MICRODESK

S213 - Introduction to Ecotect Energy Design

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10:00 – 11:00

Rm 155

What is it?

An complete building design and environmental analysis tool that does much more than just Energy analysis.

A tool that allows you to work in 3d, run analysis's and prepare views for presentation.

A powerful way to get the information you need to make sustainable design decisions when its easier to do so.

Early in the process

What is it used for?

To help create sustainable design solutions by making more informed decisions about your building in the early design stages

Performing the full range of simulation and analysis functions that allow you to fully understand how a building design will operate and perform in different settings and situations.

Giving the Designer a chance to be start the process with their engineers or energy consultants and have something to hand off to save time.

What it does it work with?

Ecotect is a standalone program that can read model files from other programs such as AutoCad, Max, Maya Sketchup, etc. for analysis.

It also has the ability to create the models or geometry to analyze on its own.

Who uses this?

ECOTECT was written and developed by architects with its application in Architecture and the design process firmly in mind.

It is also used extensively by engineers, local authorities, environmental consultants, building designers, owner-builders and environmental enthusiasts for analysis and studies.

Why would you want it?

You are looking for a competitive edge

You want to do conceptional design analysis of:

- Shadows and Reflections
- Shading Design
- Solar Analysis
- Photovoltaic Array Sizing and Load Matching
- Lighting Design
- Right-to-Light
- Acoustic Analysis
- Thermal Analysis
- Ventilation and Airflow

As well as the ability to do resource management, visualization and export to and import from many programs

Can this help with LEED?

Yes

The daylighting analysis can be used for the LEED calculations, and if you prefer to use other software for your calculations you can use your Ecotect model.

Many of the other tools can be used for LEED as well regarding sustainable sites, ventilation, Photovoltaics, etc.

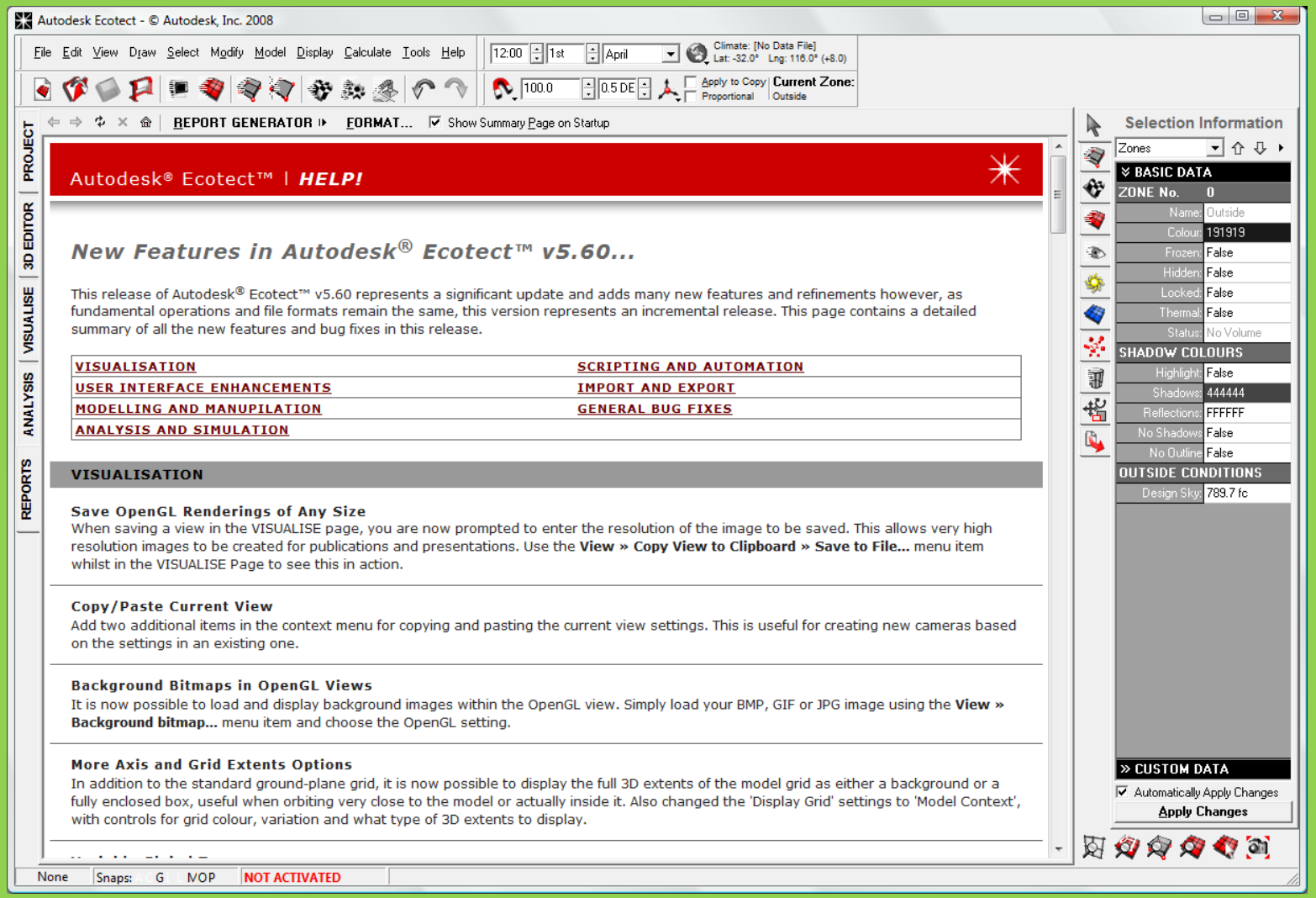
Can this help with GSA?

Yes

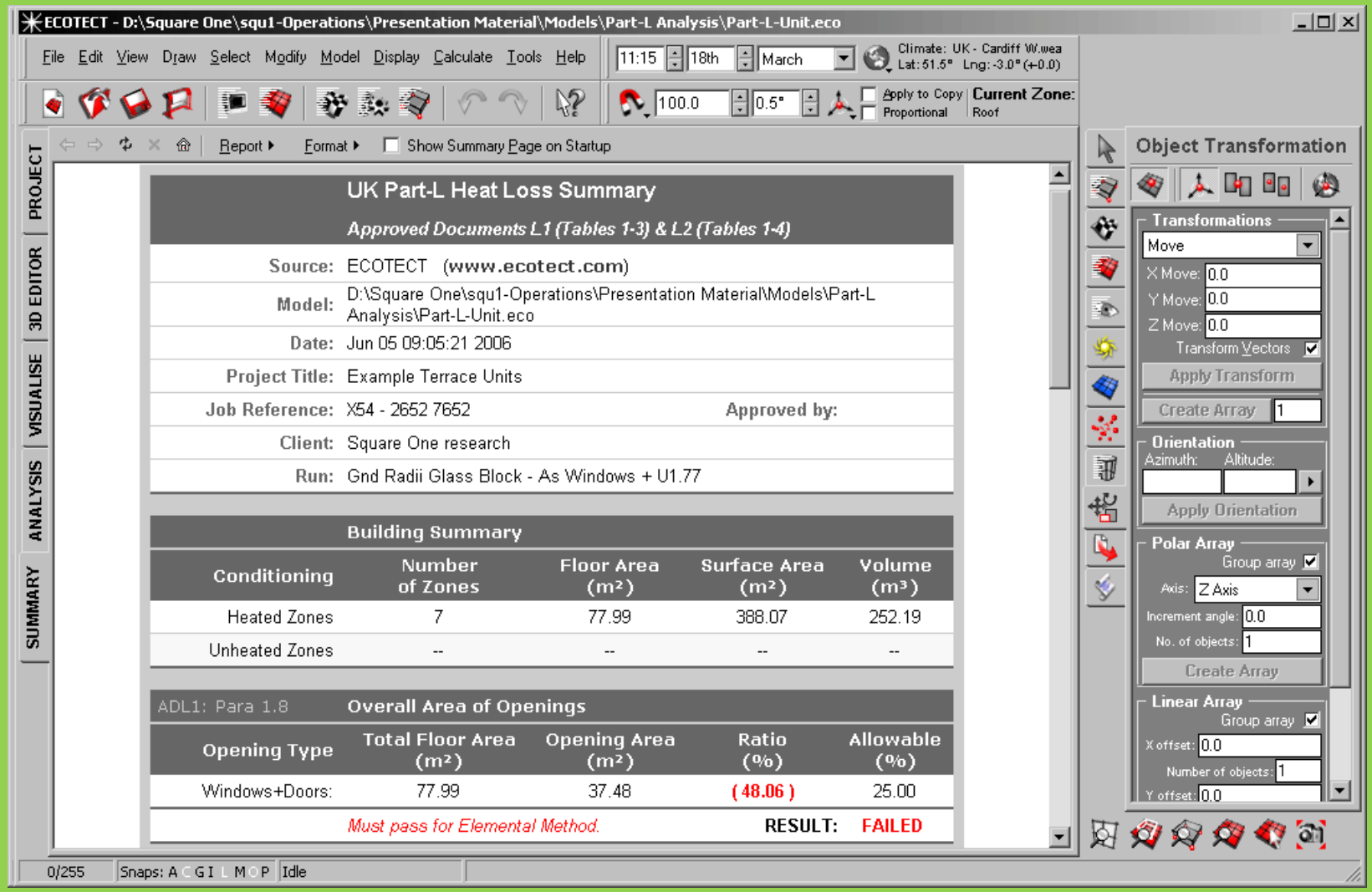
The GSA has created the National 3D-4D BIM Program to allow for Advanced and Superior cost effective management of Federal buildings and Facilities.

One of the components of this is the Energy Performance and Operations section. Using Ecotect can help use your BIM model towards getting more complete and accurate energy estimates earlier in the design process. Leading to meeting their executive order to reduce their annual energy consumption.

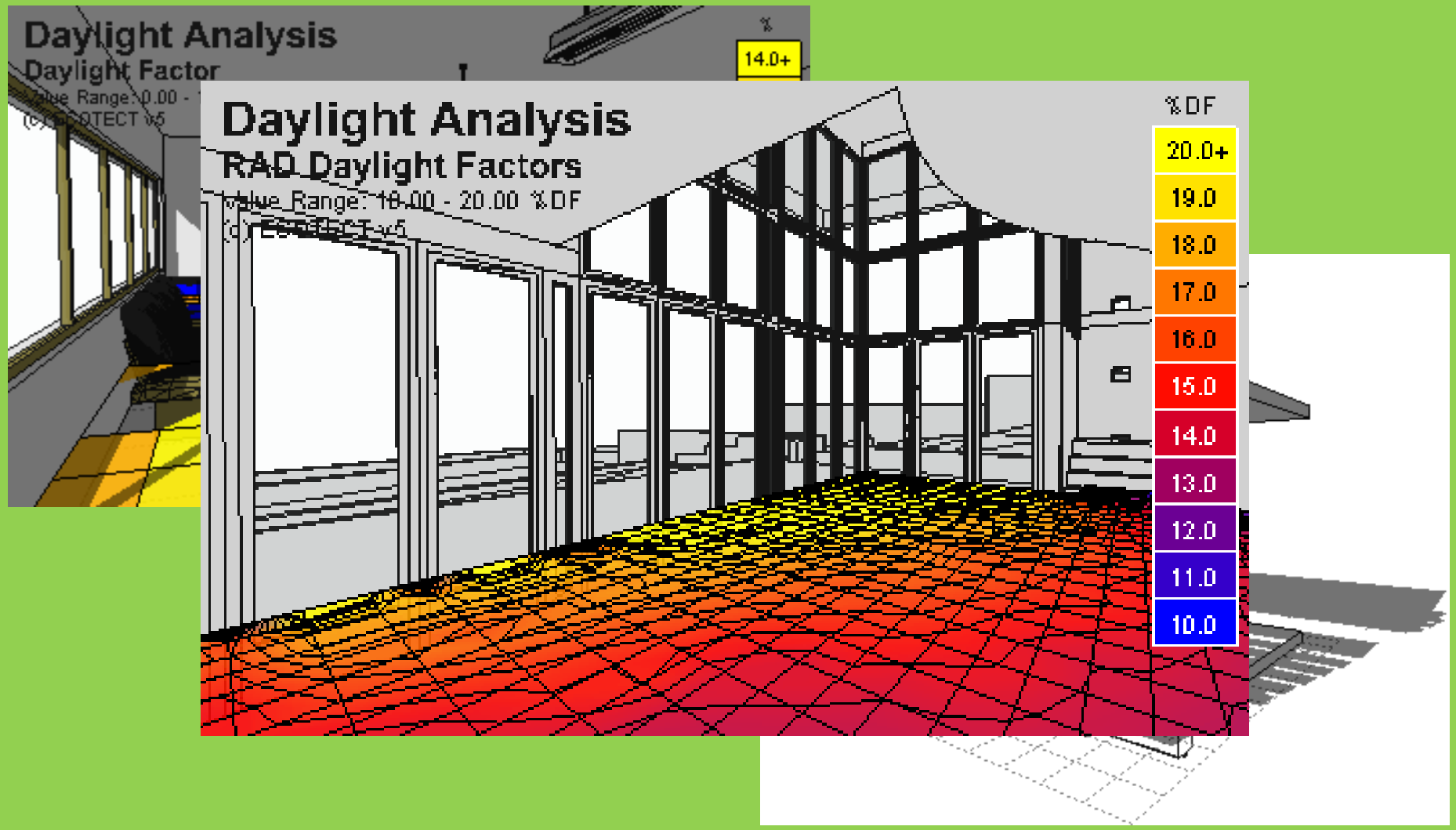
Examples of the Interface



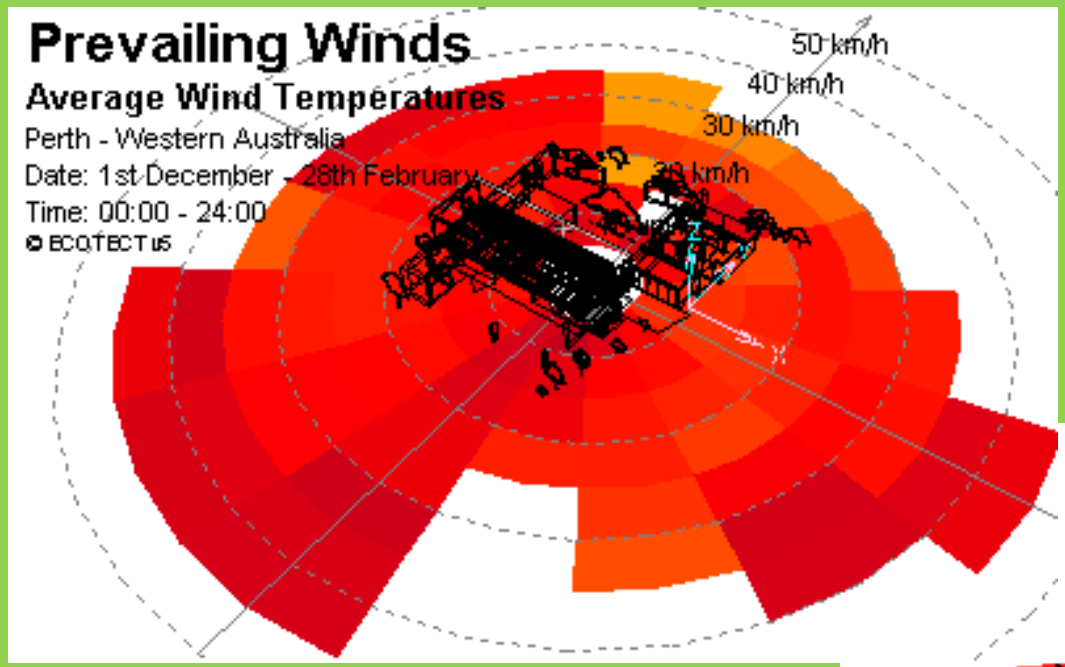
Analysis Views

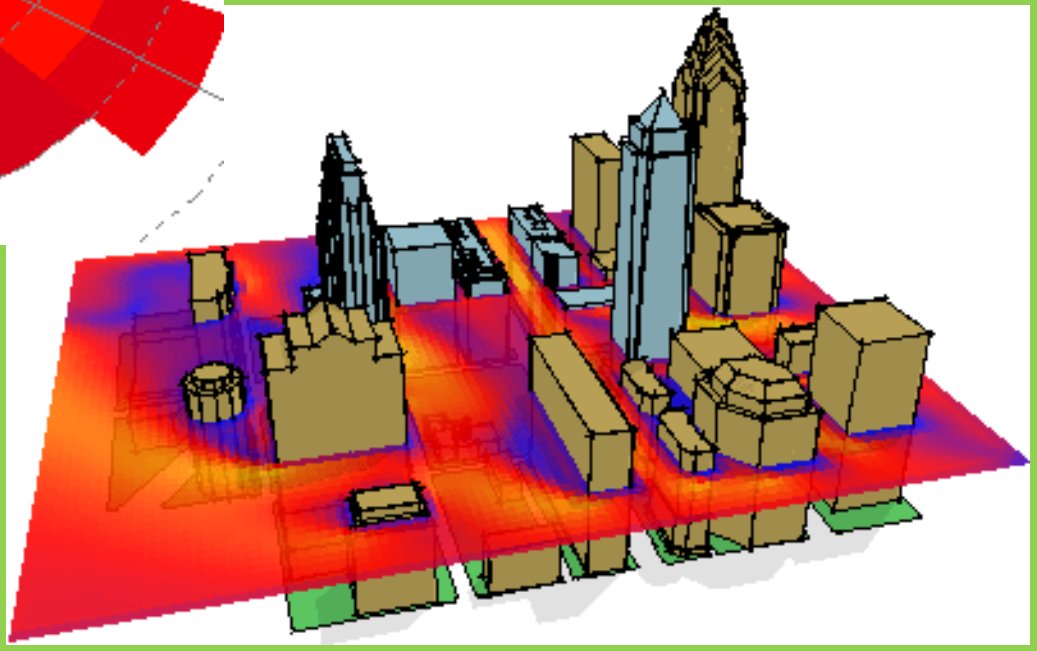


Solar Radiation/ Daylight

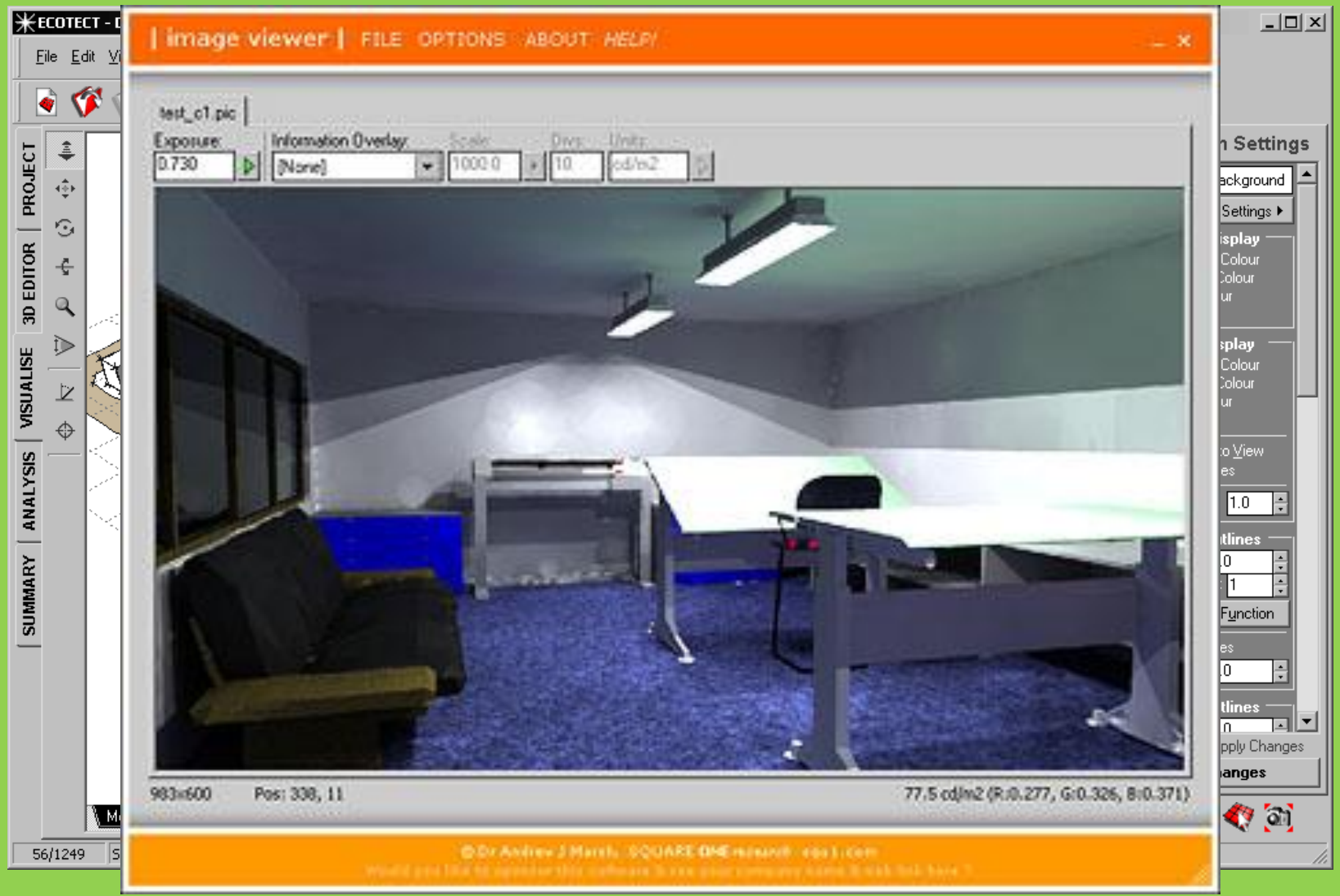


Airflow


Prevailing Winds
Average Wind Temperatures
Perth - Western Australia
Date: 1st December - 28th February
Time: 00:00 - 24:00
ECOTECT
50 km/h
40 km/h
30 km/h
20 km/h



Visualizations



Thank you for your time
Questions?

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