Annex A8 - Example of AUSPLUME Input File

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 6.0 version
*****************************************************************
* WARNING - WARNING - WARNING - WARNING - WARNING - WARNING *
*                                                               *
* This is a generated file. Please do not edit it manually. *
* If  editing  is  required, under any circumstances do not *
* edit information enclosed in curly braces.  Corruption of *
* this information or changed order of data blocks enclosed *
* in curly braces may render the file unusable.             *
*                                                               *
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Simulation Title
{0036286 - sensitivity test (case1@1.5m), emission @ 30oC}
Concentration(1)/Deposition(0), Emission rate units, Concentration/Deposition units,Background Concentration, Variable Background flag,Variable Emission Flag
{True OUV/second Odour_Units 0 False True }

Terrain influence tag, 0-ignore, 1 - include
{2}
Egan coefficients
{0.5 0.5 0.5 0.5 0.7 0.7 }
Number of source groups
{7}
Total number of sources (Stack + Area + Volume sources)
{5}

Source Group information
Total Number of Sources in Group 1
{5}
Sources in Source Group 1
{n-sbr1 n-sbr2 n-int  n-wet  n-spe  }
Total Number of Sources in Group 2
{3}
Sources in Source Group 2
{n-wet  n-int  n-spe  }
Total Number of Sources in Group 3
{2}
Sources in Source Group 3
{n-int  n-wet  }
Total Number of Sources in Group 4
{1}
Sources in Source Group 4
{n-int  }
Total Number of Sources in Group 5
{1}
Sources in Source Group 5
{n-wet  }
Total Number of Sources in Group 6
{1}
Sources in Source Group 6
{n-spe  }
Total Number of Sources in Group 7
{2}
Sources in Source Group 7
{n-sbr1 n-sbr2 }
BPIP Run (1-True, 0-False)
{0 }
Total number of buildings
{0 }

Source Information

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{n-sbr1 1 846488 814623 5.5 }
Stack height and diameter
{5 30 }
Stack temperature, Velocity, Cross, Height
{273 0 0 0 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperarture), Number of particle fractions
```

{1 0 }
Constant emission rate
{1}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{n-sbr2 1 846507 814622 5.5 }
Stack height and diameter
{5 30 }
Stack temperature, Velocity, Cross, Height
{273 0 0 0 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperarture), Number of particle fractions
{1 0 }
Constant emission rate
{1}

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{n-int 2 0 0 10 }
Source height
{0.1 0 }
Source Shape
{4 }
Side length, Effective Radius
{0 0 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperarture), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{1}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{0 30 20 0 0 20 0 }
Base shape point coordinates
{846360 814745 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{n-wet 2 0 0 10 }
Source height
{0.1 0 }
Source Shape
{4 }
Side length, Effective Radius
{0 0 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperarture), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{1}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{0 30 20 0 0 20 0 }
Base shape point coordinates
{846360 814725 }

Source ID, Source Type (1 - stack, 2 - area, 3- volume) and X, Y, Z coordinates
{n-spe 2 0 0 10 }
Source height
{0.1 0 }
Source Shape
{4 }
Side length, Effective Radius
{0 0 }
Emission type (1-constant, 2-monthly, 3-hours of the day, 4-wind and stability, 5-hour and season, 6-temperarture), Position in Array, Number of particle fractions
{1 0 }
Constant emission rate
{1}
SigmaZ,XSide,YSide,Angle,Radius,Number of Vertices
{0 6 2.5 0 0 20 0 }
Base shape point coordinates
{846440 814745 }

Receptor information

Discrete receptors
Receptor coordinates type (1-Cartesian,0-Polar),Number of Receptors
{1 47 }

X, Y coordinates and Elevation
{846116 814823 2 }
X, Y coordinates and Elevation
{846500 814560 2 }
X, Y coordinates and Elevation
{846511 814339 2 }
X, Y coordinates and Elevation
{846220 815380 2 }
X, Y coordinates and Elevation
{846077 815374 2 }
X, Y coordinates and Elevation
{846210 815485 2 }
X, Y coordinates and Elevation
{846091 815718 2 }
X, Y coordinates and Elevation
{846139 815840 2 }
X, Y coordinates and Elevation
{845881 815903 2 }
X, Y coordinates and Elevation
{845649 816017 2 }
X, Y coordinates and Elevation
{846325 815907 2 }
X, Y coordinates and Elevation
{846373 816033 2 }
X, Y coordinates and Elevation
{846180 815941 2 }
X, Y coordinates and Elevation
{846111 815967 2 }
X, Y coordinates and Elevation
{846228 816048 2 }
X, Y coordinates and Elevation
{846393 816163 2 }
X, Y coordinates and Elevation
{846304 816227 2 }
X, Y coordinates and Elevation
{846399 816323 2 }
X, Y coordinates and Elevation
{846386 816427 2 }
X, Y coordinates and Elevation
{846301 816628 2 }
X, Y coordinates and Elevation
{846381 816599 2 }
X, Y coordinates and Elevation
{846284 816817 2 }
X, Y coordinates and Elevation
{846199 817035 2 }
X, Y coordinates and Elevation
{845800 817255 2 }
X, Y coordinates and Elevation
{846234 817452 2 }
X, Y coordinates and Elevation
{846088 817869 2 }
X, Y coordinates and Elevation
{845548 818591 2 }
X, Y coordinates and Elevation
{845319 819190 2 }
X, Y coordinates and Elevation
{845132 819374 2 }
X, Y coordinates and Elevation
{845295 819404 2 }
X, Y coordinates and Elevation
{845235 819432 2 }
X, Y coordinates and Elevation
{845154 819499 2 }
X, Y coordinates and Elevation
{845214 819566 2 }
X, Y coordinates and Elevation
{845138 819606 2 }
X, Y coordinates and Elevation
{845071 819557 2 }
X, Y coordinates and Elevation

{844880 819794 2 }
X, Y coordinates and Elevation
{845473 819388 2 }
X, Y coordinates and Elevation
{845614 819483 2 }
X, Y coordinates and Elevation
{845777 819659 2 }
X, Y coordinates and Elevation
{845705 819449 2 }
X, Y coordinates and Elevation
{845862 819824 2 }
X, Y coordinates and Elevation
{844331 817963 2 }
X, Y coordinates and Elevation
{844170 818663 2 }
X, Y coordinates and Elevation
{844606 818644 2 }
X, Y coordinates and Elevation
{845112 818534 2 }
X, Y coordinates and Elevation
{842967 815143 2 }
X, Y coordinates and Elevation
{843949 814191 2 }

Gridded receptors
Receptor coordinates type (1-Cartesian, 0-Polar), Number of X and Y coordinates, Receptor height
{1 40 61 2 }

X grid coordinates
{845500 845550 845600 845650 845700 845750 845800 845850 845900 845950 846000 846050 846100 846150 846200 846250 846300 846350 846400 846450 84650

Y grid coordinates
{813500 813550 813600 813650 813700 813750 813800 813850 813900 813950 814000 814050 814100 814150 814200 814250 814300 814350 814400 814450 81450

Model settings and parameters
Emission conversion factor, Averaging Time
{1 3 }

Land use (surface roughness)
{1.2}

Averaging time flags (1,2,3,4,6,8,12,24 hrs, 7, 90 days, 3 month, All hrs
{0 0 0 0 0 0 0 0 0 0 0 0 }

Statistical output options
{0 0 }

Output options (All meteodata, Every concentration/deposition, Highest/2nd highest, 100 worst case table, Save all calculations
{0 0 1 0 0 0 }
Write concentration (1-yes, 0-no), Concentration rank, Write frequency, Frequency Level
{1 1 1 5 }

Disregard exponents (1-yes, 0-no), Exponent Scheme (1-Irvin urban, 2-Irvin rural, 3-ISCST, 4-User Defined
{0 2 }
Dispersion exponents
{0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.2 0.2 0.2 0.2 0.2 0.2 0.25 0.25 0.25 0.25 0.25 0.25 0.4 0.4 0.4 0.4 0.4 0.4 0.6 0.6 0.6 0.6 0.6 0.6 }

Building wake effects (1-include,0-not) , Default decay coefficient, Anemometr height, Sigma-theta averaging period, Roughness at vane site, Smooth stability changes, Cc
{1 0 10 60 1.2 0 0 }

Deposition options, Depletion options
{False False False False False False }

Stability class adjustments (0-None, 1-Urban1, 2-Urban2)
{0}
Building wake algorithms (1-Huber-Sneider, 2-Hybrid, 3-Schulman-Scire)
{4}

Gradual plume rise (1-yes,0-no), Stack tip downwash (1-yes,0-no), Disregard Temperature Gradient (1-yes,0-no), Partial Penetration, Temp Gradient, Adiabatic Entrainme
{1 1 0 0 0.004 0.6 0.6 }
Temperature Gradients for Wind and Stability categories

{0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.02 0.02 0.02 0.02 0.02 0.02 0.035 0.035 0.035 0.035 0.035 0.035 }

Dispersion curves (1-Pasquill Gifford, 2- Briggs rural, 3-Sigma theta) horizontal < 100 m, ditto vertical < 100 m, ditto horizontal > 100 m, ditto vertical > 100 m
{1 1 2 2 }
Adjust PG curves for roughness - Horizontal, Vertical (1-yes,0-no)
{1 1 }
Enhance plume for buyoancy - Horizontal, Vertical (1-yes,0-no)
{1 1 }
Adjust for wind direction shear
{0}
Shear rates
{0.005 0.01 0.015 0.02 0.025 0.035 }

Wind Speed categories
{1.54 3.09 5.14 8.23 10.8 }

Output file
{'H:\WPFILES\Katie Moroney\Odour 20071121\Case 1\30oC_10m_terrain (case1) (1.5m).txt'}
Meteorological file
{'H:\WPFILES\Katie Moroney\SENT2006_20071121.met'}
Receptor file
{'H:\WPFILES\Katie Moroney\terrain data\PHASE_1B_10m(1.5).ter'}
Source Emission file
{'H:\WPFILES\Katie Moroney\SEF\20071010\Source emission file_20071010 (@30oC).src'}
Concentration file
{'H:\WPFILES\Katie Moroney\Odour 20071121\Case 1\30oC_10m_terrain (case1) (1.5m).dat'}
Frequency File
{'H:\WPFILES\Katie Moroney\Odour 20071121\Case 1\30oC_10m_terrain (case1) (1.5m).frq'}
Concentration file
{'H:\WPFILES\Katie Moroney\Odour 20070830\case1\30oC_10m_terrain (case1) (1.5m).dat'}
Frequency File
{'H:\WPFILES\Katie Moroney\Odour 20070830\case1\30oC_10m_terrain (case1) (1.5m).frq'}