Landscape Animator
Help Contents

Getting Started

Overlaying Pictures and Objects

Advanced Features

How To Register Landscape Animator

Landscape Explorer

Getting Started

Landscape Animator - an overview
Viewing your first landscape
Setting projection parameters

Viewing Maps

This View Module displays a view of a previously defined map. The map may be viewed from any direction using a variety of different drawing schemes ranging from the abstract, such as simple grid, to realistic such as summer or winter colours.

Many other parameters may be altered by the user to tailor the image to specific requirements. Examples include the light source position, magnification, perspective, background, and terrain colours. You will probably wish to try varying some or all of these features to obtain the best results for your purposes. View parameters are specified in the View parameters dialog. See Loading a map for instruction on loading and viewing a map.

Advanced Features

Generating animation sequences
Memory issues
Using colour settings schemas

Memory Issues

Although Landscape Animatorr can be run successfully on a PC with 4Mb of RAM, a 8Mb system is recommended. If you have less than 8Mb of RAM you should have a windows swapfile installed. In Windows 3.x you may need to install one manually. You can do this using the virtual memory option in the control panel '386 enhanced' utility. Microsoft recommend using the 'permanent' option, and 8 - 12Mb seems to be optimal on most computers. The swapfile is managed automatically by Windows95.

Animation

The functions are accessed from Animation menu. Creating an animation consists of several steps.

- Create a path using the Makepath dialog. To access this select "Make Path" from the Anmation menu.
- Load the path script using the Animation menu "Load Script" item.
- Run the script after setting output parameters with the "Animation Parameters" dialog.
- Create a flc or avi file using a suitable utility such as the shareware program vfd.

Landscape Animator - An Overview

Landscape Animator is a landscape visualization package that allows the user to view a map or satellite image from the inside as a full 3D representations, and to generate animation sequences that fly around it.

If only digital surface data is available Landscape Animator also supports numerous drawing schemes to generate 'virtual reality' images of the landscape without using an overlay.

Landscape Animator is a sister product to Landscape Explorer, also available as shareware from WoolleySoft. Landscape Explorer is used to generate maps for use with Landscape Animator, and supports a wide range of tools for importing data from digital sources or generating it directly from scanned images. Landscape Explorer also provides a considerable number of links to other applications such as graphics packages and GIS systems.

Viewing your First Landscape

Start Landscape Animator. When the file selection box is displayed select a lem file such as tatra.lem.

The Projection Parameters dialog box appears. This is where the parameters which determine how the view will be drawn are set. In particular note the controls setting viewer and light source position on the Projection page of the notebook, and the drop down list with available colour schemas on the Drawing page. For now however just take the defaults and press OK. A dialog box appears showing progress as the map is drawn.

When complete a window is opened displaying the view. If you want to change any of the parameters used select the Parameters... item from the View menu, or press Ctrl-F1.

The parameters available are described in more detail in the section detailing the Projection Parameters dialog box.

Projection Viewpoint

This control is used to set the camera (black cross) and target (white) postions. Click the left mouse button to move the target, the left to move the camera. The camera always looks directly at the target.

Light Source Position

This describes the position of the light source in terms of altitude and azimuth.

Colour Schemes

Landscape Animator offers a variety of colour schemes for generating the landscape image. Unless specified otherwise all the following use 256 colour palettes, although Landscape Animator will take advantage of the additional colours if you are using 64K or True Colour graphics. The most effective scheme is the BMP overlay, which overlays a bmp file onto the landscape surface, thus allowing you to view or fly-through a map or satellite image.

BMP Overlay

Draws the surface with an image taken from a BMP file stretched to fit over the surface. Support is included for 16 and 256 colour bitmaps in all display modes, and true colour bitmaps if running in high or true colour mode.

Contour (gradual)

Draws the projection coloured according to altitude using a graduated colour scheme. Light source and terrain information are ignored.

Contour (stepped)

Draws the projection coloured according to altitude. The scheme used is the same as that in the Map Definition Module (which references the standard windows 16 colour palette). Light source and terrain information are ignored.

Desert

Draws the projection to give an impression of a hot desert landscape. Includes light source and terrain information.

GIS Framework

Draws the projection with grid squares coloured according to terrain type, but with no shading (e.g. light source information is ignored). Will be of particular interest to professional users who wish to show the distribution of geological features, soil types, etc. Usually a grid is displayed with this scheme.

Mono

Draws the landscape in greyscale. Useful if you wish to print the image on a mono printer.

Summer

Draws the projection to give an impression of a temperate climate landscape in summer. This and the following winter colour version are probably the best options for presentation-quality work where an overlay is not available, and give excellent results with colour printers. Includes light source and terrain information.

Summer (16 Colour)

The same as the Summer colour scheme described above, but uses the standard windows 16 colour palette only.

Winter

Draws the projection to give an impression of a temperate climate landscape in winter with snow covering the higher ground. Includes light source and terrain information. The snow covering can be adjusted by clicking on the schema details button.

Winter (16 Colour)

The same as the Winter colour scheme described above, but uses the standard windows 16 colour palette only.

Wireframe

Draws the grid squares as simple open quadrangles. Light source and terrain are ignored.

Background

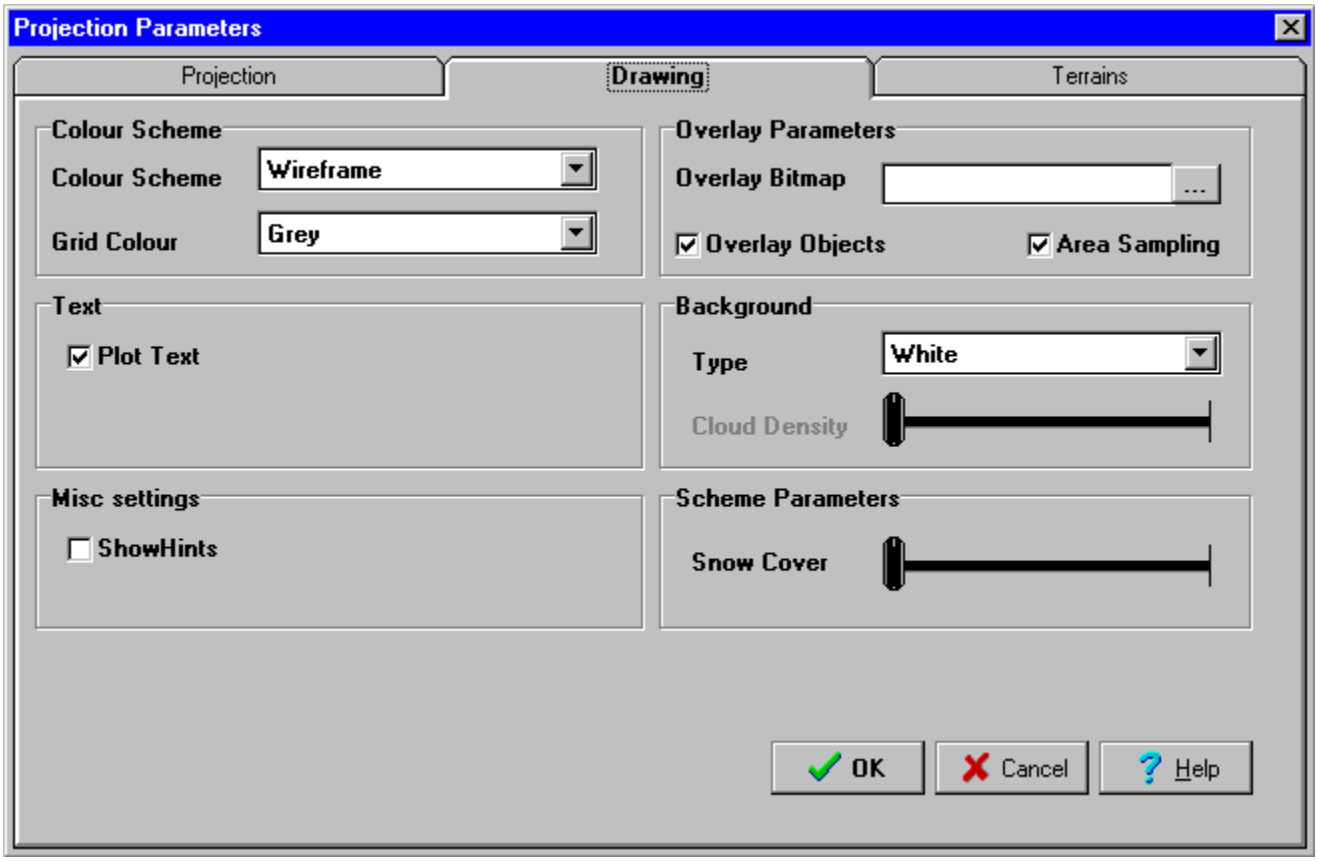
Specifies the window background. Choice of...

- White
- Black
- Sky Blue.
- Mars Pink.
- Fractal Sky. Generates a graduated sky with fractal clouds. The cloud density is set using the slider bar. Only available for high colour or true colour displays.

View Parameters - Drawing

Click on the area of the view parameters dialog you are interested in, or choose from the list below to move to the other notebook pages.

- Projection Page
- Terrains Page



Vertical Scaling

The default setting draws the projection completely to scale. However with flat landscapes it may be useful to exaggerate changes in height. Moving the slider to the right increases the vertical scaling by a factor of up to five times. Similarly moving to the left decreases the scaling, down to a minimum of one fifth the true height.

Magnification

The default setting sizes the projection to fit comfortably within the window. This can be changed to give a larger or smaller drawing by suitable positioning of the slider bar. A range of 20% to 100% of default size is available.

Perspective

Allows the user to exaggerate or relax the perspective. The default value gives a 'Natural' looking perspective. Lower values exaggerate the perspective, higher values relax it.

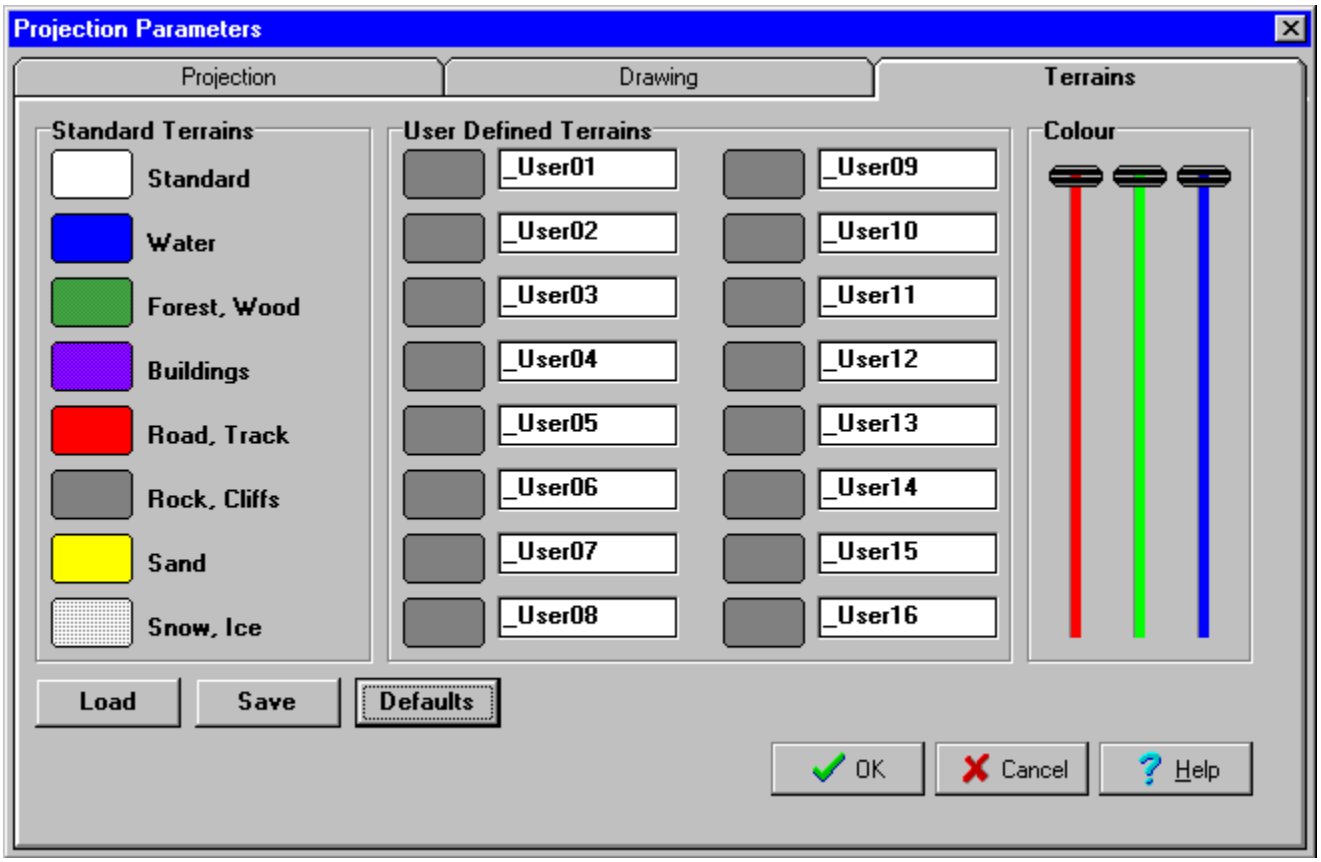
Adding a Grid

Superimposes a grid on the landscape: select black, grey or white from the drop down box to include - this feature is particularly useful with the framework and BMP overlay schemes. Leave as the default (none) to omit the grid. Note that this is not effective with the Wireframe scheme, which always draws the grid in black.

View Parameters - Terrains

Click on the area of the view parameters dialog you are interested in, or choose from the list below to move to the other notebook pages.

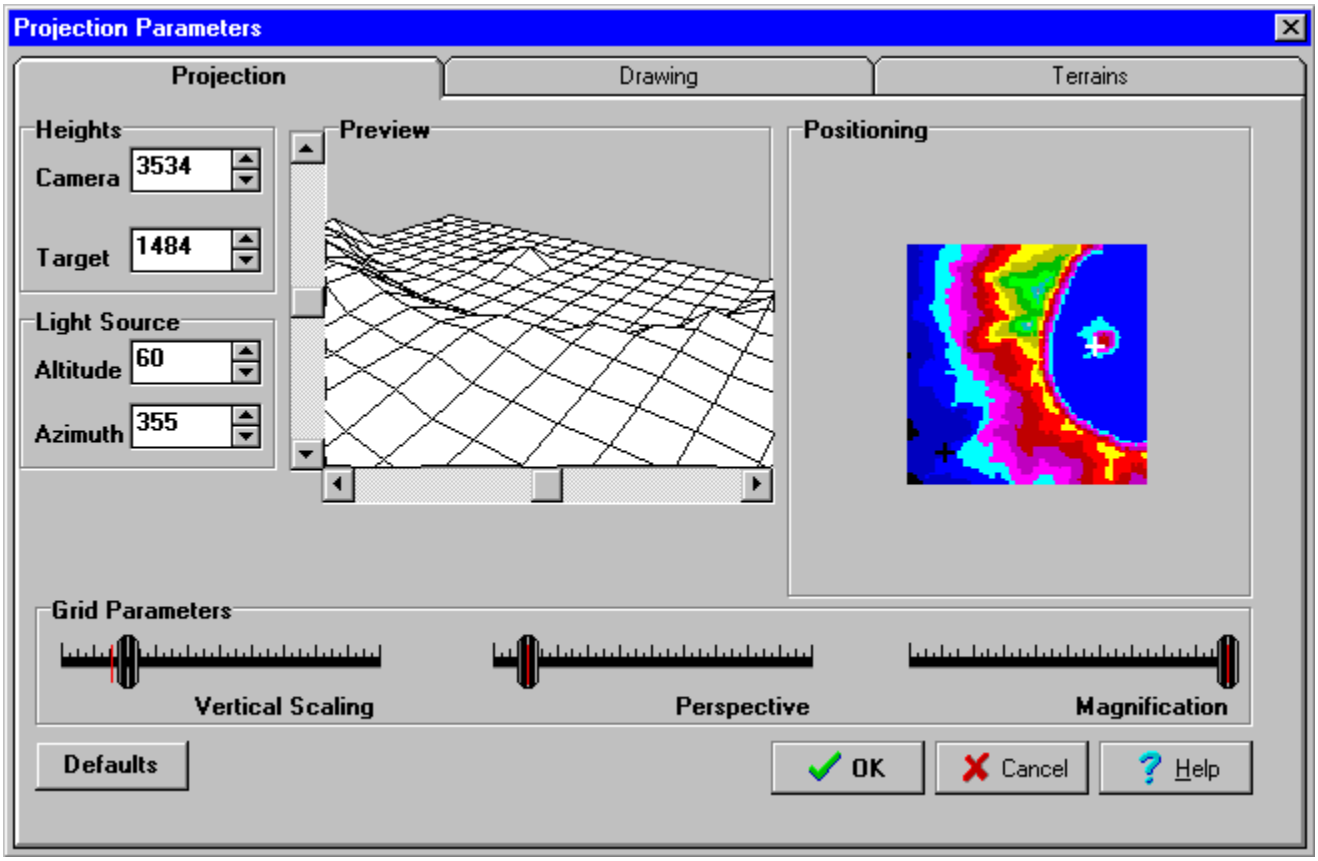
- Projection Page
- Drawing Page



View Parameters - Projection

Click on the area of the view parameters dialog you are interested in, or choose from the list below to move to the other notebook pages.

- Drawing Page
- Terrains Page



Landscape Animator Maps

Maps are stored in .lem files and contain information about heights, terrains, overlay objects and any annotations added.

Maps are created using one of Landscape Animator's sister products - Landscape Explorer, Landscape Explorer Pro, or Visual Explorer.

They may be created either from digital data files, such as USGS DEMs, or directly from a scanned image of a topographic map. Dimensions may be specified in metric or imperial units, and in sizes ranging from 1000 Kilometres down to 20 metres.

Landscape Animator maps are defined as rectangular grids. Height information is specified for each grid (or sample) point, whilst terrain information is held for each grid square. A map may contain up to116,300 grid points.

Additional information may be included in the lem file such as object overlays and text annotations.

Using Colour Settings

Landscape Animator offers considerable control over how terrains are be displayed. The program uses two types of terrains, standard and user-defined. Both types are controlled by the Terrains page of the Parameters dialog.

Standard Terrains

There are 8 standard terrains, corresponding to pre-defined terrain types such as water and forest. You may alter the colours used for all but the base colour type, but the names are fixed.

User Terrains

Up to 16 user terrains may be defined, and unlike the standard terrains you may specify both the colour and names of these terrains. User terrains can be imported in .XYZ files - see import xyz for details.

Storing and Using Colour Setting Schemas

You can save schemas in a .CFG file. Use the Save button box to do this. You can load a previously saved schema using the Load button. The Reset button in the same box restores the standard program defaults.

American Registrations

Landscape Animator can be registered with either of our two registration agents in America: PsL and Pik A Program. Both agents offer payment by credit card.

Pik A Program keep stocks of the programs themselves, and will fill your order directly. Pik A Program cannot take orders outside the USA and Canada.

Alternatively PsL will take your order then notify WoolleySoft. We will then mail out the program directly from ourselves.

Registering via CompuServe

Use the Shareware Registration service (GO SWREG).

Landscape Animator

Author: Kevin Woolley
CompuServe ID: 100332,2104
Program Title: LANDSCAPE ANIMATOR
Registration ID: 7992

Registration is $100 + $5 if outside Europe.

Registration with Pik A Program

You can get a printed copy this registration form by select PrintTopic from the File Menu.

You may mail, fax, or phone in your order. You will get faster service by sending this order form directly to Pik A Program, Inc., the American distributor for Landscape Animator. USA and Canada orders only. Please note that Canadian orders must be paid in US$.

Please send payment to Pik A Program, Inc. at:

Pik A Program (tm)
TOLL FREE (ORDERS ONLY)
1-800-TOREGISTER 1-800-867-3447
13 Saint Marks Place
NY, NY 10003
USA
Telephone (212) 598-4939
Fax (212) 228-5879

_____
(Name)

_____
(Company)

_____
(Street1)

_____
(Street2)

_____
(Town) (State) (Zip)

_____
(Telephone) (Fax) (Country if outside USA)

You will get free product support via phone, mail, or email on CompuServe or the internet, and a disk containingthe latest version of Landscape Animator. The registration fee is $100 plus $4.00 for shipping.

All disks will be sent on 3.5" high density (1.44 MByte) unless 5.25" disks are specifically requested

QUANTITY ITEM PRICE EACH (US $) TOTAL

_____

Landscape Animator US$ 100.00
Shipping US$ 4.00

TOTAL

_____

I am paying by:
( ) CHECK ( ) VISACARD ( ) MASTERCARD
( ) AMERICAN_EXPRESS ( ) DISCOVER
( ) CASH (by registered mail only, please)

Number _____-_____-_____-_____ Exp. date ___-___

_____ _____-_____-_____
(Signature) (Date)

THANK YOU FOR REGISTERING YOUR SHAREWARE!

Important: If you are ordering by mail or fax, please completely fill out this form and send it in. Please call or fax for information regarding site licensing and or purchase orders from government agencies or Fortune 500 companies.

Technical support is not available from Pik A Program.
For any technical help, please contact WoolleySoft.

****
You can find the latest English version of WoolleySoft's Landscape Animator on the Software Creations BBS, the Home BBS of Pik A Program (theUSA distributor for Landscape Animator).

(508) 365-2359 - 2400 Baud V42 MNP5
(508) 368-7036 - 14.4K V32(BIS) DS
(508) 368-4137 - 16.8k HST USR
****

Registering via PsL

CREDIT CARD ORDERS ONLY

Prices are:
Landscape Animator: $100
Shipping: $5

You can order with MC, Visa, Amex, or Discover from Public (software) Library by calling 800-2424-PsL or 713-524-6394 or by FAX to 713-524-6398 or by CIS Email to 71355,470. You can also mail credit card orders to PsL at P.O.Box 35705, Houston, TX 77235-5705.

THE ABOVE NUMBERS ARE FOR ORDERS ONLY.

Any questions about the status of the shipment of the order, refunds, registration options, product details, technical support, volume discounts, dealer pricing, site licenses, etc, must be directed to WoolleySoft at the address given for direct registration above.

To insure that you get the latest version, PsL will notify us the day of your order and we will ship the product directly to you.

The PsL reference number for Landscape Animator is 14264.

WoolleySoft

WoolleySoft is run by Kevin Woolley, a professional Information Technology specialist with over 10 years experience of computer systems and applications at all levels from programming to systems and business analysis. Particular areas of expertise include Windows development, graphics processing, GIS and database systems, and scientific applications. Kevin is an author member of the Association of Shareware Professionals (ASP) - please take a few seconds to view the ASP's Ombudsman statement

WoolleySoft is commited to developing stimulating and informative shareware applications. However we can also undertake custom software development and offer consultancy on many aspects of computer systems and business. If you are interested please contact WoolleySoft at

WoolleySoft,
Humblesknowe Cottage, Ramoyle,
Dunblane, Perthshire,
Scotland
Tel. 0786 825406

Kevin can also be reached by e-mail at 100332,2104 on CompuServe, or 100332.2104@compuserve.com from the internet. You might also like to look at our web page at http://www.stir.ac.uk/~kjw1r/home.html

When not working with computers Kevin's time is taken up looking after his young son and daughter and climbing all the mountains in Scotland. One day he hopes to move to the end of a ISDN line on the west coast and combine all three!

How To Register

This application is Shareware. If you find it useful you should register the product with WoolleySoft. Why register? Well, here are a few good reasons:

1. To bypass the sign-on and sign-off dialogs without a key press.
2. To be able to view other maps besides the Tatras.
3. To get rid of "reminder text" in the program title bar.
4. To get full technical support.
5. To get the latest version of the program, which may have new features that you need.
6. To get notice of program upgrades.
7. To get additional DEM and LEM files (optional).
8. To influence they way Landscape Animator develops.

9. It's the right thing to do.

Product support is available by e-mail on the internet and CompuServe as well as by telephone and standard mail. Please see the Product Support topic for full details of our Support Policy.

This program was developed by an author member of the Association of Shareware Professionals (ASP) - please take a few seconds to view the ASP's Ombudsman statement.

You can register directly with WoolleySoft, or if you are not in the UK you may prefer to use one of the agents in the countries listed below. If you have a CompuServe account you can register directly on-line using the SWREG facility.

USA/North America

Registering With WoolleySoft

Direct registration with WoolleySoft costs £60 or $105 including shipping. Send your order to

Humblesknowe Cottage
Ramoyle, Dunblane
Perthshire. Scotland FK15 0BA.
Tel. 0786 825406.
E-Mail 100332.2104@compuserve.com

We cannot accept credit/debit cards (but our North American agents can). Non-British orders should prefably pay by a cheque drawn against a British bank in UK £ (foreign banks can easily arrange this). But cheque drawn againt a US bank in US$ or international money order are also acceptable. Cheques in other currencies are also accepted, but an additional charge is made. Please make your cheque etc. payable to WoolleySoft.

An order from is included with the distributed files. We can also provide consultancy and other services - see WoolleySoft Services for details.

Overlaying Pictures and Objects

Landscape Animator's most powerful feature is it's ability to draw landscapes with overlay data on the surface. Overlays give the user the ability to create a virtual reality image of the landscape as it actually is - instead of how the creator of a program has thought it should look based simply on height data. Landscape Animator supports two distinct types of overlays - Picture or BMP, and Object.

Picture or BMP Overlays

BMP overlays are drawn with the image from a windows .bmp file stretched over the surface. This image can be anything, but is typically a map or satellite photograph of some type. 16 and 256 colour bmp files are supported if your computer is running in 256 colour mode. In addition true colour bmps are supported in high colour or true colour mode. BMP overlays are generated by selecting BMP Overlay as the colour scheme on the Drawing Page of the Projection Parameters dialog.

Object Overlays

Objects such as circles, lines etc mat be defined using Landscape Explorer Pro or Visual Explorer. These can then be overlayed onto the surface in combination with Picture overlays or in combination with one of the other colour schemes. Objects overlays are included in the landscape visualization by checking the Overlay Objects box on the Drawing Page of the Projection Parameters dialog.

Projection defaults

Restores the defaults for scale, magnification, perspective and panning controls.

Preview

Shows a simplified preview of the projection with the values chosen.

Include Text

Check this box to include text annotations. Note that you need Landscape Explorer Pro or Visual Explorer to define text.

Overlay Bitmap

Use the elipsis button to select a bitmap to be drawn on the landscape surface when using the BMP Overlay drawing scheme.

Include Object Overlays

Check this box to include object overlays. Note that you need Landscape Explorer Pro or Visual Explorer to define these.

Area Sampling

Check this box to use area sampling. This only affects landscape drawn using BMP Overlays, and should normally be left checked.

Snow Level

Set the snow cover when using the Winter colour scheme.

Heading

The eight standard terrains. You can change the colours, but not the names, using the colour sliders.

Colour Sliders

A set of three colour sliders used to change the colour for the currently selected terrain.

User Terrains

A set of 16 user-defined terrains. Both colour and terrain name can be set by the user.

Terrain Defaults

Restores the default settings for terrain names and colours.

Save Terrains

Saves the current terrain settings to a configuration (.cfg) file.

Load Terrains

Loads a set of terrain settings from a configuration (.cfg) file.

Animation Map

Shows the landscape surface. To define the flight path click on the map to set a series of control points. You may move these later. One you have defined 4 or more the generate button is enable, which is used to generate a smooth path.

Flightpath Height

Sets the approximate (due to smoothing) height the flightpath will take above the surface.

Flightpath Minimum Height

Set the minimum height that the flightpath cannot drop below.

Flightpath Speed

Sets the speed at which the viewer will travel along the flightpath. This is inversely related to the number of frames between each control point.

Generate Flightpath

Generate a flightpath using the currently selected set of Height, Minimum Height, Speed and Flightpath settings.

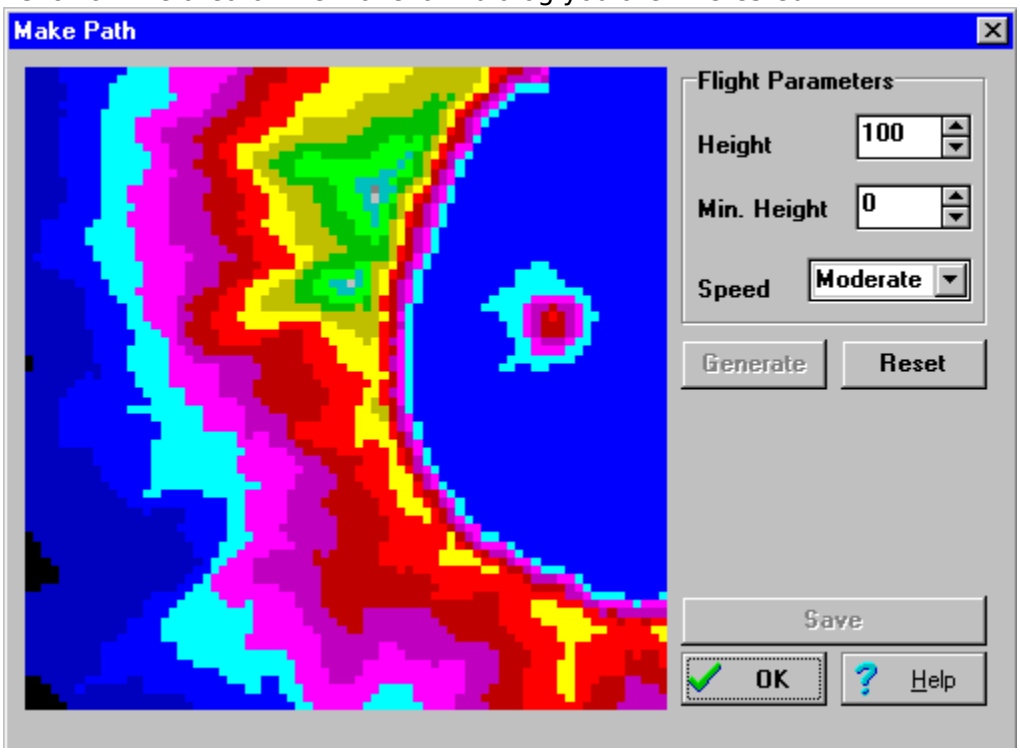
Reset

Resets all Makepath parameters.

Save
Saves the generated flightpath as a script file.

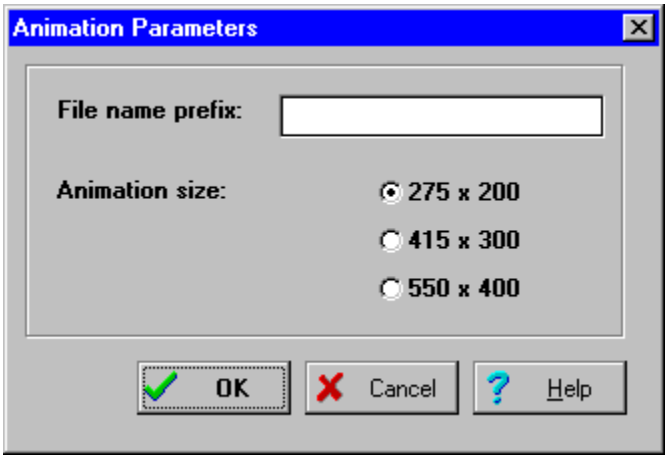
MakePath

Click on the area of the MakePath dialog you are interested in.



Animation Parameters

Click on the area of the Animation Parameters dialog you are interested in.



Landscape Explorer

The maps used by Landscape Animator must be created by one of its sister products - Landscape Explorer, Landscape Explorer Pro, or Visual Explorer.

Landscape Explorer

Like Landscape Animator, Landscape Explorer is distributed as shareware. Landscape Animator requires maps created by Version 3.50 or higher. You can obtain a copy from all of the major FTP sites or from our WWW page at http://www.stir.ac.uk/~kjw1r/home.html

Landscape Explorer contains an advanced surface definition toolset that can be used to create maps from scanned map images, or directly from digital data. File formats supported include USGS 7.5" dem, Ordnance survey Panorama NTF, spreedsheet exported ASCII, and XYZ. Unlike other visualization programs, Landscape Explorer supports terrain definition, making it ideal for use with GIS packages. A MapInfo link is available.

Landscape Explorer also contains a set of landscape visualization functions similar to Landscape Animator, but these view the landscape from outside as a 'block' of terrain. For serious use this may be prefable to 'internal' approach supported by Landscape Animator.

Landscape Explorer cannot define bitmap/object overlays, no several of the other advanced tools found in Landscape Explorer Pro and Visual Explorer.

Landscape Explorer Pro

Landscape Explorer Pro is currently our advanced version of Landscape Explorer, although it is expected to be replaced by Visual Explorer before the end of 1995. It is distributed as a non-shareware version of Landscape Explorer.

Landscape Explorer Pro offers several advantages over Landscape Explorer. It can define larger maps (up to 68,000 datapoints compared with 16,800 in Landscape Explorer), import/export data in Vistapro DEM format, export data in AutoCAD DXF format, and supports text annotations. Most importantly it fully supports object and bitmap overlays.

Visual Explorer

Visual Explorer will replace Landscape Explorer Pro towards the end of 1995. Published as a fully commercial package on cdrom, it will includes a many additional utilities and data, and be available in both French and English versions with German, Italian and Spanish to follow. Users purchasing Landscape Explorer Pro now will be offered an easy upgrade path.

Heights

Used to set the Camera and Target heights. Note that it is possible to set a height underneath the surface.

Hints

Turns hints on or off.

Animation size

Sets the size of the bmp files to be created. Remeber large sizes will require more memory to run.

Animation Filename

Enter the animation filename prefix. This may be up to 5 characters long. For example, entering the prefix "test" will result in a series of files called test000.bmp, test001.bmp etc.