Computer requirements for running

HYDROLIGHT-ECOLIGHT VERSION 5

The HydroLight-EcoLight version 5 (HE5) core mathematical code that solves the radiative transfer equation is mostly machine independent ANSI-standard Fortran 77 (with an occasional bit of Fortran 95) and has been run on a variety of computers (UNIX, Linux, PCs with Microsoft Windows, and Apples with Windows emulation software) with various Fortran compilers. However, the graphical user interface needed for convenient specification of the input is written in Visual Basic and runs only on the MicroSoft Windows operating system. Therefore,

**HE5 is currently supported only for PCs running Microsoft Windows operating systems (XP through 7) and the Lahey Fortran 95 Express compiler version 7.2 for Windows, which is provided with HydroLight.** Users wishing to run HydroLight on other systems need to create the input files manually or via their own software.

The EcoLight-S software is entirely Fortran 95 and does not come with a user interface because it is designed to be imbedded in the users’ other code, such as an ecosystem model. EcoLight-S can therefore be run on any system with a Fortran 95 compiler.

HE5 has been developed and tested on various personal computers running Microsoft Windows operating systems with version 7.x of the Lahey Fortran 95 Express compiler. Any modern PC has more than enough processor speed, RAM, and hard drive capacity to run HE5 without problems. The HE5 graphical user interface is designed for a monitor resolution of 1024x768 pixels and 256 colors.

Only Windows systems are available at Sequoia Scientific, Inc., and therefore user support for other systems such as UNIX or Linux cannot be provided. Although some users routinely run Hydrolight on other systems, a few minor problems have been reported (for example, the Silicon Graphics Fortran 77 compiler requires certain compilation switches to be set so that it adheres to ANSI standards). Some users have run the PC version of Hydrolight on Apple MacIntosh computers with Virtual PC or Wine software.

*Note on Microsoft 64 bit operating systems:* Users are running HE5 without problems on the 32 bit version of Vista. However, the Lahey compiler does not install correctly for the 64 bit version of Vista, so **HE5 cannot be run on the Vista 64 bit operating system**. Lahey does install correctly on both 32 and 64 bit computers running Windows 7. However, **the Lahey compiler runs at 32 bit precision on 64 bit computers under Windows 7**.

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