Appendix B Scripts to run MET

B1 This is the main script to run MET

```
#!/bin/bash
echo  “WRF-chem statistics analysis”
#
#  The following directories have to be set
#  DIRFCT    - Forecast/model output from UPP
#   fobservado - Observational data from
ascii2nc
#  fconfig    - Configuration file to extract
met, chem variables
export DIR=/media/Disco2
export  DIRFCT=/media/DOMAINS/abr_2007/
postprd
export fobservado=${DIR}/met/out/ascii2nc/
ramaApr2007.nc
export  fconfig=${DIR}/met/scripts/config/
PointStatConfig_Apr
#
#  Data extraction and comparison
#
    n=1
   for file in ${DIRFCT}/WRFPRS_d01.0?
   do
     echo $file
    if [ $n -lt 10 ]; then
   bin/point_stat $file $fobservado $fconfig
-outdir out/point_stat -v 2 >& fe_0$n.log
    else
   bin/point_stat $file $fobservado $fconfig
-outdir out/point_stat -v 2 >& fe_$n.log
    fi
  (( n++ ))
   done
```

B2 Script to run the stat module from MET

```
ecaim_stat.sh
#!/bin/sh

echo
echo “*** Running STAT-Analysis for Ecaim
***”
/tmpu/agr_g/agr/met/bin/stat_analysis \
   -config ./STATAnalysisConfig_ecaim \
   -lookin ./out/point_stat \
    -out  ./out/stat_analysis/stat_analy-
sis_ecaim.out \
   -v 2
```

B3 Additions in the point stat configuration file

```
PointStatConfig_Apr
field =[
      {
        name       = “TMP”;
        level      = [ “L1” ];
        cat_thresh = [  >298 ];
      },
      {
        name       = “OZCON”;
        level      = [ “L1” ];
       cat_thresh = [ >=60, >=95, >=110 ];
         GRIB1_ptv  = 129;
      },
     {
        name       = “NO”;
        level      = [ “L1” ];
        cat_thresh = [ >=105, >=210 ];
              GRIB1_ptv  = 141;
      },
      {
        name       = “NO2”;
        level      = [ “L1” ];
        cat_thresh = [ >=105, >=210 ];
              GRIB1_ptv  = 141;
      },
      {
        name       = “CO”;
        level      = [ “L1” ];
        cat_thresh = [ >=550, >=1100 ];
              GRIB1_ptv  = 141;
      },
      {
        name       = “SO2”;
        level      = [ “L1” ];
        cat_thresh = [ >=65, >=130 ];
              GRIB1_ptv  = 141;
      },
     {
       name      =”PMTF”;
```

```
    level      = [ "L1" ];
    cat_thresh = [ >=65, >=130 ];
     GRIB1_ptv  = 129;
},
{
  name      ="PMTC";
    level      = [ "L1" ];
    cat_thresh = [ >=45, >=90 ];
     GRIB1_ptv  = 129;
}]
```

B4 Additions in the stat analysis configuration file

```
"-job aggregate_stat -fcst_var OZCON -line_type MPR -out_line_type CTC -out_fcst_thresh >=95.0 -out_obs_thresh >=95.0 -dump_row ./out/stat_analysis/job3_eca_aggr_stat_mpr.stat -interp_pnts 4",
"-job aggregate_stat -fcst_var NO -line_type MPR -out_line_type CTC -out_fcst_thresh >=105.0 -out_obs_thresh >=105.0 -dump_row ./out/stat_analysis/job4_eca_aggr_stat_mpr.stat -interp_pnts 4",
"-job aggregate_stat -fcst_var NO2 -line_type MPR -out_line_type CTC -out_fcst_thresh >=105.0 -out_obs_thresh >=105.0 -dump_row ./out/stat_analysis/job5_eca_aggr_stat_mpr.stat -interp_pnts 4",
"-job aggregate_stat -fcst_var CO -line_type MPR -out_line_type CTC -out_fcst_thresh >=550.0 -out_obs_thresh >=550.0 -dump_row ./out/stat_analysis/job6_eca_aggr_stat_mpr.stat -interp_pnts 4",
"-job aggregate_stat -fcst_var SO2 -line_type MPR -out_line_type CTC -out_fcst_thresh >=100.0 -out_obs_thresh >=100.0 -dump_row ./out/stat_analysis/job7_eca_aggr_stat_mpr.stat -interp_pnts 4",
```