

Please wait...



Computer Assisted Spray Productivity and Efficiency Routine

CASPER can run as a stand alone program or in conjunction with ArcView 3.x.

The following demonstration uses ArcView to compute spray block information for use in CASPER.

NEXT



New

Views

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3D Scenes

- Blks_2005_u16.shp
- Block_divide_2005
- Middlesboro_ky_a
- Claiborne_rds_u16
- 7t_points.dbf by A
- 7t-0510.shp
- ms-_points.dbf by
- Ms-0510.shp
- % Rh surface
- Temp_c.shp
- Temp_c Surface E
- Wind_mph
- Ms-05101025.shp
- Ms-05101145.shp
- Ms-05101108.shp
- 7t-05101058.shp
- 7t-05101016.shp

Begin by installing the ArcView Distance Extension in ArcView/EXT32 directory. This Extension can be downloaded at:

www.fs.fed.us/r8/foresthealth/sprayapps.html

After it is installed, select it from the Extension menu. The Distance Extension uses ArcView shape files to compute distance and acreage calculations that will be used by CASPER.

BACK NEXT

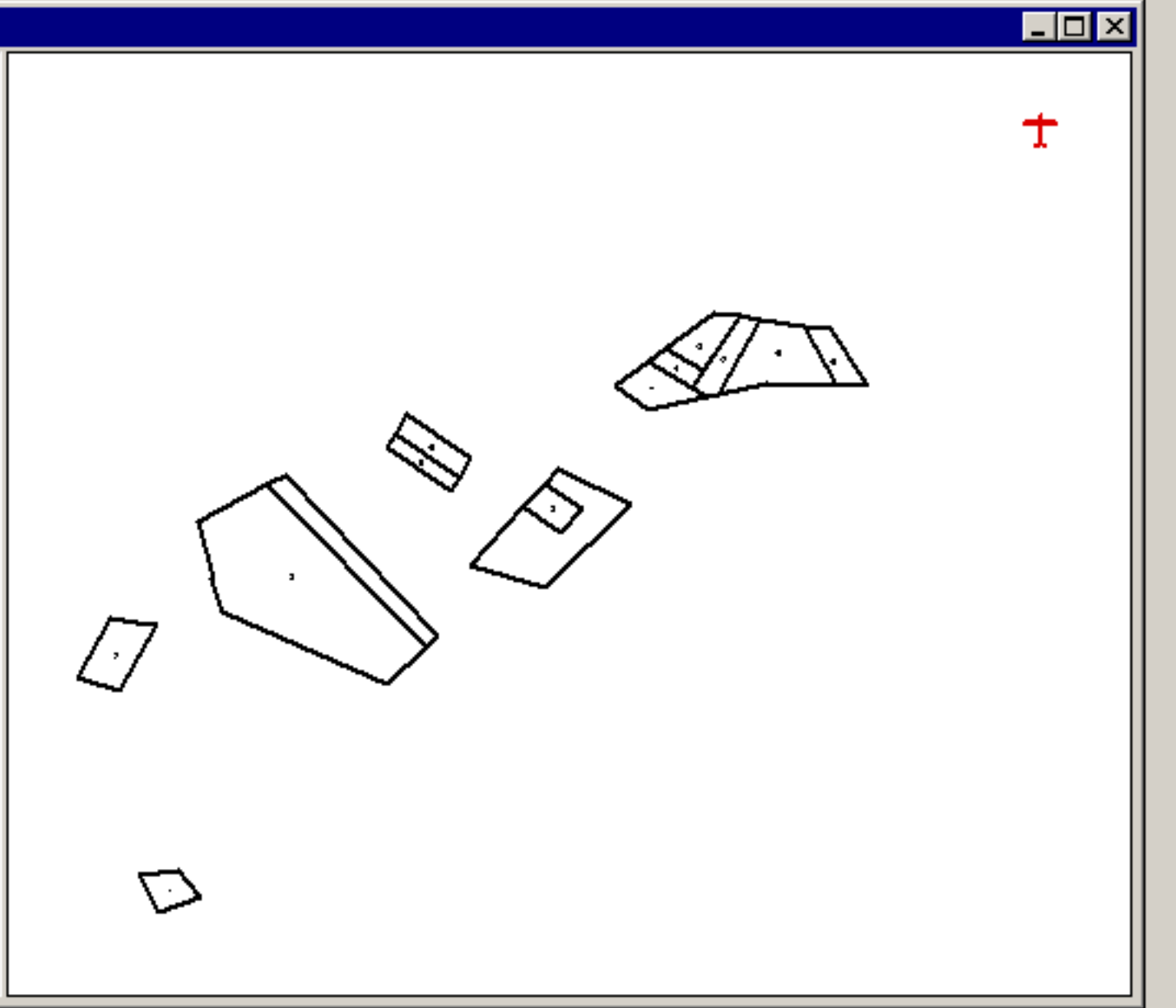
- Close
- Close All
- Set Working Directory...
- Save Project Ctrl+S
- Save Project As...
- Extensions...
- Print...
- Print Setup...
- Export...
- Manage Data Sources...
- Import Data Source...
- Export Data Source...
- ArcView Projection Utility...
- Exit



Scale 1: 167,871 771,782.23 4,055,056.78

- Layouts
- Scripts
- 3D Scenes

- 005_u16.shp
- divide_2006
- sboro_ky_a
- rne_rds_u16
- ints.dbf by A
- D.shp
- oints.dbf by
- Ms-0510.shp
- % Rh surface
- Temp_c.shp
- Temp_c Surface E
- Wind_mph
- Ms-05101025.shp
- Ms-05101145.shp
- Ms-05101108.shp
- 7t-05101058.shp
- 7t-05101016.shp



- Close
- Close All
- Set Working Directory...
- Save Project Ctrl+S
- Save Project As...
- Extensions...**
- Print...
- Print Setup...
- Export...
- Manage Data Sources...
- Import Data Source...
- Export Data Source...
- ArcView Projection Utility...
- Exit



Scale 1: 167,871 771,782.23 4,055,056.78

Layouts

Scripts

3D Scenes

- Ms-0510.shp
- % Rh surface
- Temp_c.shp
- Temp_c Surface E
- Wind_mph
- Ms-05101025.shp
- Ms-05101145.shp
- Ms-05101108.shp
- 7t-05101058.shp
- 7t-05101016.shp

Extensions

Available Extensions:

- CADRG Image Support
- Cad Reader
- CIB Image Support
- Database Access
- Dialog Designer
- Digitizer
- Forest Service Distance Extension

Buttons: OK, Cancel, Reset

Make Default

About:

Window GRID FUNCTIONS DISTANCE TREATMENT Help

Scale 1: 167,871

771,782.23
4,055,056.78

Lay Traj

- ms-_points.dbf by
- Ms-0510.shp
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- Wind_mph
- Ms-05101025.shp
- Ms-05101145.shp
- Ms-05101108.shp
- 7t-05101058.shp
- 7t-05101016.shp

Layouts

Scripts

3D Scenes

Extensions

Available Extensions:

- CADRG Image Support
- Cad Reader
- CIB Image Support
- Database Access
- Dialog Designer
- Digitizer
- Forest Service Distance Extension**

Buttons: OK, Cancel, Reset, Make Default

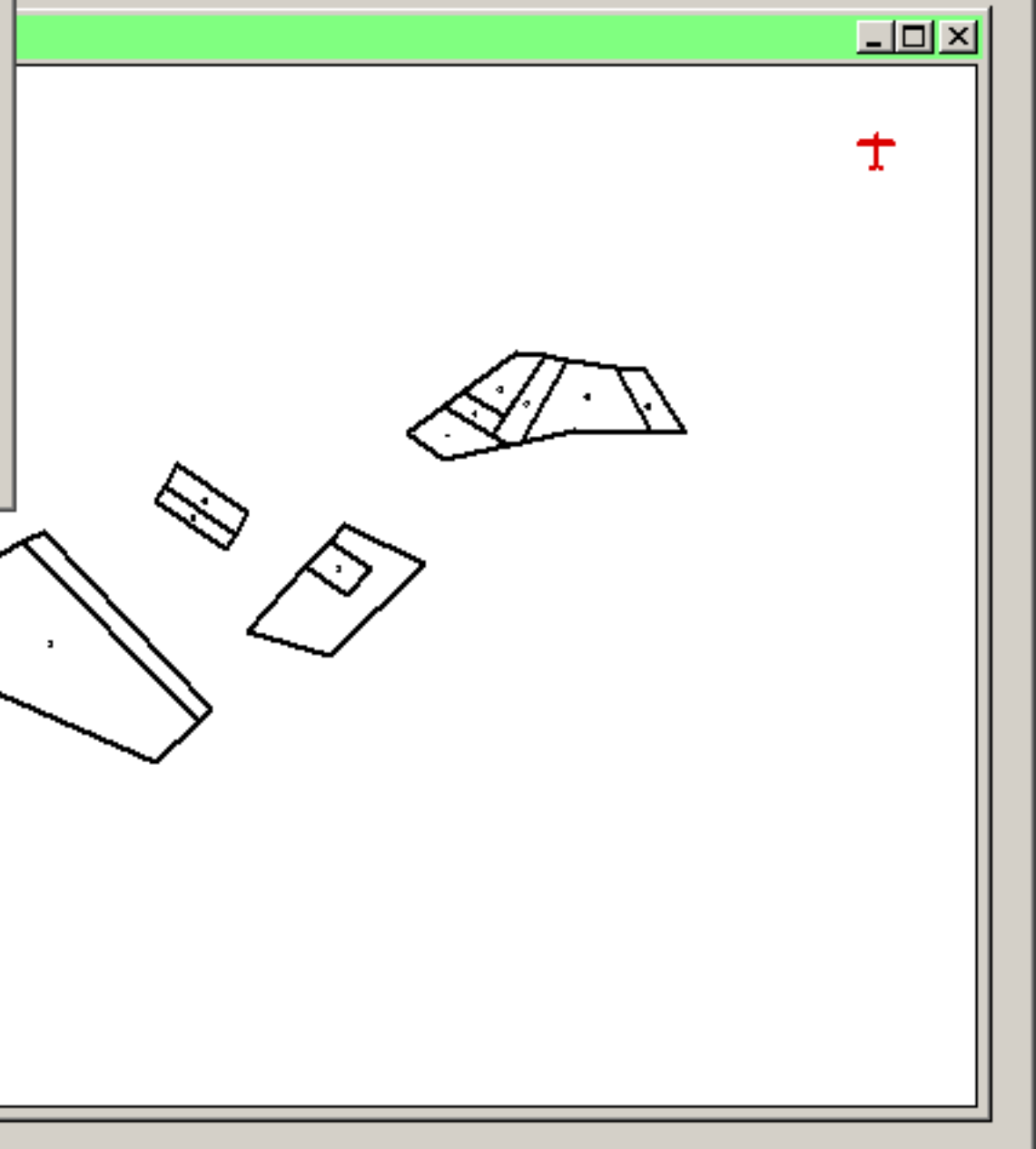
About:

Forest Service Spray Block Distance Extension
 Natural Resource Analysis Center, WVU
 Version Date: 20050311

Window TREATMENT Help

Scale 1: 167,871

771,071.57
4,053,413.38



Layouts

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3D Scenes

- ms-_points.dbf by
- Ms-0510.shp
- % Rh surface
- Temp_c.shp
- Temp_c Surface E
- Wind_mph
- Ms-05101025.shp
- Ms-05101145.shp
- Ms-05101108.shp
- 7t-05101058.shp
- 7t-05101016.shp

Extensions

Available Extensions:

- CADRG Image Support
- Cad Reader
- CIB Image Support
- Database Access
- Dialog Designer
- Digitizer
- Forest Service Distance Extension

Make Default

About:

Forest Service Spray Block Distance Extension
 Natural Resource Analysis Center, WVU
 Version Date: 20050311

Window TREATMENT Help

Scale 1: 167,871 771,071.57 4,053,413.38

The map displays several irregular polygons representing spray blocks. A red crosshair cursor is positioned in the upper right area of the map. The map is contained within a window titled 'TREATMENT'.

Layouts

Scripts

3D Scenes

- ms-_points.dbf by
- Ms-0510.shp
- % Rh surface
- Temp_c.shp
- Temp_c Surface E
- Wind_mph
- Ms-05101025.shp
- Ms-05101145.shp
- Ms-05101108.shp
- 7t-05101058.shp
- 7t-05101016.shp

Clicking on 'Compute Spray Block Distances' will open a Window where the user can select the shape file that contains the treatment block file and the location of the airport or loading zone.

BACK

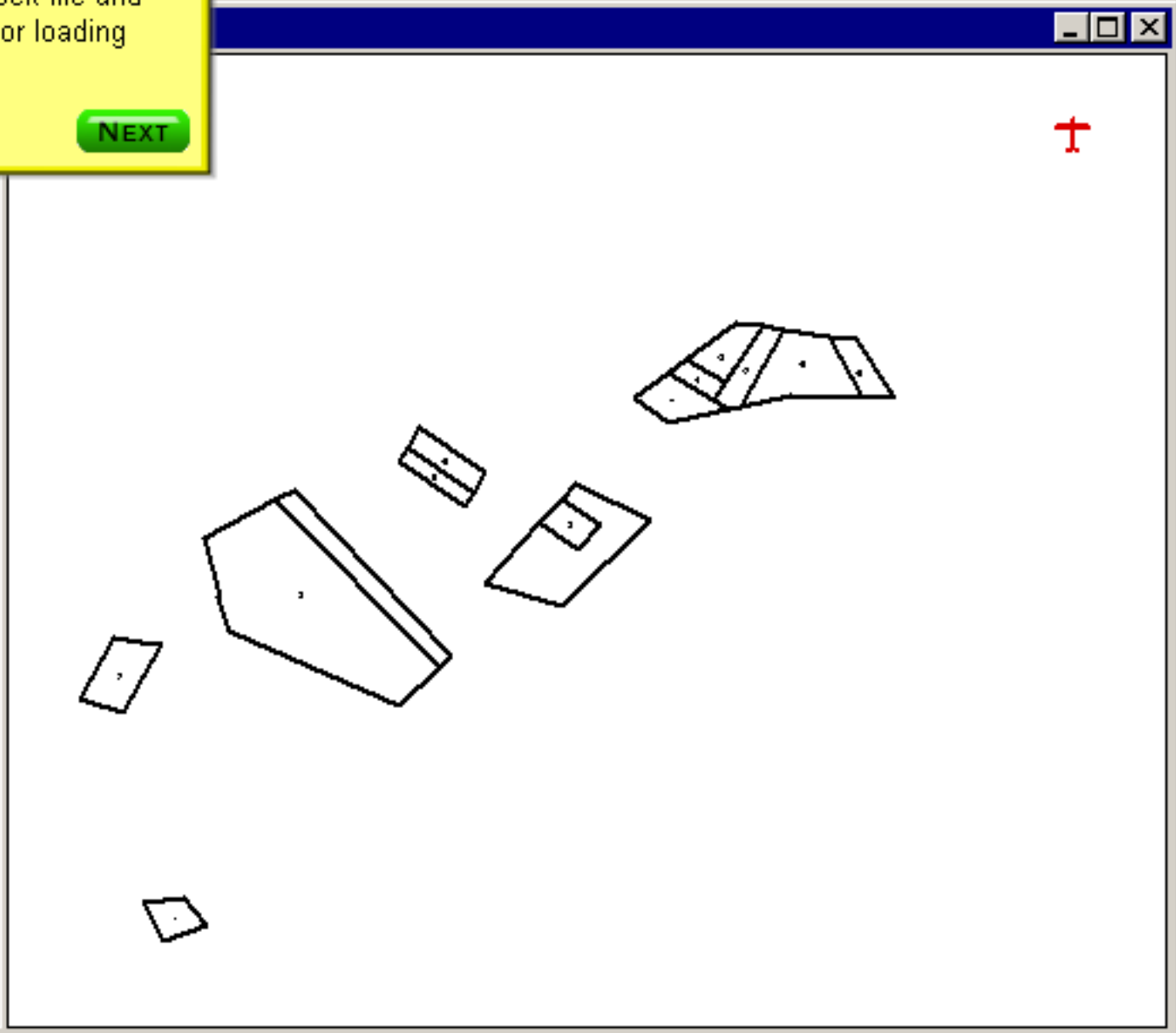
NEXT

Compute Spray Block Distances

Scale 1: 167,871 771,071.57 4,053,413.38

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- Charts
- Layouts
- Scripts
- 3D Scenes

- Middlesboro_ky_a
- Claiborne_rds_u16
- 7t_points.dbf by A
- 7t-0510.shp
- ms-_points.dbf by
- Ms-0510.shp
- % Rh surface
- Temp_c.shp
- Temp_c Surface E
- Wind_mph
- Ms-05101025.shp
- Ms-05101145.shp
- Ms-05101108.shp
- 7t-05101058.shp
- 7t-05101016.shp



Select the block shape file from those in the current view

BACK **NEXT**

- Views
- May [checkbox] Middlesboro
 - May [checkbox] Claiborne_rd
 - May [checkbox] 7t_points.dbf
 - May [checkbox] 7t-0510.shp
 - May [checkbox] ms-_points.d
 - May [checkbox] Ms-0510.shp
 - May [checkbox] % Rh surface
 - May [checkbox] Temp_c.shp
 - May [checkbox] Temp_c Surt
 - May [checkbox] Wind_mph
 - May [checkbox] Ms-0510102
 - May [checkbox] Ms-0510114
 - May [checkbox] Ms-0510110
 - May [checkbox] 7t-05101058
 - May [checkbox] 7t-05101016

Distance Calculations

Spray Block(s)

Select spray block theme:

Blks_2005_u16.shp

NOTE: All blocks will be used

Airport(s)

Enter coordinates of airport

Get airport location(s) from theme

Middlesboro_ky_airport_u16.shp

Output

Select map projection units:

meters feet

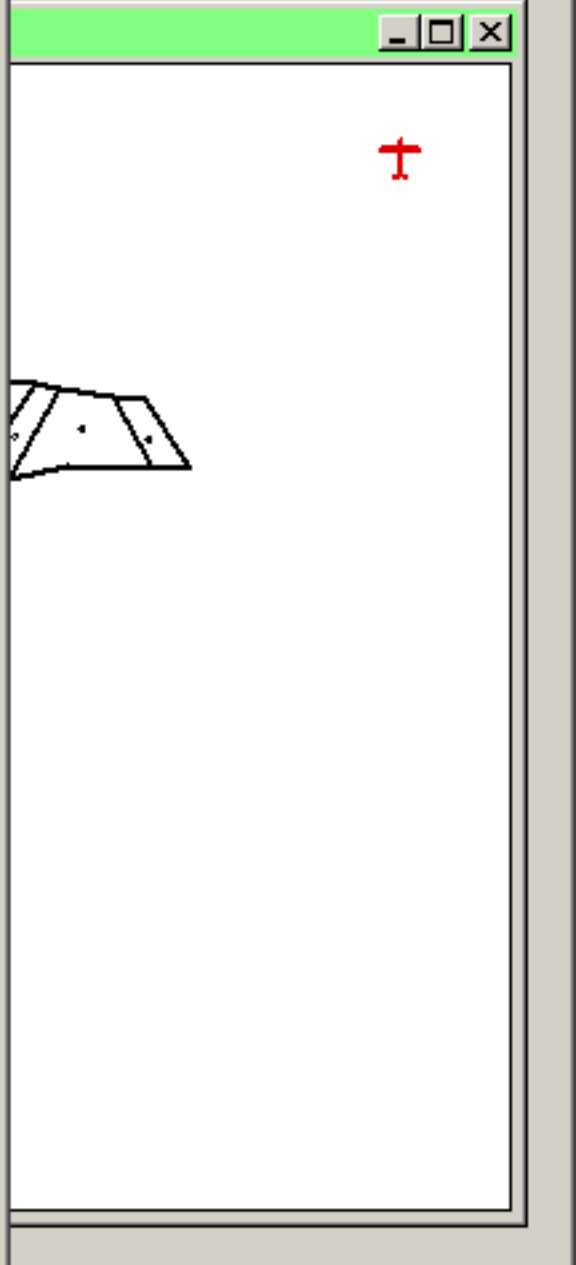
Select output measurement units:

Metric U.S.

Run Distance Calculations

Cancel

1: 167,871 771,071.57 4,053,413.38



ArcView GIS 3.3

File Edit View Theme Analysis

tennessee_20 May 10

New

Views

Tables

3D Scenes

- Blks_2005_u16.shp
- Block_divide
- Middlesboro_airport
- Claiborne_rds
- Temp_c_Surt
- Wind_mph
- Ms-0510102
- Ms-0510114
- Ms-0510110
- 7t-05101058
- 7t-05101016

Distance Calculations

Spray Block(s)

Select spray block theme:

Blks_2005_u16.shp

NOTE: All blocks will be used

Airport(s)

Enter coordinates of airport

Get airport location(s) from theme

Middlesboro_ky_airport_u16.shp

Output

Select map projection units:

meters feet

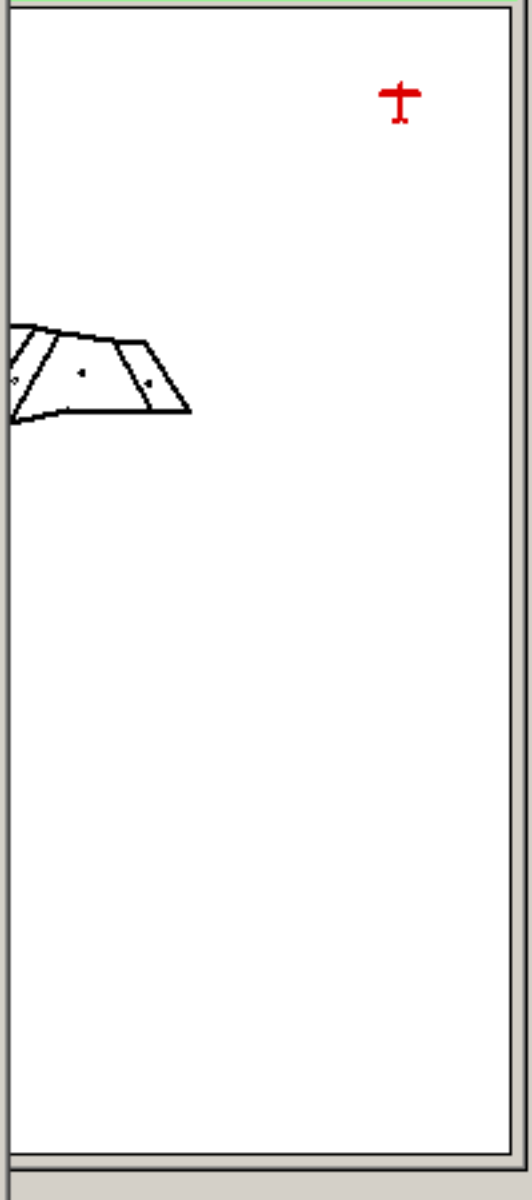
Select output measurement units:

Metric U.S.

Run Distance Calculations

Cancel

1: 167,871 771,071.57 4,053,413.38



Select the airport shape file from those in the current view or Enter the coordinates manually

BACK **NEXT**

tennessee_20 May 10

New

Views

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- Blks_2005_u16
- Block_divide
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- Ms-0510.shp
- % Rh surface
- Temp_c.shp
- Temp_c Surt
- Wind_mph
- Ms-0510102
- Ms-0510114
- Ms-0510110
- 7t-05101058
- 7t-05101016

Distance Calculations

Spray Block(s)

Select spray block theme:

Blks_2005_u16.shp

NOTE: All blocks will be used

Airport(s)

Enter coordinates of airport

Get airport location(s) from theme

Middlesboro_ky_airport_u16.shp

Output

Select map projection units:

meters feet

Select output measurement units:

Metric U.S.

Run Distance Calculations

Cancel

1: 167,871 771,071.57 4,053,413.38

ArcView GIS 3.3

File Edit View Theme Analysis S

2000 tennessee_20 May 10

New

Views

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- Block_divide
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- Claiborne_rd
- 7t_points.dt
- 7t-0510.shp
- ms-_points.d
- Ms-0510.shp
- % Rh surfac
- Temp_c.shp
- Temp_c Surt
- Wind_mph
- Ms-0510102
- Ms-0510114
- Ms-0510110
- 7t-05101058
- 7t-05101016

Distance Calculations

Spray Block(s)

Select spray block theme:

Blks_2005_u16.shp

NOTE: All blocks will be used

Select numeric field for unique block ID (BlockID):

Bnd_
Bnd_id
Blockid
Uniqueid

OK
Cancel

Metric U.S.

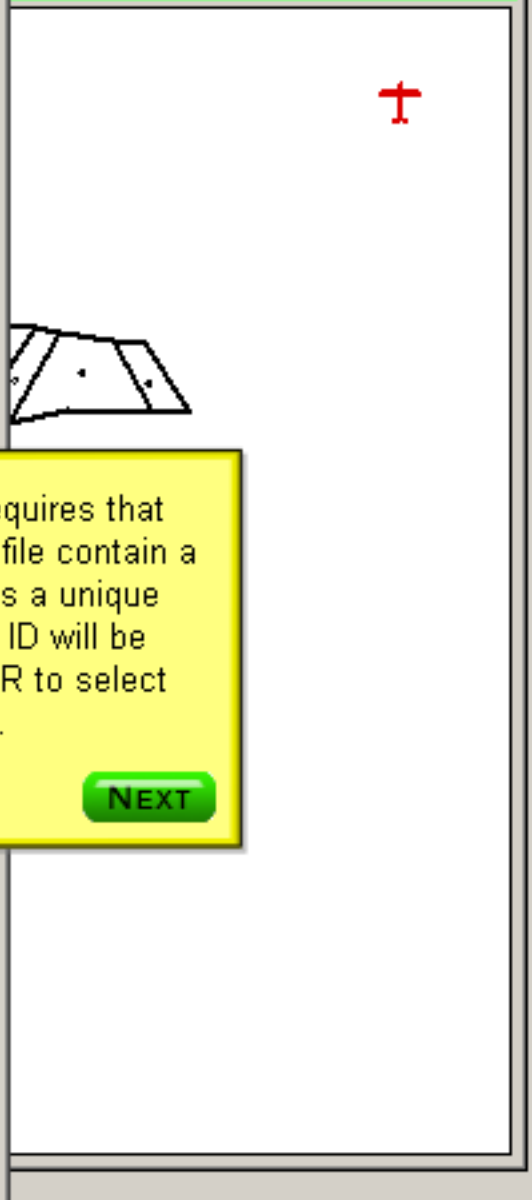
Run Distance Calculations

Cancel

The extension requires that the block shape file contain a field that contains a unique numeric ID. This ID will be used by CASPER to select individual blocks.

BACK NEXT

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ArcView GIS 3.3

File Edit View Theme Analysis S

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- Blks_2005_u16.shp
- Block_divide
- Middlesboro
- Claiborne_rd
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- 7t-0510.shp
- ms-_points.d
- Ms-0510.shp
- % Rh surfac
- Temp_c.shp
- Temp_c Surt
- Wind_mph
- Ms-0510102
- Ms-0510114
- Ms-0510110
- 7t-05101058
- 7t-05101016

Distance Calculations

Spray Block(s)

Select spray block theme:

Blks_2005_u16.shp

NOTE: All blocks will be used

Select numeric field for unique block ID (BlockID):

- Bnd_
- Bnd_id
- Blockid**
- Uniqueid

Metric U.S.

Run Distance Calculations

Cancel

1:167,871 771,071.57 4,053,413.38

Distance Calculations

Spray Block(s)

Select spray block theme:

Blks_2005_u16.shp

NOTE: All blocks will be used

1: 167,871 771,071.57
4,053,413.38

tennessee_20 May 10

New

200

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Views

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Blks_2005_u

Block_divide

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W

Ms-0510102

Ms-0510114

Ms-0510110

7t-05101058

7t-05101016

Enter filename for result TXT table:

File Name: DistResults.txt

Directories: c:\program files\casper

- c:\
- program files
- casper
 - aircraft
 - blockdata**
 - projects

Drives: c:

OK

Cancel

Distances are calculated and written to a text file. The file can be renamed and saved in any directory. By default, CASPER will look in its installed directory under 'blockdata'.

BACK **NEXT**

Metric U.S. Feet

Run Distance Calculations

Cancel

Distance Calculations

Spray Block(s)

Select spray block theme:

Blks_2005_u16.shp

NOTE: All blocks will be used

1: 167,871 771,071.57
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tennessee_20 May 10

New

Views

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- Blks_2005_u
- Block_divide
- Mi
- Cl
- 7t
- 7t
- ms
- Ms
- %
- Te
- Te
- W
- Ms-0510102
- Ms-0510114
- Ms-0510110
- 7t-05101058
- 7t-05101016

Enter filename for result TXT table:

File Name: TN_Project.txt

Directories: c:\program files\casper\blockdata

- burke 2005 tz
- burke no distances tz
- clabone in distances.txt
- distresults tz
- sample_blockdata tz
- in_distances tz**

Drives: c:

OK

Cancel

Metric U.S.

Run Distance Calculations

Cancel

Distance Calculations

Spray Block(s)

Select spray block theme:

Blks_2005_u16.shp

NOTE: All blocks will be used

1: 167,871 771,071.57
4,053,413.38

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New

200

Views

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3D Scenes

- Blks_2005_u
- Block_divide
- Mi
- Cl
- 7t
- 7t
- ms
- Ms
- %
- Te
- Te
- W
- Ms-0510102
- Ms-0510114
- Ms-0510110
- 7t-05101058
- 7t-05101016

Enter filename for result TXT table:

File Name: TN_Project.txt

Directories: c:\program files\casper\blockdata

- burke 2005 tz?
- burke no distances tz?
- clabone in distance.txt
- distresults tz?
- sample_blockdata tz?
- in_distances tz?**

Drives: c:

OK

Cancel

Metric U.S.

Run Distance Calculations

Cancel

ArcView GIS 3.3

File Edit View Theme Analysis

tennessee_20 May 10

New

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Scripts

3D Scenes

- Blks_2005_u16.shp
- Block_divide
- Middlesboro
- Claiborne_rd
- 7t_points.dbf
- 7t-0510.shp
- ms_points.d
- Ms-0510.shp
- % Rh surface
- Temp_c.shp
- Temp_c Surt
- Wind_mph
- Ms-0510102
- Ms-0510114
- Ms-0510110
- 7t-05101058
- 7t-05101016

Distance Calculations

Spray Block(s)

Select spray block theme:

Blks_2005_u16.shp

NOTE: All blocks will be used

Airport(s)

Calculations Completed

Distance calculations are complete. Press OK to view results.

Final TXT filename: c:\program files\casper\blockdata\tn_project.txt

NOTES: Inter-block distance results are reported by block number ('Blockid' column).

OK

Metric U.S.

Run Distance Calculations

Cancel

When calculations are completed, a text box is displayed showing the location of the distance results text file. Clicking on OK will display the data table within ArcView.

BACK NEXT

1: 167,871 771,071.57 4,053,413.38

+



0 of 14 selected



tennessee_20 May 10

New

Distance results: c:\program files\casper\blockdata\tn_project.txt

<i>Blockid</i>	<i>Centerx</i>	<i>Centery</i>	<i>Area_ac</i>	<i>To_airport_mi</i>	<i>Wwidth_A</i>	<i>Length_ft</i>	<i>Exarea_ac</i>	<i>To_1_mi</i>	<i>To_2_mi</i>
1	774188.6368	4041263.6388	154	14.54	2845	3277	0	0.00	3.0
2	773112.1958	4046057.0054	307	13.36	2845	5500	0	3.05	0.0
3	777066.1743	4047484.9599	2219	10.80	8096	16519	1	4.26	2.6
4	784620.0687	4051940.9778	175	5.35	3326	3900	78	9.28	8.0
5	777872.7002	4047960.7289	386	10.22	1279	15086	0	4.75	3.1
6	781872.1092	4048609.6314	921	7.95	5082	10135	140	6.61	5.6
8	781935.7140	4049021.4420	139	7.76	2114	3199	0	6.81	5.7
9	779293.2790	4049946.6106	133	8.83	1168	5181	0	6.26	4.5
10	779507.5305	4050272.7974	172	8.62	1543	5145	0	6.50	4.7
11	784113.9376	4051504.7870	230	5.76	2814	5582	0	8.86	7.6
12	785439.5826	4052089.4362	215	4.88	1801	6343	0	9.70	8.5
13	784964.9268	4052397.6283	198	5.02	2845	4486	0	9.63	8.3
15	786486.1795	4052085.1201	546	4.37					9.1
16	787671.5441	4052107.1640	156	3.83					9.8

The data table contains the Block ID, center coordinates for each block, area, and the distances between all blocks and the airport. Also calculated are length and width of each block along with any exclusion areas inside of the blocks. All of these values are used by CASPER to determine aircraft productivity.

BACK

NEXT

 Wind_mph Ms-05101025.shp Ms-05101145.shp Ms-05101108.shp 7t-05101058.shp 7t-05101016.shp

Please wait...



Computer Assisted Spray Productivity and Efficiency Routine

CASPER can be downloaded from:

www.fs.fed.us/r8/foresthealth/sprayapps.html

It can use the Distance Extension text file or manual entry of data

BACK

NEXT



CASPER uses either English or Metric units. These are selected under Options. Once the unit preference is selected it becomes the default.

BACK **NEXT**

Set Units ▶
✓ English
Metric

Set Units ▶
✓ English
Metric

- File
- Options
- Help
- New Project...
- Open Project...
- Cancel Project
- Save Project...
- Exit

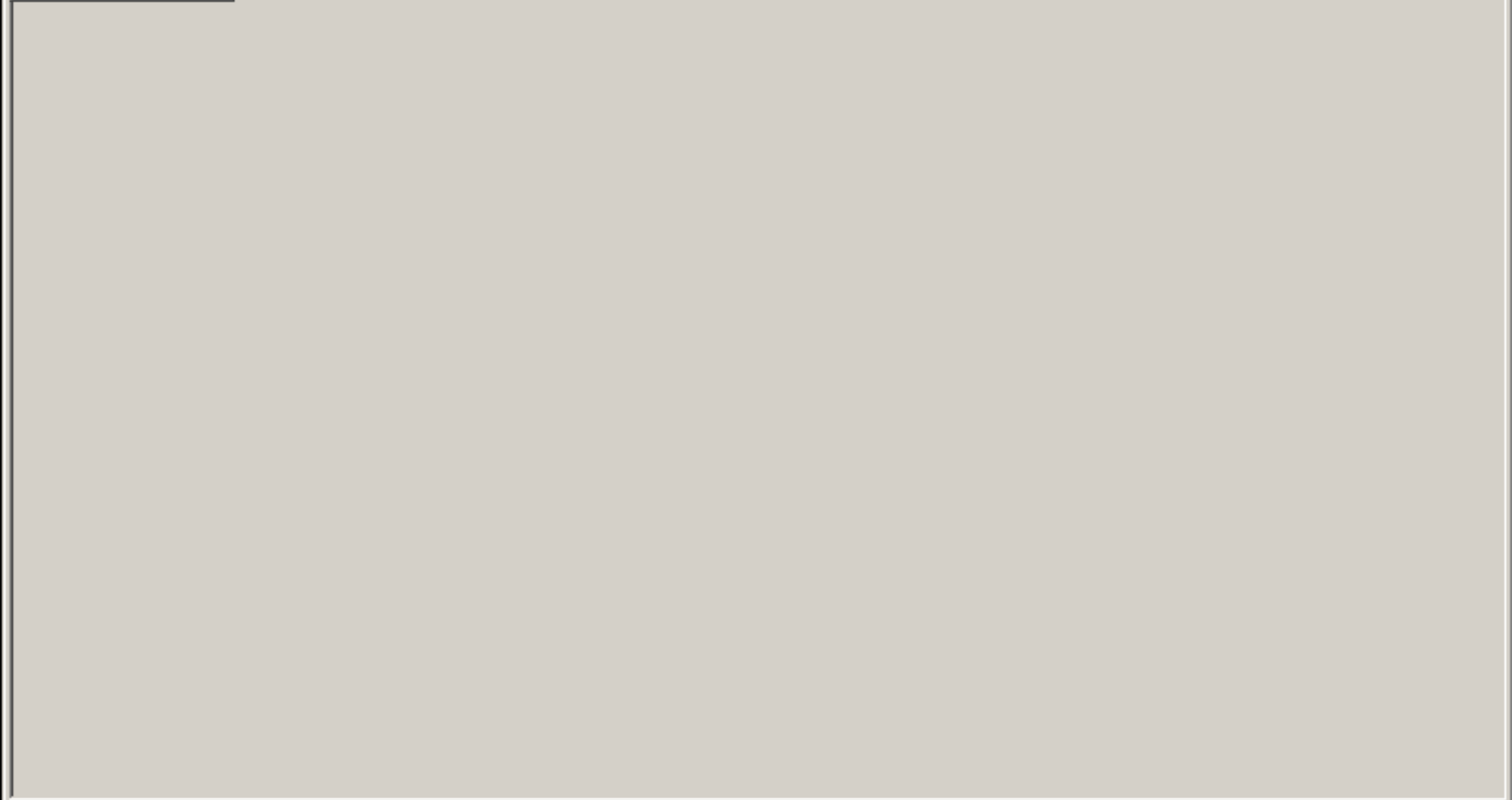
Begin a project by selecting 'NewProject' from the File menu.

BACK **NEXT**



File Options Help

- New Project...
- Open Project...
- Cancel Project
- Save Project...
- Exit



CASPER

Select Load Type:

Constant Volume

Variable Volume

Dry Material

OK Cancel

CASPER works with either liquid or dry application material. The user can select whether the aircraft will always be loaded with a constant volume of material each time it loads. Or if Variable Volume is selected, each time the aircraft loads, CASPER will ask for the volume loaded.

BACK NEXT

CASPER

Select Load Type:

Constant Volume

Variable Volume

Dry Material

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate: gal/ac

Swath Width: feet

Application Speed: mph

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

Block Entry

From file <no file selected>

Manual entry

The Aircraft Setup form provides data for CASPER to calculate flow rates, area treated per load, and flight times.

Ferry Speed (take-off to block and between blocks) is estimated to be about 20 MPH (32 KPH) less than the application speed.

If the aircraft has a GPS guidance systems, actual values for Ferry Speed and Turn Time can be obtained.

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate:

Swath Width:

Application Speed:

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

- AgCat B
- AgCat Turbo
- AgCat King
- AgCat Super B
- Air Tractor 301
- Air Tractor 400
- Air Tractor 502
- Air Tractor 602

Block Entry

From file <no file selected>

Manual entry

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate:

Swath Width:

Application Speed:

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

- AgCat B
- AgCat Turbo
- AgCat King
- AgCat Super B
- Air Tractor 301
- Air Tractor 400**
- Air Tractor 502
- Air Tractor 602

Block Entry

From file <no file selected>

Manual entry

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate: gal/ac

Swath Width: feet

Application Speed: mph

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

Block Entry

From file <no file selected>

Manual entry

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate: gal/ac

Swath Width: feet

Application Speed: mph

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

Block Entry

From file <no file selected>

Manual entry

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate: gal/ac

Swath Width: feet

Application Speed:

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

Block Entry

From file <no file selected>

Manual entry

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate: gal/ac

Swath Width: feet

Application Speed: mph

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

Block Entry

From file <no file selected>

Manual entry

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate: gal/ac

Swath Width: feet

Application Speed: mph

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

Block Entry

From file <no file selected>

Manual entry

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate: gal/ac

Swath Width: feet

Application Speed: mph

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

Block Entry

From file <no file selected>


Manual entry

Aircraft Setup

Aircraft Setup

Aircraft Type:	<input type="text" value="Air Tractor 400"/>
Application Rate:	<input type="text" value="0.33"/> gal/ac
Swath Width:	<input type="text" value="125"/> feet
Application Speed:	<input type="text" value="140"/> mph
Ferry Speed:	<input type="text" value="120"/> mph
Average Turning Time:	<input type="text" value="30"/> seconds
Average Load:	<input type="text" value="325"/> gal

Block Entry

From file  <no file selected>

Manual entry

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate: gal/ac

Swath Width: feet


Application Speed: mph

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

Block Entry

From file  <no file selected>

Manual entry

Block Entry can be manual or if the ArcView Distance Extension was used, the results can be selected from the saved text file.

Open

Look in: Blockdata

- History
- Desktop
- My Computer
- My Network P...

- burke 2005.txt
- Burke NC distances.txt
- Claiborne tn distances.txt
- distresults.txt
- sample_blockdata.txt
- tn_distances.txt
- tn_project.txt

File name: distresults.txt

Files of type: TXT File

Open

Cancel

Manual entry

Open Setup

Save Setup

Next >>

Open

Look in: Blockdata



- History
- Desktop
- My Computer
- My Network P...

- burke 2005.txt
- Burke NC distances.txt
- Claiborne tn distances.txt
- distresults.txt
- sample_blockdata.txt
- tn_distances.txt
- tn_project.txt**

Type: Text Document
Size: 1.88 KB

File name: tn_project.txt

Open

Files of type: TXT File

Cancel

Manual entry

Open Setup

Save Setup

Next >>

Open

Look in: Blockdata



- History
- Desktop
- My Computer
- My Network P...

- burke 2005.txt
- Burke NC distances.txt
- Claiborne tn distances.txt
- distresults.txt
- sample_blockdata.txt
- tn_distances.txt
- tn_project.txt

File name: tn_project.txt

Files of type: TXT File

Open

Cancel

Manual entry

Open Setup

Save Setup

Next >>

Aircraft Setup

Aircraft Setup

Aircraft Type:

Application Rate: gal/ac

Swath Width: feet

Application Speed: mph

Ferry Speed: mph

Average Turning Time: seconds

Average Load: gal

Block Entry

From file tn_pro

Manual entry

After finishing the Aircraft Setup, the information can be saved for future runs.

The default name will be the Aircraft Type, but can be renamed to whatever is desired.

Save As

Save in: Aircraft



- History
- Desktop
- My Computer
- My Network P...

- AT 502.txt
- Bell 205.txt
- Bell 206.txt
- UH-1 125.txt

File name: AT 400.txt

Save as type: TXT File

Save

Cancel

Manual entry

Open Setup

Save Setup

Next >>

Save As

Save in: Aircraft

- History
- Desktop
- My Computer
- My Network P...

- AT 502.txt
- Bell 205.txt
- Bell 206.txt
- UH-1 125.txt

File name: AT 400.txt

Save as type: TXT File

Save

Cancel

Manual entry

Open Setup

Save Setup

Next >>

Aircraft Setup - AT 400.txt

Aircraft Setup

Aircraft Type:	<input type="text" value="Air Tractor 400"/>	
Application Rate:	<input type="text" value="0.33"/>	gal/ac
Swath Width:	<input type="text" value="125"/>	feet
Application Speed:	<input type="text" value="140"/>	mph
Ferry Speed:	<input type="text" value="120"/>	mph
Average Turning Time:	<input type="text" value="30"/>	seconds
Average Load:	<input type="text" value="325"/>	gal

Block Entry

From file tn_project.txt

Manual entry

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

The Block Entry form is where spacial information about the treatment area is selected. If the ArcView Distance Extension text file was selected, all block information is available by selecting the block ID.

IMPORTANT: Blocks must be entered in the order in which they will be flown.

BACK **NEXT**

Current Block:

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 2
- 3
- 4
- 5
- 6

Add >

< Remove

<< Remove All

To be treated:

[Empty list box for blocks to be treated]

OK

Cancel

lock

Previous

Delete

Next Block:

Edit Block

Next >>

Clear All

[Input field for Next Block]

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 2
- 3
- 4
- 5
- 6

Add >

< Remove

<< Remove All

To be treated:

[Empty box for blocks to be treated]

OK

Cancel

Block

Edit Block

Previous

Next >>

Delete

Clear All

Start Block:

[Input field for Start Block]

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 2
- 3
- 4
- 5
- 6

Add >

< Remove

<< Remove All

To be treated:

[Empty box for blocks to be treated]

OK

Cancel

Block

Edit Block

Previous

Next >>

Delete

Clear All

Start Block:

[Input field for Start Block]

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 3
- 4
- 5
- 6
- 8

Add >

< Remove

<< Remove All

To be treated:

2

OK

Cancel

Block

Edit Block

Previous

Next >>

Delete

Clear All

Start Block:

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 3
- 4
- 5
- 6
- 8

Add >

< Remove

<< Remove All

To be treated:

- 2

OK

Cancel

Block

Edit Block

Previous

Next >>

Delete

Clear All

Start Block:

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 3
- 4
- 6
- 8
- 9

Add >

< Remove

<< Remove All

To be treated:

- 2
- 5

OK

Cancel

Block

Edit Block

Previous

Next >>

Delete

Clear All

If an error is made entering blocks in order, they can be highlighted and removed from the treatment list.

BACK NEXT

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 3
- 4
- 6
- 8
- 9

Add >

< Remove

<< Remove All

To be treated:

- 2
- 5

OK

Cancel

Block

Edit Block

Previous

Next >>

Delete

Clear All

Start Block:

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 3
- 4
- 6
- 8
- 9

Add >

< Remove

<< Remove All

To be treated:

- 2

OK

Cancel

Block

Edit Block

Previous

Next >>

Delete

Clear All

Start Block:

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 3
- 6
- 8
- 9
- 10

Add >

< Remove

<< Remove All

To be treated:

- 2
- 4

OK

Cancel

Block

Edit Block

Previous

Next >>

Delete

Clear All

Start Block:

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 3
- 8
- 9
- 11
- 11

Add >

< Remove

<< Remove All

To be treated:

- 2
- 4
- 6

OK

Cancel

Block

Edit Block

Previous

Next >>

Delete

Clear All

Start Block:

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 3
- 8
- 9
- 10
- 11

Add >

< Remove

<< Remove All

To be treated:

- 2
- 4
- 6

OK

Cancel

lock

Edit Block

Previous

Next >>

Delete

Clear All

Start Block:

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
----------	-----------	------------	--------------------------	-----------------------------	------------------

Aircraft Setup

Save Project

Select Block

Select blocks to treat from list on left, then click Add.
(Note: Blocks must be selected in the order of treatment)

Available Blocks:

- 1
- 3
- 8
- 10
- 11
- 12

Add >

< Remove

<< Remove All

To be treated:

- 2
- 4
- 6
- 9

OK

Cancel

Block

Edit Block

Previous

Next >>

Delete

Clear All

Start Block:

Once all blocks have been ordered, click OK. CASPER will create a data table and display block information and gallons used.

BACK

NEXT

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
2	307	2845	13.4	8	325
4	97	3326	5.4	2.7	
6	781	5082	8	1.8	325
→ 9	133	1168	8.8		

Aircraft Setup

Save Project

Add Block

Edit Block

<< Previous

Next >>

Delete

Clear All

Current Block: 9

The arrow on the left indicates which block can be edited. Clicking on 'Previous' or 'Next' buttons moves the arrow up or down to select the block to be edited.

BACK **NEXT**

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
2	307	2845	13.4	8	325
4	97	3326	5.4	2.7	
→ 6	781	5082	8	1.8	325
9	133	1168	8.8		

Aircraft Setup

Save Project

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Add Block - Constant Load

Block ID:

Block Size: ac

Block Width: ft

Distance from Airport: mi

Distance to Next Block: mi

Distance to Next Block (mi) Total Load (gal)

Only those field that are not grayed out can be edited.
 As an example, changing block width might be required if flight direction has to be changed.
 When using the Distances Extension, distances are calculated from block centers. For very large blocks, the actual distance between blocks may be shorter and can be changed.

Block ID:

To calculate efficiency, enter Load Time:

minutes/load

Add Block - Constant Load

Block ID:

Block Size: ac

Block Width: ft

Distance from Airport: mi

Distance to Next Block: mi

Distance to Block (mi)	Total Load (gal)
	325
	325

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

Add Block - Constant Load

Block ID:

Block Size: ac

Block Width: ft

Distance from Airport: mi

Distance to Next Block: mi

Distance to Block (mi)	Total Load (gal)	<input type="button" value="Aircraft Setup"/>	<input type="button" value="Save Project"/>
	325	<input type="button" value="Add Block"/>	<input type="button" value="Edit Block"/>
	325	<input type="button" value="Previous <<"/>	<input type="button" value="Next >>"/>
		<input type="button" value="Delete"/>	<input type="button" value="Clear All"/>
Current Block: <input type="text" value="6"/>			

To calculate efficiency, enter Load Time:

minutes/load

Add Block - Constant Load

Block ID:

Block Size: ac

Block Width: ft

Distance from Airport: mi

Distance to Next Block: mi

Distance to Block (mi)	Total Load (gal)
	325
	325

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
2	307	2845	13.4	8	325
4	97	3326	5.4	2.7	
6	781	5222	8	1.8	325
→ 9	133	1168	8.8		

Aircraft Setup

Save Project

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
2	307	2845	13.4	8	325
4	97	3326	5.4	2.7	
6	781	5222	8	1.8	325
→ 9	133	1168	8.8		

Aircraft Setup

Save Project

Add Block

Edit Block

<< Previous

Next >>

Delete

Clear All

Current Block: 9

To calculate efficiency, the time it takes to service the aircraft and taxi to takeoff is entered here.

BACK NEXT

To calculate efficiency, enter Load Time:

0 minutes/load

CALCULATE

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
2	307	2845	13.4	8	325
4	97	3326	5.4	2.7	
6	781	5222	8	1.8	325
→ 9	133	1168	8.8		

Aircraft Setup

Save Project

Add Block

Edit Block

<< Previous

Next >>

Delete

Clear All

Current Block: 9

To calculate efficiency, enter Load Time:

15 minutes/load

CALCULATE

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
2	307	2845	13.4	8	325
4	97	3326	5.4	2.7	
6	781	5222	8	1.8	325
→ 9	133	1168	8.8		

Aircraft Setup

Save Project

Add Block Edit Block

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
2	307	2845	13.4	8	325
4	97	3326	5.4	2.7	
6	781	5222	8	1.8	325
→ 9	133	1168	8.8		

Aircraft Setup

Save Project

Add Block

Edit Block

<< Previous

Next >>

Delete

Clear All

Current Block: 9

To calculate efficiency, enter Load Time:

15 minutes/load

CALCULATE

Total ac: 1318

Productivity: 482 ac/hr

Efficiency: 408 ac/hr

6	781	5222	8	1.8	325
→ 9	133	1168	8.8		

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

The results for the blocks selected are calculated and displayed. This information can be saved as a project file in the File menu.

BACK **NEXT**

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

→ 6	5222	8	1.8	325
9	1168	8.8		

Project Cost Calculator is accessed under the Tool menu. This provides an estimate of the cost for treating the selected blocks.

To get an estimate for an entire project, all blocks should be entered in the order they are likely to be treated.

BACK **NEXT**

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

→ 6	5222	8	1.8	325
9	1168	8.8		

Costs...

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Calculate Close

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

The estimated number of days should include setup, calibration, weather delays, treatment, and take down. This value is used to compute personnel and per diem costs.

BACK **NEXT**

<< Previous Next >>

Clear All

lock:

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Calculate Close

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications:

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

Calculate Close

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

- 1
- 2
- 3

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Calculate Close

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

Calculate Close

<< Previous

Next >>

Delete

Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Calculate Close

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

Calculate Close

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

If additional or special insurance must be purchased it can be entered. Also any special licences or fees could be entered.

ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Calculate Close

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

Calculate Close

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

Calculate Close

<< Previous

Next >>

Delete

Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Calculate Close

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

Aircraft \$ /hr

Fuel \$ /gal

Product \$ /gal

Insurance \$ fixed

Travel (ground) \$ fixed

Personnel \$ /day

Per Diem \$ /day

<< Previous

Next >>

Delete

Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Calculate

Close

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

		Total
Aircraft	\$ <input type="text" value="300.00"/> /hr	<input type="text" value="819.00"/>
Fuel	\$ <input type="text" value="3.75"/> /gal	<input type="text" value="511.88"/>
Product	\$ <input type="text" value="24.25"/> /gal	<input type="text" value="10,548.75"/>
Insurance	\$ <input type="text" value="0.00"/> fixed	<input type="text" value=".00"/>
Travel (ground)	\$ <input type="text" value="1,200.00"/> fixed	<input type="text" value="1,200.00"/>
Personnel	\$ <input type="text" value="800.00"/> /day	<input type="text" value="4,000.00"/>
Per Diem	\$ <input type="text" value="400.00"/> /day	<input type="text" value="2,000.00"/>

Cost/ac: \$

Total Cost: \$

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

Project Cost Calculations

Estimates

Number of days:

Aircraft burn rate: gal/hr

Num. applications: fixed

		Total
Aircraft	\$ <input type="text" value="300.00"/> /hr	<input type="text" value="819.00"/>
Fuel	\$ <input type="text" value="3.75"/> /gal	<input type="text" value="511.88"/>
Product	\$ <input type="text" value="24.25"/> /gal	<input type="text" value="10,548.75"/>
Insurance	\$ <input type="text" value="0.00"/> fixed	<input type="text" value=".00"/>
Travel (ground)	\$ <input type="text" value="1,200.00"/> fixed	<input type="text" value="1,200.00"/>
Personnel	\$ <input type="text" value="800.00"/> /day	<input type="text" value="4,000.00"/>
Per Diem	\$ <input type="text" value="400.00"/> /day	<input type="text" value="2,000.00"/>

Cost/ac: \$

Total Cost: \$

Calculate Close

<< Previous

Next >>

Delete

Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal

→ 6 781 5222 8 1.8 325
9 133 1168 8.8

<< Previous Next >>

Delete Clear All

Current Block:

To calculate efficiency, enter Load Time:
 minutes/load

CALCULATE

Total ac:

Productivity: ac/hr

Efficiency: ac/hr

Flight Time: hours

Total Product: gal



Block Entry

Block ID	Size (ac)	Width (ft)
2	307	2845
4	97	3326
6	781	5222
→ 9	133	1168

The user can evaluate different aircraft setup or select different aircraft all together by selecting Aircraft Setup.

In the following example, the aircraft's swath width is changed from 125 feet to 150 feet.

BACK **NEXT**

Aircraft Setup

Save Project

Add Block

Edit Block

<< Previous

Next >>

Delete

Clear All

Current Block: 9

To calculate efficiency, enter Load Time:

15 minutes/load

CALCULATE

Total ac: 1318

Productivity: 482 ac/hr

Efficiency: 408 ac/hr

Flight Time: 2.7 hours

Aircraft Setup - AT 400.txt

Aircraft Setup

Aircraft Type:	<input type="text" value="Air Tractor 400"/>
Application Rate:	<input type="text" value="0.33"/> gal/ac
Swath Width:	<input type="text" value="150"/> feet
Application Speed:	<input type="text" value="140"/> mph
Ferry Speed:	<input type="text" value="120"/> mph
Average Turning Time:	<input type="text" value="30"/> seconds
Average Load:	<input type="text" value="325"/> gal

Block Entry

From file tn_project.txt

Manual entry

Open Setup

Save Setup

Next >>

Aircraft Setup - AT 400.txt

Aircraft Setup

Aircraft Type:	<input type="text" value="Air Tractor 400"/>
Application Rate:	<input type="text" value="0.33"/> gal/ac
Swath Width:	<input type="text" value="150"/> feet
Application Speed:	<input type="text" value="140"/> mph
Ferry Speed:	<input type="text" value="120"/> mph
Average Turning Time:	<input type="text" value="30"/> seconds
Average Load:	<input type="text" value="325"/> gal

Block Entry

From file tn_project.txt

Manual entry

Block Entry

Block ID	Size (ac)	Width (ft)	Distance to Airport (mi)	Distance to Next Block (mi)	Total Load (gal)
2	307	2845	13.4	8	325
4	97	3326	5.4	2.7	
6	781	5222	8	1.8	325
→ 9	133	1168	8.8		

Aircraft Setup

Save Project

Add Blocks

Edit Block

<< Previous

Next >>

Delete

Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Delete

Clear All

Current Block:

To calculate efficiency, enter Load Time:

minutes/load

CALCULATE

Changing swath width increased productivity from 483 to 561 ac/hr, increased efficiency from 408 to 462 ac/hr, and decreased flight time from 2.7 to 2.4 hrs. This results in an 14% increase in productivity and efficiency and a decrease of 11% in flight time.

BACK START

Total ac:
Productivity: ac/hr
Efficiency: ac/hr
Flight Time: hours
Total Product: gal