



HS2 Reader DLL

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Buried deep in each HYPACK® release is a file called Hs2readr.dll. What is it? It is a DLL (Dynamic Link Library) file that provides useable information from HS2 (HYSWEEP® Edit Format) files. What does that mean? I will try to clarify below.

DLL FILES

Every DLL file provides some kind of service to Windows® programs. The service may be access to data or devices, geodetic conversions, etc. Pretty much anything that can be done in a program can also be done in a DLL.

DLL files are often used by multiple programs. This reduces program size by removing the DLL code from each program. DLL files may be updated without need for changing the calling programs. A good example are the HYPACK® device drivers. Each driver (hundreds of them) is a DLL file and may be updated without changing the survey program itself.

So there's a brief description of DLL files.

HS2 FILES

HS2 files are the result of multibeam editing. HS2 files contain lots of raw data – slant ranges, travel times, SV profiles, tides, raw data time series' and on and on. All this raw data is saved to allow replacement of sound velocity and tides, changes to mounting and calibration offsets and practically any parameter that affects final depths.

HS2 files do not contain the final depths. A lot of calculation is required for that.

Data storage is compressed where ever possible, which gets a bit complicated. We don't generally provide details on HS2 formatting. Not because we are trying to keep it secret. Rather because it's complicated and we don't want to explain it!

Summary: Not so easy to get final depths from HS2 files.

TYING IT TOGETHER

The HS2 Reader DLL fills the gap between HS2 files and final depths. It is accessible to any program that needs final depths from HS2 files. For example, when you use HYPACK® Cloud to read an HS2 file, the depths are provided by the DLL. Another example is Fledermaus, which also uses the DLL to read final depths from HS2 files.