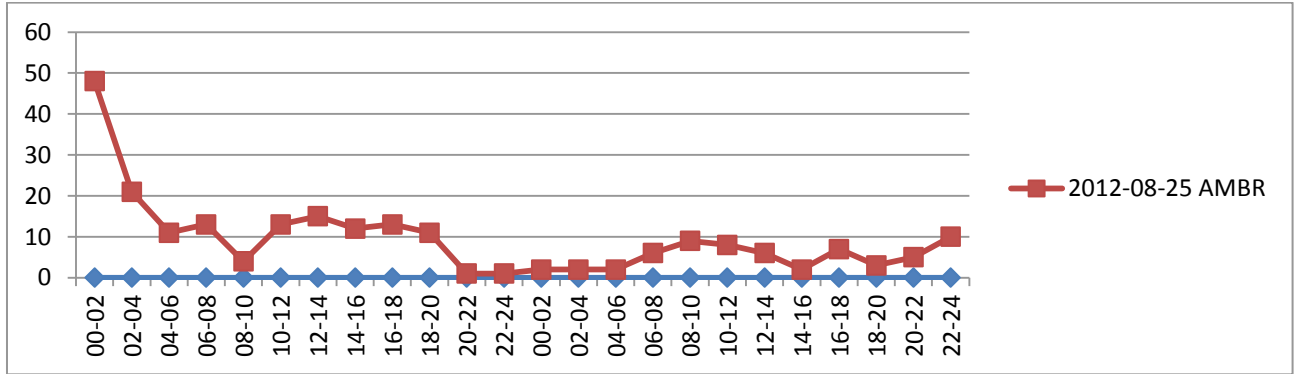


Problem 1

To determine the source of Ambrosia pollen in Vinnitsa for August 25th

Given: is a pollen count data at a bihourly mode

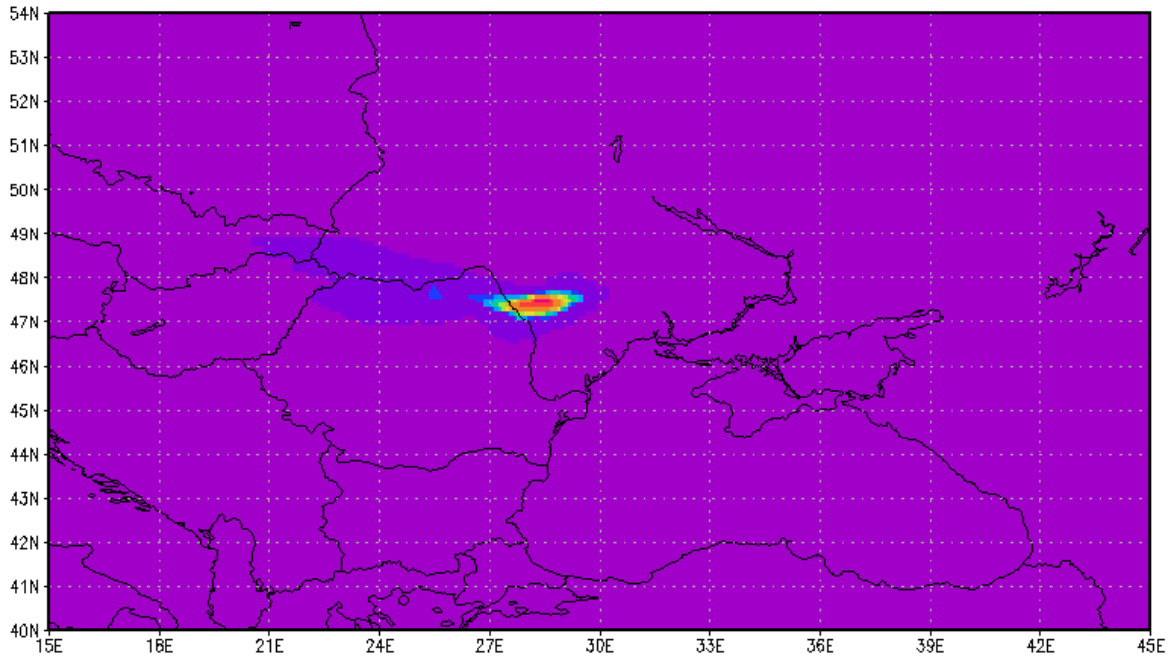


Done: air flow in Ukraine is determined using the SILAM Model through meteorological data analyses

```

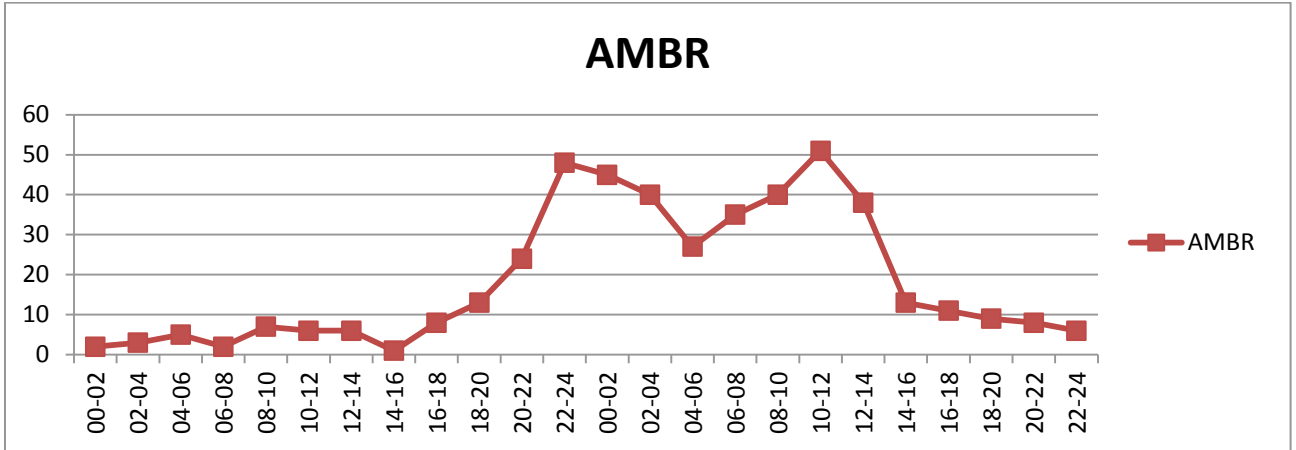
D:\winter_school\silam_v5_2.exe
Mode: time steps: 6397
Species: InDir DryDep MetDep Outside Garbage Total
POLLN_RRGVEED: 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00
----- END OF Total MASS REPORT -----
----- OUI-OF-GRID MASS REPORT -----
Species: x<1 >>Max y<1 >>yMax z<1 >>zMax
POLLN_RRGVEED: 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00 0.0000E+00
----- END OF OUI-OF-GRID MASS REPORT -----
Computing now-time emission (dispersion supplementary)
Updating biological time
Emission of pollen source:pollen_ragweed_source:sector:natural_emission
POLLN_RRGVEED: 0.000000E+00
Pollen ready to fly: 0.0000000E+00
Pollen left: 3.594671E+19
Horizontal advection
Vertical advection and diffusion
Unit: km to km
H: Parallel
Transformation
Time in loop now:2010_05_25_15.15.00.0 utc, run to:2010_10_31_23.00.00.0 utc
Metadata acquisition
executing:dir /B /S e:\Meteorological_Data\EC_OPER\2010\ecmf2010052517+01* > f
ilist:silam_10232
%a% no %a%gen
executing:dir /B /S e:\Meteorological_Data\EC_OPER\2010\ecmf2010052516+02* > f
ilist:silam_10232
%a% no %a%gen
executing:dir /B /S e:\Meteorological_Data\EC_OPER\2010\ecmf2010052515+03* > f
ilist:silam_10232
%a% no %a%gen
executing:dir /B /S e:\Meteorological_Data\EC_OPER\2010\ecmf2010052514+04* > f
ilist:silam_10232
%a% no %a%gen
executing:dir /B /S e:\Meteorological_Data\EC_OPER\2010\ecmf2010052513+05* > f
ilist:silam_10232
%a% no %a%gen
executing:dir /B /S e:\Meteorological_Data\EC_OPER\2010\ecmf2010052512+06* > f
ilist:silam_10232
Storing input to supermarket:e:\Meteorological_Data\EC_OPER\2010\ecmf201005251
2+06
Opening GRIB file:e:\Meteorological_Data\EC_OPER\2010\ecmf2010052512+06
Overwriting the stack with valid time:2010_05_25_12.00.00.0 utc
*** WARNING: Negative values removed from:surface roughness [m]
Number of negatives found:
*** WARNING: Negative values removed from:soil moisture content [m3/m3]
Number of negatives found: 14809
    
```

Result: Pictures obtained showed the origin' point of the air brought ragweed pollen to Vinnitsa



Problem 2

To determine the source of Ambrosia pollen in Vinnitsa for September 25th and September 26th
 Given: is a pollen count data at a bihourly mode



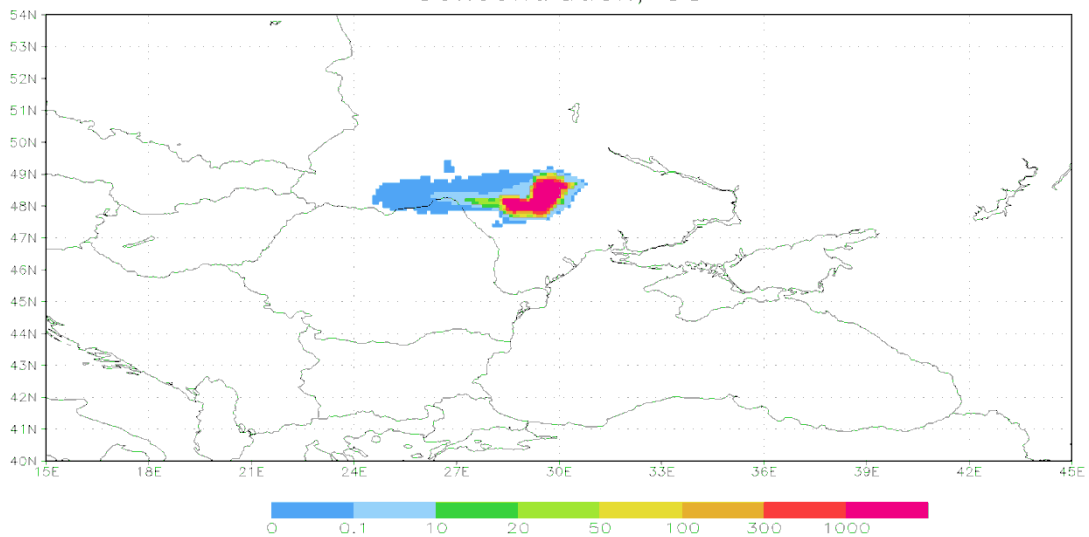
Done: air flow in Ukraine is determined using the SILAM Model through meteorological data analyses for 2-sources mode



Result: Pictures obtained showed the origin' point of the air brought ragweed pollen to Vinnitsa for both diurnal peaks:

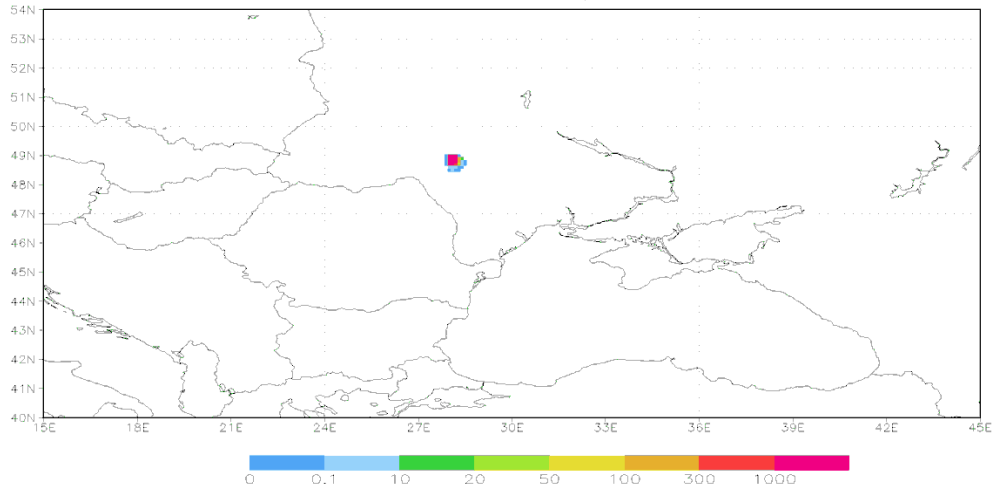
NIGHT PEAK:

Concentration, 58



DAY PEAK:

Concentration, 73



GRADS: COLA/IGES

2013-02-20-16:59