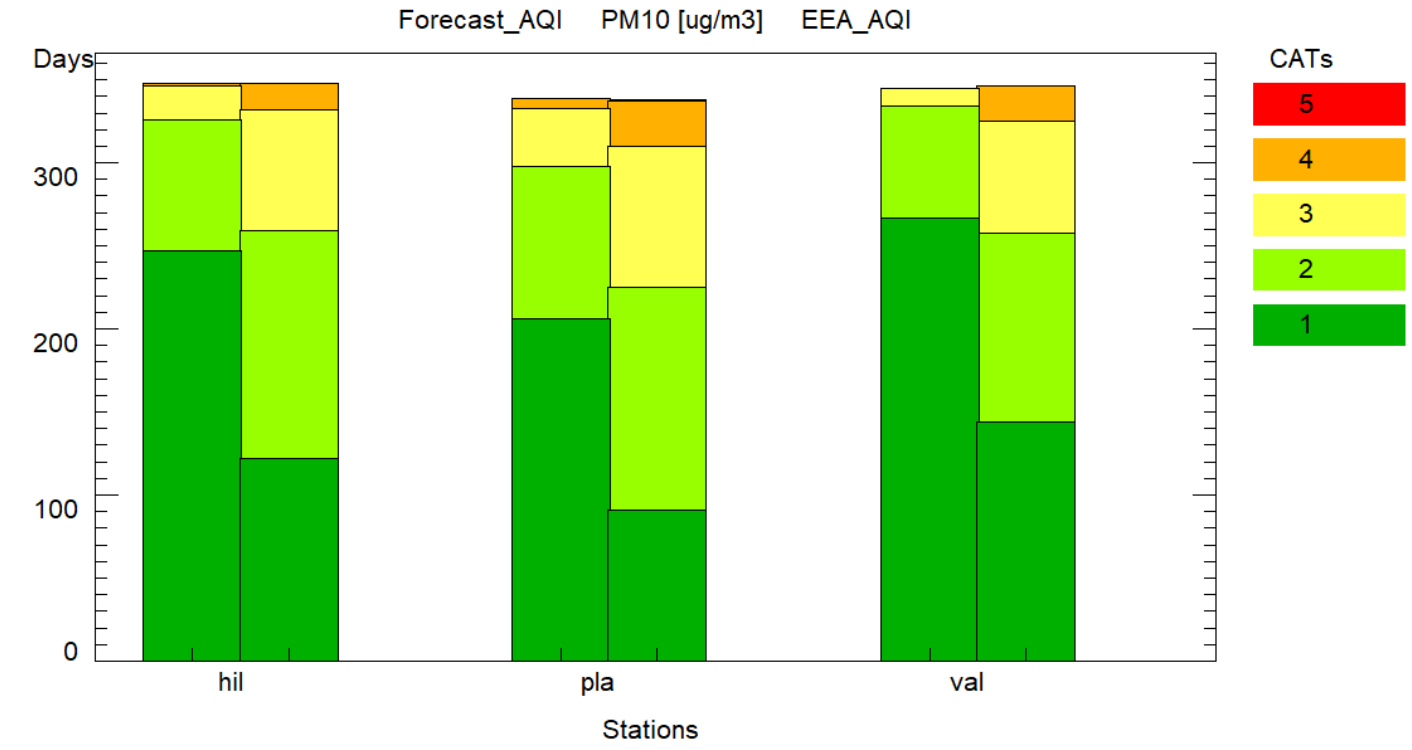
Forecast_AQI/Forecast_AQI

Time Avg= preserve (none) Daily stats= Mean

Execute

Saving the Results: *File* → *Save image*

Help → *Edit DumpFile* → *File* → *Save as*



SubBars: M O:

EEA_AQI:

Cat5:	Very Poor:	180.0 ---	5000.0
Cat4:	Poor:	90.0 ---	180.0
Cat3:	Medium:	50.0 ---	90.0
Cat2:	Good:	25.0 ---	50.0
Cat1:	Very Good:	0.0 ---	25.0

Strt/end Ind: 1-8760
Station: -1
Model (s): MOD1
Parameter: PM10
Scen: 2005
Extra Values: No
Season: Year
Day hours: All 24h
Time Average: Preserve