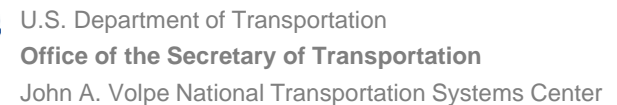


George Noel

June 24th, 2015



Background - AEDT

- ❑ **Aviation Environmental Design Tool (AEDT) version 2b released May 29th, 2015**
 - Replaces Emissions and Dispersion Modeling System (EDMS) 5.1.4.1 (August 2013) as the preferred model for airport air quality analyses
 - Replaces the Integrated Noise Model (INM)
 - EPA's MOtor Vehicle Emission Simulator (MOVES) is not embedded within AEDT 2b or EDMS 5.1.4.1
 - EDMS: The Usage of the U.S. Environmental Protection Agency's (USEPA) Motor Vehicle Emission Simulator (MOVES) with the Federal Aviation Administration's (FAA) Emissions and Dispersion Modeling System (EDMS) (February 28th, 2014)
 - AEDT 2b: Using MOVES with AEDT 2b Version 1.0
 - Available on AEDT website: <https://aedt.faa.gov/>

Background - MOVES

- ❑ MOVES is required model for estimating emissions from on-road mobile sources
 - Required as of March 2013
 - Replaces MOBILE6.2
- ❑ MOVES2014 is the current version
 - Released October 7th, 2014
 - Replaces MOVES2010b
 - 2 year grace period with exceptions
 - NONROAD2008 embedded

Background - EDMS

❑ EDMS – Roadway Input Interface

The screenshot displays the EDMS 5.1.4.1 software interface. The main window shows a project tree on the left with 'PVD2004BC' selected, and a 'Baseline' scenario. The 'Roadways - [PVD2004BC] - Baseline - Theodore Francis Green State' dialog box is open, showing a list of roadways in the 'In Study' section. The 'Available' section is empty. The 'Operational Profiles' section shows 'Off-airport roadways' for Quarter-Hourly, Daily, and Monthly profiles. The 'Traffic Volume' section shows 'Peak Qtr-Hour' with a value of 795. The 'Vehicle Emission Parameters' section shows 'Default Fleet Mix (all types, fuels & ages)' and 'Average Speed' of 45 mph. The 'Emission Factors (grams/vehicle-mile)' section shows values for CO, NMHC, Benzene, 1,3-Butadiene, Acetaldehyde, NOx, PM-10, VOC, TOG, MTBE, Formaldehyde, Acrolein, SOx, and PM-2.5.

EDMS 5.1.4.1 - [PVD2004BC]

File Emissions Airport Dispersion View Utilities Window Help

PVD2004BC

Baseline

Theodore Francis Green State

2004

Name Description

Roadways - [PVD2004BC] - Baseline - Theodore Francis Green State

Available

Add New

Add -->

<-- Remove

Delete

Duplicate

Rename

In Study

Airport Connector 1

Airport Connector 2L

Airport Connector 2U

Airport Rd 1

Airport Rd 2

Airport Rd 3

Airport Rd 4

Airport Rd 5

Airport Rd 6

Traffic Volume
(Total flow regardless of direction.)

Yearly 14015127

Peak Qtr-Hour 795

Vehicle Emission Parameters

Default Fleet Mix (all types, fuels & ages)

Fuel

Manufactured Year

Average Speed 45 (mph)

Roadway Length 0.17 (miles)

Operational Profiles

Quarter-Hourly Off-airport roadways

Daily Off-airport roadways

Monthly Off-airport roadways

Preview

Coordinates (feet)

Dispersion Width 48

Number of Points 2

Pt. #	X (feet)	Y (feet)	Elevati...
1	4125.00	9127.00	54.99
2	5027.00	9168.00	54.99

Nudge

OK Cancel Apply Help

Scenario selected: Baseline

Airport selected: Theodore Francis Green State

Year selected: 2004

For Help, press F1

NUM

Using AEDT with MOVES

❑ Emissions Inventories

- Analysts will generate emissions inventories for on-road and off-road (e.g. construction equipment) mobile sources independently of AEDT 2b
- Emissions Inventory results may be imported in AEDT 2b
 - The following Emissions Inventory categories can be imported
 - Roadways
 - Parking Facilities
 - Construction

Using AEDT with MOVES

❑ Dispersion Modeling

- Analysts will generate AERMOD input files for on-road and off-road (e.g. construction equipment) mobile sources independently of AEDT 2b
 - Analyst generated AERMOD input file (.inp)
 - Analyst generated AERMOD hourly emission rate file (.hre)
- AERMOD .inp and .hre files may be imported into AEDT 2b
 - Merged with aircraft and other airport sources

Methodology – MOVES

- ❑ MOVES executed at Project Level Domain
 - Allows for Link (roadway segment) level emissions estimates
- ❑ Each MOVES run models a single hour
 - Single hour, month, and year for each MOVES run
- ❑ Number of MOVES runs required may vary
 - Use Case
 - Emission Inventory may require less runs
 - Dispersion modeling may require more runs
 - Meteorological variation
 - Traffic Variation

Methodology – MOVES

- ❑ Number of MOVES Runs
 - Determined by interagency coordination
- ❑ Meteorological and traffic variation
 - An example of a detailed set of runs is 16 MOVES runs
 - Quarterly seasonal variation (Table 1)
 - Daily traffic variation (Table 2)

Table 1. Quarters of the year for MOVES runs

Code	Name	Months
Q1	First Quarter	January - March
Q2	Second Quarter	April – June
Q3	Third Quarter	July - September
Q4	Fourth Quarter	October - December

Table 2. Traffic volume times of day for MOVES runs

Code	Name	Time of Day
AM	Morning Peak	0600 – 0900 (3 hours)
MD	Midday	0900 – 1600 (7 hours)
PM	Evening Peak	1600 – 1900 (3 hours)
ON	Overnight	1900 – 0600 (11 hours)

Methodology – MOVES

☐ Scale

MOVES - ID 3735076918586931817

File Edit Pre Processing Action Post Processing Tools Settings Help

- ✓ Description
- ✓ Scale
- ! Time Spans
- ! Geographic Bounds
- + ! Vehicles/Equipment
- ! Road Type
- ! Pollutants And Processes
- ≈ Manage Input Data Sets
- + ✓ Strategies
- + ! Output
- ✓ Advanced Performance Features


Model

☒ Onroad

☐ Nonroad

Domain/Scale

☐ National Use the default national database with default state and local allocation factors.

 Caution: Do not use this scale setting for SIP or conformity analyses. The allocation factors and other defaults applied at the state or county level have not been verified against specific state or county data and do not meet regulatory requirements for SIPs and conformity determinations.

☐ County Select or define a single county that is the entire domain.

Note: Use this scale setting for SIP and regional conformity analysis. Use of this scale setting requires user-supplied local data for most activity and fleet inputs.

☒ Project Use project domain inputs.


Note: Use this scale setting for project-level analysis for conformity, NEPA, or any other regulatory purpose. Use of this scale setting requires user-supplied data at the link level for activity and fleet inputs that describe a particular transportation project.

Calculation Type

☒ Inventory Mass and/or Energy within a region and time span.

☐ Emission Rates Mass and/or Energy per unit of activity.

MOVESScenarioID:

 Caution: Changing these selections changes the contents of other input panels. These changes may include losing previous data contents.

Ready...

Methodology – MOVES

❑ Pollutants and Processes for Roadway Links

- These Pollutants and processes must be selected so results appropriately map to AEDT

Pollutant	Emissions Process
Total Gaseous Hydrocarbons	Running Exhaust and Crankcase Running Exhaust
Non-Methane Hydrocarbons	
Non-Methane Organic Gases	
Volatile Organic Compounds	
Total Organic Gases	
Carbon Monoxide (CO)	
Oxides of Nitrogen (NOX)	
Sulfur Dioxide (SO2)	
Total Energy Consumption	
Atmospheric CO2	
Primary Exhaust PM10 - Total	
Primary Exhaust PM2.5 - Total	
Primary PM10 - Organic Carbon	
Primary PM2.5- Organic Carbon	
Primary PM10 - Elemental Carbon	
Primary PM2.5 - Elemental Carbon	
Primary PM10 - Sulfate Particulate	
Primary PM2.5 - Sulfate Particulate	
Primary PM10 - Brakewear Particulate	Running Exhaust, Crankcase Running Exhaust, and Brakewear
Primary PM2.5 - Brakewear Particulate	
Primary PM10 - Tirewear Particulate	Running Exhaust, Crankcase Running Exhaust, and Tirewear
Primary PM2.5 - Tirewear Particulate	

Methodology – MOVES

❑ Output – General Output

The screenshot displays the MOVES software interface. The title bar reads 'MOVES - ID 3735076918586931817'. The menu bar includes 'File', 'Edit', 'Pre Processing', 'Action', 'Post Processing', 'Tools', 'Settings', and 'Help'. On the left, a blue sidebar contains a tree view of settings, with 'Output' expanded to show 'General Output' and 'Output Emissions Detail'. The main window area contains two panels: 'Output Database' and 'Units'. The 'Output Database' panel has fields for 'Server' and 'Database', with 'Refresh' and 'Create Database...' buttons. The 'Units' panel has dropdown menus for 'Mass Units' (Grams), 'Energy Units' (Million BTU), and 'Distance Units' (Miles). To the right of the 'Units' panel is an 'Activity' section with checkboxes for 'Distance Traveled', 'Source Hours', 'Hotelling Hours', 'Source Hours Operating', 'Source Hours Parked', 'Population', and 'Starts'.

MOVES - ID 3735076918586931817

File Edit Pre Processing Action Post Processing Tools Settings Help

✓ Description
✓ Scale
✓ Time Spans
! Geographic Bounds
☐ ✓ Vehicles/Equipment
 ✓ On Road Vehicle Equipment
✓ Road Type
✓ Pollutants And Processes
✓ Manage Input Data Sets
☐ ✓ Strategies
 ✓ Rate Of Progress
☐ ! Output
 ! General Output
 ! Output Emissions Detail
✓ Advanced Performance Features

Output Database

Server: Refresh

Database: Create Database...

Units

Mass Units: Grams
Energy Units: Million BTU
Distance Units: Miles

Activity

☐ Distance Traveled
☐ Source Hours
☐ Hotelling Hours
☐ Source Hours Operating
☐ Source Hours Parked
☐ Population
☐ Starts

Methodology – MOVES

□ Links

- Roadway Links
 - Unique Link for each Roadway Segment
 - Road Type
 - Average Speed (mph)
 - Length (miles)
 - Grade (%)
- Parking Facility Links
 - Three Links for each Parking Facility/Level
 - Parking Facility Movement Link
 - Idle Link
 - Off-Network Link (starts and soak)
 - » Only a single off-network link can modeled with each MOVES run

Methodology – MOVES Output

- ❑ After all MOVES runs have been completed, the analyst will have generated output by each link represented in total grams of each pollutant for the hour modeled.
- ❑ The MOVES output for all links is located in the “movesoutput” table within the output database.
- ❑ The analyst must conduct post processing on the MOVES output so that pollutants match those generated by the other sources modeled with AEDT

Pollutant	MOVES Pollutant ID
THC	1
CO	2
VOC	87
NMHC	79
TOG	86
NOx	3
SOx	31
PM10	100 (100 + 106 + 107)
PM2.5	110 (110 + 116 + 117)
CO2 Atmospheric	90
H2O	119

Methodology – MOVES Output

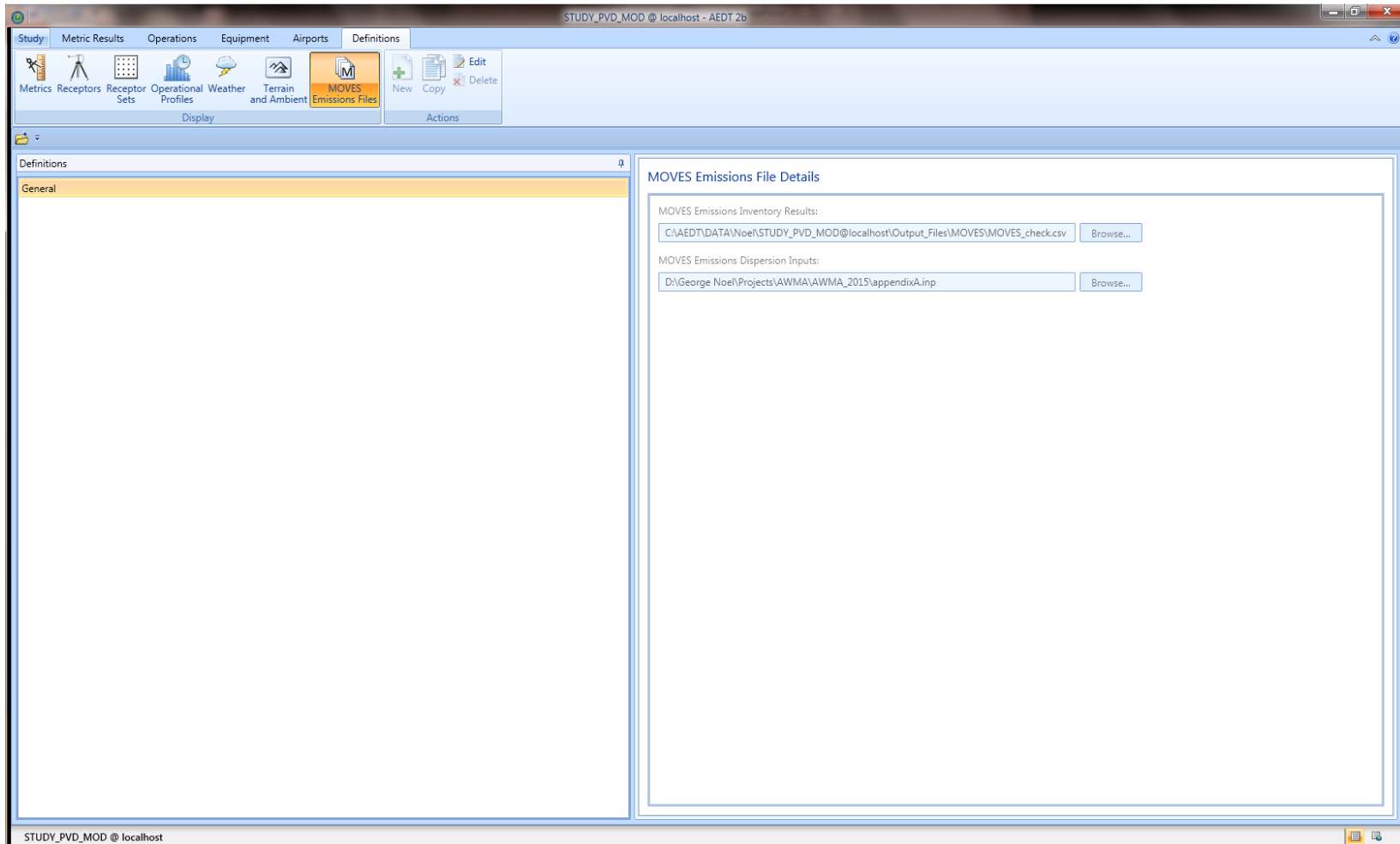
- ❑ AEDT accepts a comma separated file (.csv) for importing an emission inventory
- ❑ A single emission inventory for each analysis year can be imported in AEDT
- ❑ Four columns of information are to be included in the .csv import file
 - YearID – Analysis Year
 - Source – Roadway, Parking Facilities, and Construction
 - PollutantID – MOVES Pollutant ID
 - emissionQuant – total mass in grams

Example of Emissions Inventory Input File

```
yearID,Source,pollutantID,emissionQuant
2015,Roadways,1,130500300.8
2015,Parking Facilities,1,5200900.5
2015,Construction,1,100000.5
2015,Roadways,2,2357991820
2015,Parking Facilities,2,58200458.5
2015,Construction,2,526878.2
2015,Roadways,3,142300852.3
2015,Parking Facilities,3,4400800.9
```

Methodology – AEDT Import

- ❑ Emission Inventory and AERMOD input files Import



Methodology – AERMOD Input Files

- ❑ AEDT does not manage or utilize geospatial data associated with roadway links or parking facility links
 - The analyst can import a GIS shape file (.shp) to display roadways on the AEDT map viewer.
 - Shape file data is not used for any other purpose (e.g., AERMOD)
- ❑ Analyst is responsible for managing geospatial coordinates of roadway and parking facility sources
 - All AERMOD source coordinates are based on a local coordinate system with the origin based on the airport reference point
 - UTM Coordinates are not utilized

Methodology – AERMOD .inp File

- ❑ Roadway Sources
 - Modeled using AREA sources
- ❑ Parking Sources
 - Modeled using AERAPOLY sources
 - Each level of a parking garage is to be modeled as an individual source
- ❑ Construction Sources
 - Can be modeled as AREA, AREAPOLY, POINT, or VOLUME sources

Methodology – AERMOD .inp File

- ❑ The analyst needs to only specify the CO and SO Pathways

```
CO STARTING
TITLEONE Example CO 1 HOUR INP FILE
TITLETWO Example
MODELOPT CONC DFAULT
AVERTIME 1
POLLUTID CO
FLAGPOLE 1.8
RUNORNOT RUN
SAVEFILE
CO FINISHED

SO STARTING
SO ELEVUNIT METERS
**
** -----
**          SOURCE   TYPE   X(m)   Y(m)   Z(m)
** -----
** LOCATION PARKA001 AREAPOLY 1213.10 2565.50 16.76
** LOCATION RD000001 AREA 719.51 1742.71 16.76
** LOCATION RDC00001 VOLUME 1345.69 2147.62 16.76
**
** AREA AND VOLUME SOURCE PARAMETERS:      HEIGHT      WIDTH      LENGTH      ANGLE      SIGMA-Z0
** -----
** SRCPARAM RD000001  1.00 0.00 14.63 100.0 91.39 3.00
** SRCPARAM RDC00001  1.00 13.00 3.00 3.00
**
** AREAPOLY PARAMETERS:      HEIGHT      POINTS      SIGMA-Z0
** -----
** SRCPARAM PARKA001  1.00 1.00 4 3.00
** AREAVERT PARKA001  1213.10 2565.50 1358.80 2519.78 1346.30 2453.03 1193.29 2499.97
**
** HOURLY EMISSION FILE:
** -----
** HOUREMIS appendixA.HRE RD000000-RD999999
** HOUREMIS appendixA.HRE RDC00001-RDC99999
** HOUREMIS appendixA.HRE PARKA001-PARKA999
**
** SOURCE GROUP DEFINITIONS:
** -----
** SRCGROUP ALL
** SRCGROUP ROADWAYS RD000000-RD999999
** SRCGROUP CONSTRUCTION RDC00000-RDC99999
** SRCGROUP PARKING PARKA001-PARKA999
SO Finished
```

Methodology – AERMOD .hre File

Year	Month	Day	Hour	Source Name	Emission Rate	
SO	HOUREMIS	04	01	01	PARKA001	9.538541e+005
SO	HOUREMIS	04	01	01	RD000001	1.118548e+005
SO	HOUREMIS	04	01	01	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	02	PARKA001	9.538541e+005
SO	HOUREMIS	04	01	02	RD000001	1.118548e+005
SO	HOUREMIS	04	01	02	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	03	PARKA001	9.538541e+005
SO	HOUREMIS	04	01	03	RD000001	1.118548e+005
SO	HOUREMIS	04	01	03	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	04	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	04	RD000001	1.118548e+005
SO	HOUREMIS	04	01	04	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	05	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	05	RD000001	1.118548e+005
SO	HOUREMIS	04	01	05	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	06	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	06	RD000001	1.118548e+005
SO	HOUREMIS	04	01	06	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	07	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	07	RD000001	1.118548e+005
SO	HOUREMIS	04	01	07	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	08	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	08	RD000001	1.118548e+005
SO	HOUREMIS	04	01	08	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	09	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	09	RD000001	1.118548e+005
SO	HOUREMIS	04	01	09	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	10	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	10	RD000001	1.118548e+005
SO	HOUREMIS	04	01	10	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	11	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	11	RD000001	1.118548e+005
SO	HOUREMIS	04	01	11	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	12	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	12	RD000001	1.118548e+005
SO	HOUREMIS	04	01	12	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	13	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	13	RD000001	1.118548e+005
SO	HOUREMIS	04	01	13	RDC00001	2.000000e+005
SO	HOUREMIS	04	01	14	PARKA001	9.538541e-006
SO	HOUREMIS	04	01	14	RD000001	1.118548e+005
SO	HOUREMIS	04	01	14	RDC00001	2.000000e+005

Methodology – AERMOD .inp and .hre Requirements

- ❑ A minimum of one parking facility must be included in the .inp and corresponding .hre file. If the analyst does not want to model a parking facility then the emission rates can be set to zero in the .hre file.
- ❑ The following naming conventions must be used in order for the AERMOD .inp to import correctly into AEDT.
 - Parking Facilities: naming range of PARKA001 through PARKZ999
 - Roadways: naming range of RD000001 through RD999999
 - Construction: naming range of RDC00001 through RDC99999
- ❑ The order of the sources listed under the SRCPARAM keyword in the .inp must be ordered in the following manner:
 - All roadway sources are to be defined first.
 - All construction sources are to be defined following the roadway sources.
 - All parking facility sources are to be defined after the construction sources. If there are no construction sources to be modeled then the parking facility sources will follow the roadway sources. Construction Sources

Methodology – AERMOD .inp and .hre Requirements

- ❑ The POLLUTID in the CO (control) Pathway in the AERMOD input file must match the AEDT Metric Result being modeled. For example, if the CO (carbon monoxide) Metric is chosen to be modeled in AEDT then CO (carbon monoxide) must be listed with the POLLUTID keyword within the CO (control) Pathway section of the AERMOD input file. The following naming conventions must be used in order for the AERMOD .inp to import correctly into AEDT.
- ❑ The AERMOD input file (.inp) and the hourly emission rate file (.hre) must have the same naming convention. For example, if the AERMOD input file name is CO_airportXYZ.inp then the hourly emission rate file is to be named CO_airportXYZ.hre.
- ❑ The order of sources in the hourly emission rate file (.hre) must be ordered in the following manner:
 - All parking facility sources are to be listed first.
 - All roadway sources are to be listed following the parking facility sources.
 - All construction sources are to be listed following the roadway sources.

AEDT Emissions Inventory Results

Test_Functionality_3 @ localhost - AEDT 2b

Study Metric Results Operations Equipment Airports Definitions

Map Reports Define Copy Delete Run Run All Reset Reset All Import Combine Export

Flight Performance Emissions Dispersion VALE Report Emissions and Fuel Impact Set Report Aggregated VALE Report Noise Population Exposure Metric Result Input

Display Metric Result Actions Reports

Metric Results

Drag a column header and drop it here to group by that column

ID	State	Metric	Type	Receptor Set
1	✓	Emissions	Emissions	No ReceptorSet

1 of 1 item(s) shown. 1 item(s) selected.

Details Aircraft Operations Tracks

General

Metric Result ID

State

Metric

Type

Receptor Set

Annualization

Run Start Time

Emissions Report 1

Operation Group: All Operation Groups

Group by: Operation Group Summary

Units: Grams

Generate Report

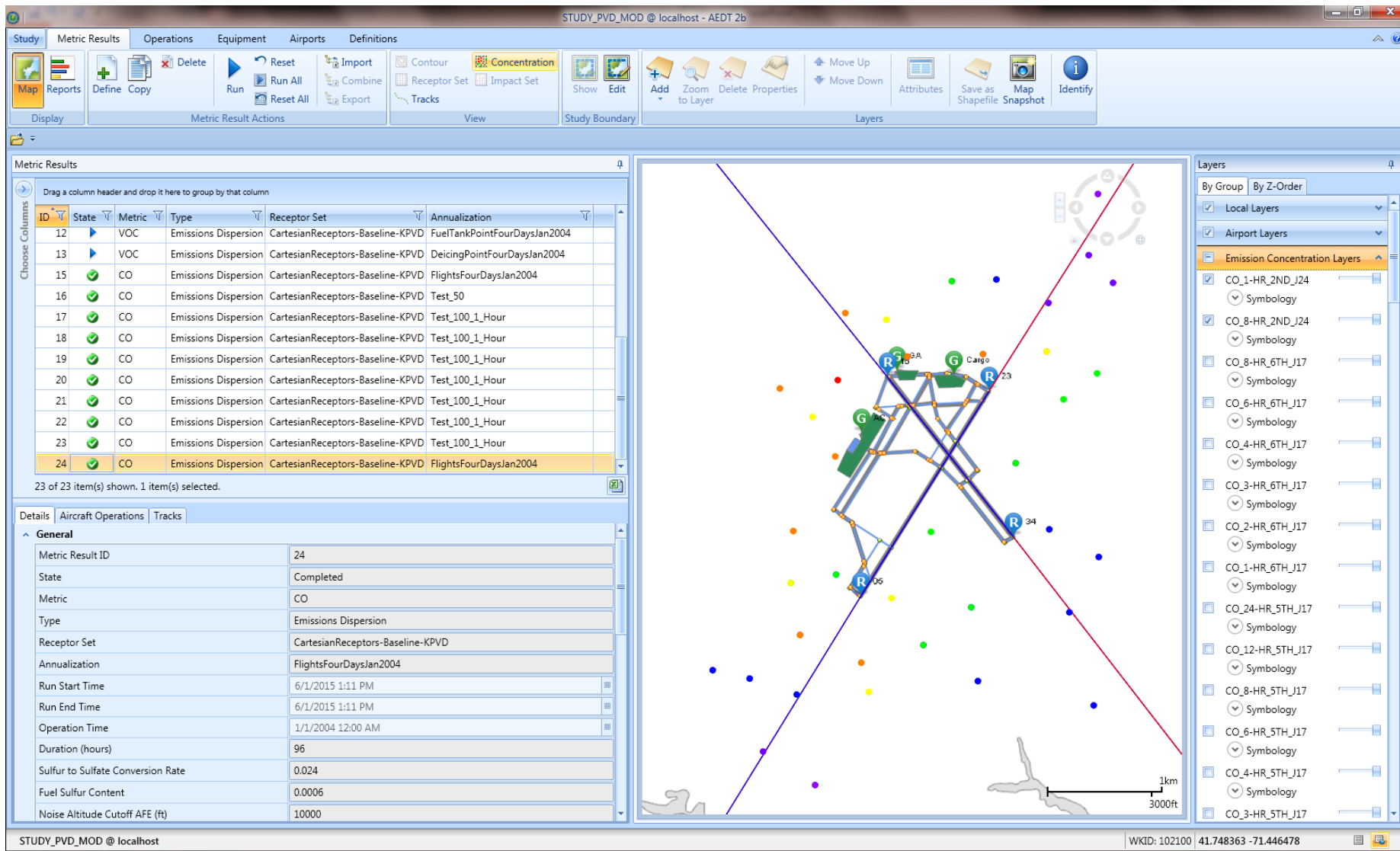
Emissions Speciated Organic Gases

Operation Group	Mode	Fuel (g)	Distance (km)	Duration	CO (g)	HC (g)	TOG (g)	VOC (g)	NMHC (g)
TEST_3	Above10000	0.00	0.00	00:00:00.00	0.00	0.00	0.00	0.00	0.00
TEST_3	DescendBelow10000	0.00	0.00	00:00:00.00	0.00	0.00	0.00	0.00	0.00
TEST_3	DescendBelowMixingHeight	0.00	0.00	00:00:00.00	0.00	0.00	0.00	0.00	0.00
TEST_3	DescendBelow1000	0.00	0.00	00:00:00.00	0.00	0.00	0.00	0.00	0.00
TEST_3	DescendGround	0.00	0.00	00:00:00.00	0.00	0.00	0.00	0.00	0.00
TEST_3	DescendTaxi	0.00	0.00	00:00:00.00	0.00	0.00	0.00	0.00	0.00
TEST_3	FullFlight	1523750.40	24.00	00:22:31.38	14518.76	1858.25	2148.58	2137.37	2148.58
MOVES Emissions : 2015	Roadways	0.00	0.00	00:00:00.00	2000000.00	1000000.00	0.00	87000000.00	79000000.00
MOVES Emissions : 2015	Parking Facilities	0.00	0.00	00:00:00.00	2000001.00	1000001.00	0.00	87000001.00	79000001.00
MOVES Emissions : 2015	Construction	0.00	0.00	00:00:00.00	2000002.00	1000002.00	0.00	87000002.00	79000002.00

15 of 15 item(s) shown. 1 item(s) selected.

Test_Functionality_3 @ localhost Accelerated display disabled

AEDT Dispersion Analysis Results



AEDT Dispersion Analysis Results

STUDY_PVD_MOD @ localhost - AEDT 2b

Study Metric Results Operations Equipment Airports Definitions

Map Reports Define Copy Delete Run Reset Import Flight Performance Emissions Dispersion VALE Report
Run All Combine Emissions and Fuel Impact Set Report Aggregated VALE Report
Reset All Export Noise Population Exposure Metric Result Input

Display Metric Result Actions Reports

Metric Results

Drag a column header and drop it here to group by that column

ID	State	Metric	Type	Receptor Set	Annualization
12	▶	VOC	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	FuelTankPointFourDaysJan2004
13	▶	VOC	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	DeicingPointFourDaysJan2004
15	✓	CO	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	FlightsFourDaysJan2004
16	✓	CO	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	Test_50
17	✓	CO	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	Test_100_1_Hour
18	✓	CO	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	Test_100_1_Hour
19	✓	CO	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	Test_100_1_Hour
20	✓	CO	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	Test_100_1_Hour
21	✓	CO	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	Test_100_1_Hour
22	✓	CO	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	Test_100_1_Hour
23	✓	CO	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	Test_100_1_Hour
24	✓	CO	Emissions Dispersion	CartesianReceptors-Baseline-KPVD	FlightsFourDaysJan2004

23 of 23 item(s) shown. 1 item(s) selected.

Details Aircraft Operations Tracks

General

Metric Result ID	24
State	Completed
Metric	CO
Type	Emissions Dispersion
Receptor Set	CartesianReceptors-Baseline-KPVD
Annualization	FlightsFourDaysJan2004
Run Start Time	6/1/2015 1:11 PM
Run End Time	6/1/2015 1:11 PM
Operation Time	1/1/2004 12:00 AM
Duration (hours)	96
Sulfur to Sulfate Conversion Rate	0.024
Fuel Sulfur Content	0.0006
Noise Altitude Cutoff AFE (ft)	10000

Emission Dispersion Report 24

Latitude (deg)	Longitude (deg)	Elevation (ft)	Concentration Index	CO (µg/m³)	Average	Rank
41.7390791838078	-71.4249025842066	0	3	640.29	1-HR	
41.7155135442788	-71.4373469032823	0	3	699.109	1-HR	
41.7460175319653	-71.4092492196057	0	0	174.369	1-HR	
41.7392097119534	-71.4201320269107	0	2	359.848	1-HR	
41.7373364771765	-71.414589491837	0	1	322.806	1-HR	
41.7389120158409	-71.4076746923366	0	1	247.326	1-HR	
41.7332399123713	-71.4215967122881	0	5	1586.11	1-HR	
41.7365180961547	-71.4363457714921	0	5	1775.38	1-HR	
41.7316814628883	-71.4093171999735	0	3	798.158	1-HR	
41.7334204556851	-71.4147749080505	0	4	1512.65	1-HR	
41.7059337230908	-71.4416116618266	0	2	488.083	1-HR	
41.7050840773965	-71.4096751067667	0	2	395.53	1-HR	2ND
41.7411440439236	-71.4102014027402	0	1	236.647	1-HR	2ND
41.7070308608671	-71.4220958757468	0	2	469.121	1-HR	2ND
41.7296053028837	-71.4129050574002	0	3	735.037	1-HR	2ND
41.7061303868414	-71.4338369870752	0	4	1379.24	1-HR	2ND
41.7244531557078	-71.4180328674727	0	3	873.309	1-HR	2ND
41.6986996299958	-71.4396354488751	0	0	183.389	1-HR	2ND
41.7191995333741	-71.4144972747449	0	2	413.804	1-HR	2ND
41.7078468952733	-71.4506203854881	0	2	448.085	1-HR	2ND
41.7169665952362	-71.4091436572959	0	2	495.482	1-HR	2ND
41.7281621893241	-71.4398975089523	0	4	1264.76	1-HR	2ND
41.7125082595292	-71.4122853082781	0	2	566.003	1-HR	2ND
41.7129339835303	-71.4228403443263	0	3	589.523	1-HR	2ND
41.7098807684873	-71.4279872486926	0	3	605.083	1-HR	2ND
41.7180232788204	-71.4371561521004	0	2	626.241	1-HR	2ND

38 of 76 item(s) shown. 0 item(s) selected.

STUDY_PVD_MOD @ localhost

Questions?

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AEDT Website

<https://aedt.faa.gov/>