Thank you!

Orbx would like to thank you for purchasing FTX NZSI - New Zealand South Island. FTX NZSI has taken a team of developers over ten months to produce and builds on the techniques and success of the prior Australian and North American region packs. It is the first region in our New Zealand series as we continue to recreate magnificent places to fly.

Te Waipounamu

The South Island of New Zealand is also known as Te Waipounamu, or the Waters of Greenstone. It is a unique place in the world, diverse in its landscape and climates, and a location that visitors return to again and again. The South Island covers about 151,215 square kilometers comprising the largest of the two main islands of the country and the 12th largest island in the world. It spans ~ 860 km from the tip of Marlborough Sounds to Puysegur Point in the south west, and ~280 km from Jackson Head on the west coast to Cape Saunders in the south east.

The South Island's capital is the city of Christchurch. The other areas of population concentration are Dunedin in the south east, Nelson and Blenheim to the north, and furthest south is Invercargill. The interior hosts the smaller but better known resort towns of Queenstown and Wanaka, the latter being the home of the famous biennial Warbirds Over Wanaka air show. The aforementioned town of Blenheim has its own claim to fame with the Omaka Heritage Aviation Centre and the Classic Fighters air show.

Product Features

FTX NZSI features a diversity of custom-built landscape, from the unique farm land of the Canterbury Plains, the barren tussock country of the Central Highlands, the rugged and visually stunning Alps, and the ancient wilderness of the Southern Fiordlands. The scenery also includes Stewart Island to the south and the Chatham Islands to the east. The landclass textures are drawn from aerial and satellite photography of New Zealand and hand placed so as to accurately render the visual environment.

The region pack models most of the aeronautical hazards, obstacles and cultural features mapped in the VFR visual navigation charts for the South Island. This includes towers, power lines, bridges, tunnels, golf courses, dams, lighthouses, power stations, prominent buildings, race courses, radar facilities and wind farms – all the visual aids for VFR flying. You'll also find over 400 unregistered airfields to land at. The registered airfields have been enhanced with the accurate placement of hangars and facilities, terrain adjustments and scheduling of GA traffic to closely match their real-world counterparts. The airports are full of people, vehicles, and aircraft and clutter making them busy locations to land at and take off from.

When down low and slow, you'll see a world full of NZ buildings and NZ trees. Taking the lead again in pushing the boundaries of what FSX can offer, we've developed new technology making custom autogen tree models and textures. We have also modelled houses, farm facilities, factories and office blocks drawn from an extensive portfolio of photos of New Zealand's natural and built environments.
The product includes an integrated network of major roads, freeways, bridges and moving
vehicle traffic. Accurate shorelines, rivers, waterfalls, streams and beaches have been
professionally developed from GIS data and applied for use with FTX. Using similar technology,
we have modeled 49 photo-real glaciers and snow fields, producing stunning geological
formations nestled in among the FTX landclass. If you look closely, you’ll even find all of the
South Island’s back country huts.

Product requirements

This scenery addon is designed to work in the following simulators: Microsoft Flight Simulator
X, Lockheed Martin Prepar3D v1, Lockheed Martin Prepar3D v2 and Lockheed Martin
Prepar3D v3.
Compatibility notes

Please visit http://orbxsystems.com/forums/index.php?board=118.0 for the latest compatibility information between FTX NZSI and third party addons.

Vector Land Class NZ (VLC)

Vector Land Class (VLC) New Zealand is a replacement landclass product which covers both the North and South Islands of New Zealand with custom landclass. Like Orbx FTX, it also replaces some global textures and autogen trees, so care needs to be taken to ensure that no files are overwritten. We recommend that you refer to http://www.orbxsystems.com/forum/forum/80-ftx-compatibility-forum/ for the latest compatibility information regarding the use of FTX NZSI and VLC NZ concurrently.

FLIGHT1 - GROUND ENVIRONMENT X (GEX)

GEX is a default FSX texture replacement product and their textures won't appear inside FTX NZSI since we use custom landclass textures which are called from within the ORBX folders only. This means you will see GEX outside the FTX NZSI boundaries and our textures as soon as you cross over into NZSI. There is nothing to do when flying inside FTX NZSI.

REAL ENVIRONMENT XTREME (REX)

FTX NZSI is 100% compatible with REX and you don't need to do anything special to use REX whilst flying over NZSI. In fact, most of the Orbx developers and beta testers use REX, and it's an Orbx recommended addon.

THIRD PARTY TERRAIN MESH

NZSI comes with a complete set of high-resolution terrain mesh files. Third-party add-on terrain mesh files are compatible as long as they don't provide a higher grid resolution than 10m (the resolution of the NZSI terrain mesh files) and their scenery library position is of lower display priority than FTX NZSI.
Quick Installation Guide

Installing Orbx FTX NZSI is all managed by our FTX Central application. This app is responsible for many aspects in maintaining your Orbx installation. Please visit the support forums to learn more.

Once you have purchased NZSI it will be added to your account and you can have FTX Central download and install it for you. The appropriate scenery library entries will also be managed by FTX Central.

You may also manually download NZSI and then have FTX Central manage the installation for you once downloaded.

An internet connection is required for FTX Central to validate your license.

Please note that the above all refers to FTX Central 3. Earlier versions of FTX Central are no longer supported but will still function as before. The integration of FTX Central with your OrbxDirect account is only available with FTX Central version 3 and above.
Scenery Coverage Area

You can view the coverage and features map shown on the previous page interactively in Google Earth by loading the FTX NZSI Coverage and Features Map.kmz which you’ll find in your ORBX\User Documents folder in your FSX root folder.

Once loaded into Google Earth, you can select all or some of the features included in the scenery, and the corresponding icons will appear inside the map boundary. You can click on each item on the map for a popup balloon which provides details for that airport or POI.

This is a useful tool to begin to explore the features and points of interest included in FTX NZSI.
What is Custom Landclass?

Landclass are special files which reside in the scenery layer “pie”, and their role is to tell FSX what type of ground texture to place in any given square kilometer cell. In other words, landclass files tell the simulator to place a field here, a township there, forest here, and a railway yard there, and so on.

As far as we are aware, FTX is the first flight simulation product to feature totally hand-crafted landclass on such a large scale. Many global or country-specific addon landclass products for FSX are created using various data sources and compiled using automated scripts and then manually rectified for obvious errors.

Not so with FTX. The diagram below gives you an idea of the custom landclass which was shipped with FTX NZSI. Every single square mile in the green highlighted areas was hand placed by Martin Lott, using a combination of many sources, including street maps, aerial photos, and topography charts to name a few.

The result is nothing like you have ever experienced before, with an almost photoreal feel to all areas which have been edited, but with the added benefit of faster loading times, full five seasons’ support and hand-placed custom autogen and library objects in every single kilometer of the region.
Quick Reference Simulator Settings

The table below lists in a handy reference the minimum recommended settings required in your simulator to enjoy NZSI the way Orbx designed it. These settings will run well on most PCs and take particular advantage of the custom mesh and photoreal imagery used in the scenery area.

If you use the settings below you will be guaranteed the highest fidelity experience and the best balanced performance.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of detail radius</td>
<td>Large</td>
<td>Reduces blurring of textures.</td>
</tr>
<tr>
<td>Global texture resolution</td>
<td>Max</td>
<td>Displays photoreal textures best.</td>
</tr>
<tr>
<td>Mesh complexity</td>
<td>100</td>
<td>Better terrain definition.</td>
</tr>
<tr>
<td>Mesh resolution</td>
<td>5m</td>
<td>5 m is required for NZSI</td>
</tr>
<tr>
<td>Texture resolution</td>
<td>7 cm</td>
<td>Sharpest roads and freeways.</td>
</tr>
<tr>
<td>Scenery complexity</td>
<td>Extremely Dense</td>
<td>How Orbx designed FTX NZSI.</td>
</tr>
<tr>
<td>Autogen density</td>
<td>Normal</td>
<td>Best FPS vs detail.</td>
</tr>
<tr>
<td>GA AI traffic</td>
<td>16-50%</td>
<td>Recommended for this scenery.</td>
</tr>
<tr>
<td>Road vehicle traffic</td>
<td>16%</td>
<td>No need to set higher for FTX.</td>
</tr>
</tbody>
</table>
Product Technical Support

Orbx has a very simple support policy: no question unanswered. That means, should you have any questions about NZSI or its use, please feel free to register on the forums at orbxdirect.com and then log a support question in the FTX Payware Support Forum section. Orbx FTX experts will be available to review your support questions and you will usually get a reply on the forums within 12 hours, often much sooner than that.

To visit our support forums, click on the “Forums” button shown on the homepage of orbxdirect.com.

Please do NOT email support requests
Orbx provides world-class support on our forums, and it's the only way in which you can receive support for NZSI. Provided you adhere to the forum terms of use and have a legitimate copy of NZSI, you will always be offered our support at no cost as we work toward a resolution to your problem each time.

Use the forum search function
Before you post a question, please try searching for the answer first, using the forum's built in search function located on the forum menu bar.

What to include in your support requests
If at all possible, this is what we'd like to see provided for each request you log:

- A separate post on the FTX support forums for each issue (don't tag new issue reports onto existing threads).
- Include your ORDER NUMBER from your NZSI purchase in your post or forum signature section.
- A screenshot to highlight what you are talking about.
- A descriptive post title which clearly states what the issue is.
- Detailed comments in your post about what you are reporting on.

The Orbx support team is always on standby to assist you with any problems you may have, or will comment on your issue reports. Please remember, our priority is fixing any urgent issues first, and addressing bug reports second. Clearly though, any “show stopper” bugs will be given top priority though.
FTX Community Forums

FTX already has quite a thriving and active user community on the forums, with over 63,000 members as of September 2016. To visit the forums, just point your web browser to orbxdirect.com and from the front page click the “Forums” menu item.

You don’t need a user account to view other people’s posts and information posted by Orbx staff, but if you’d like to join in on the discussion there, simply create an account. It’s instant and no validation email is required. We like to keep things simple😊.

We hope to see you there soon!

Thanks for reading!

You’ve stuck with us through all these pages of information, and we appreciate you taking the time to read the user guide. We hope it gave you some tips and insights. See you on the forums!
The FTX NZSI Team

Lead Developers

- **Dr Matt Tomkins (Project Manager):** Lead texture artist including landclass ground textures; User Guide; all building textures; custom autogen tree textures, object placement autogen annotation; `default.xml` and `autogendescriptions.spb` edits; `lclookup.bgl` and `terrain.cfg` mods; and overall landclass texture architecture and team meetings.
- **Tim Harris:** Autogen annotation; night lighting and object placement; POI (points of interest) development; POI scenery object modeling; and some beta build management.
- **Holger Sandmann:** Geospatial data processing including vector roads and railroads, waterbodies, photoreal glaciers, terrain mesh, seasons file, waterclass and water textures, base landclass, vertical obstructions, and DOC huts; extrusion bridges; road traffic; `terrain.cfg` mods; m-tiles; beta build management and installer coding.
- **Martin Lott:** Custom hand-crafted landclass covering nearly the entire region.
- **Neil Hill:** Enhancement and correction of FTX NZSI airports and airfields.
- **Edward Boyte:** Development of private turf airfields; and some POI scenery object modeling.
- **Martin Henare:** Custom autogen tree models; `autogendescriptions.spb` edits; and some autogen annotation and POI scenery object modelling.

Additional Orbx Developers

- **Orbx Team:** Orbxlibs objects.
- **Bill Womack:** Custom autogen tree textures.
- **Alex Goff & Heiko Glatthorn:** Autogen annotation.
- **Ian Routley:** Type-2 autogen models and some POI object modelling.
- **Ryan Mason:** Start locations.

Specialist Roles

- **John Venema:** Business management.
- **Ed Correia:** Production Management.
- **Ben McClintock:** FTX Central and website.

Beta Testing Team

Gary Garrison, Eberhard Haberkorn, Philip Manhart, Friedi Gulder, Patrick Scharnowski, Iain Emms, John Venema, Vlad Maly, Edward Boyte, Martin Henare, Ryan Mason.

Further Acknowledgements

- **Kade Belleney:** Tree information.
- **Koordinates:** Christchurch Post-Earthquake Aerial Photos (24 Feb 2011).
- **LINZ:** Lake Grassmere photoreal area sourced from Orthophoto BR29 (2004/05). Crown Copyright Reserved.
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For the most recent version of the EULA, see orbxdirect.com/eula.

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