

DORIS: Processing and management of Sound Velocity Profiles for echosounding applications

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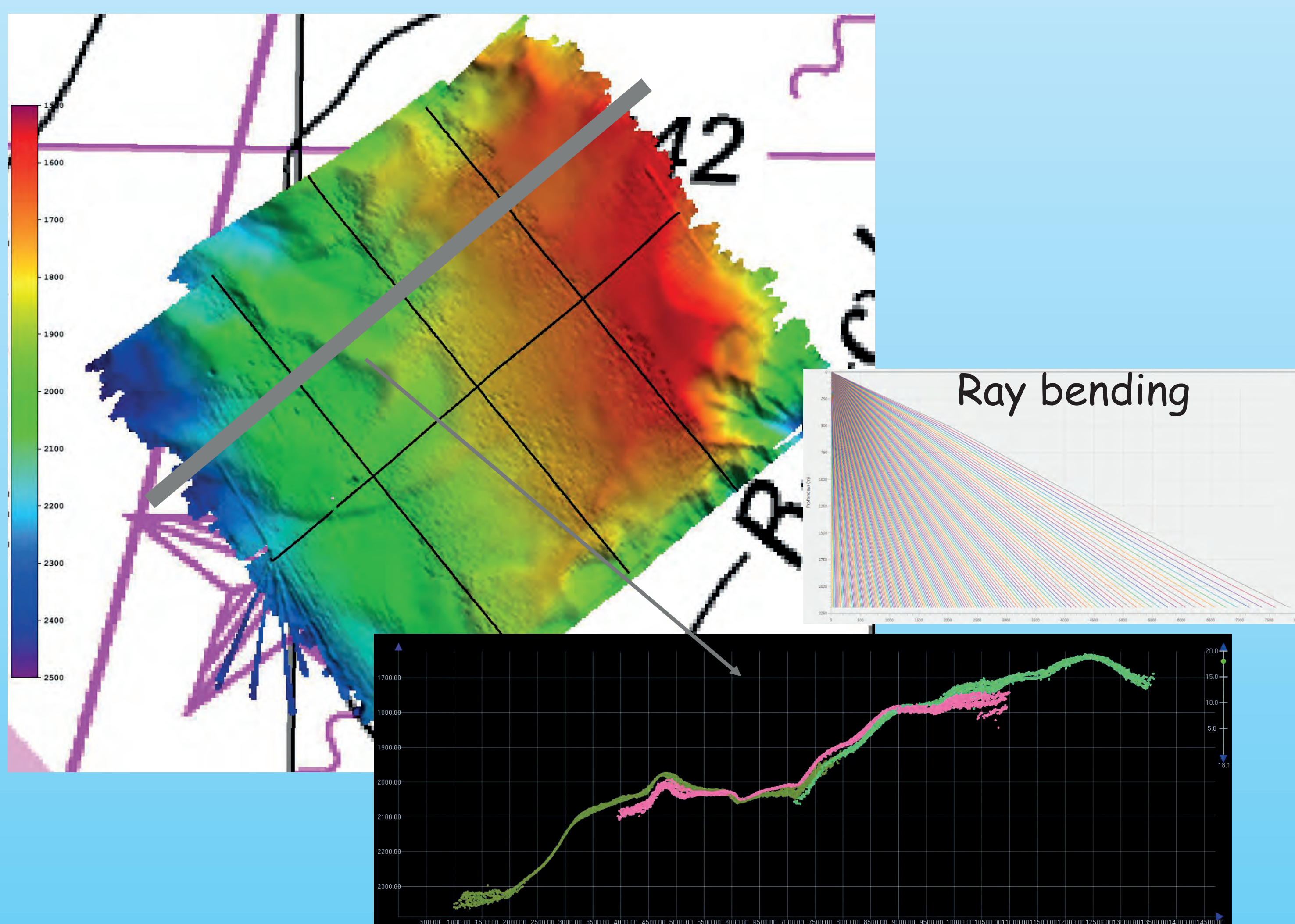
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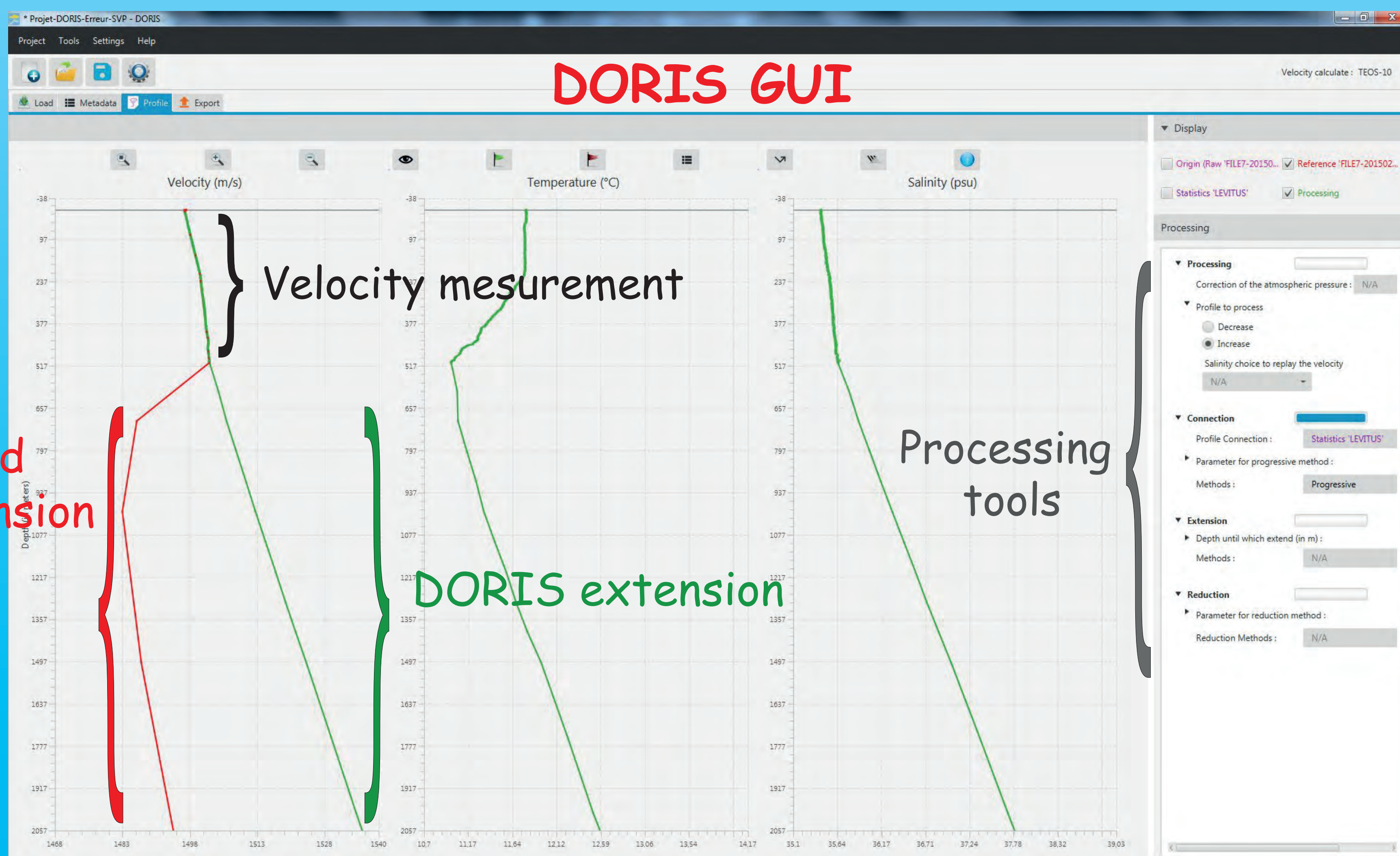
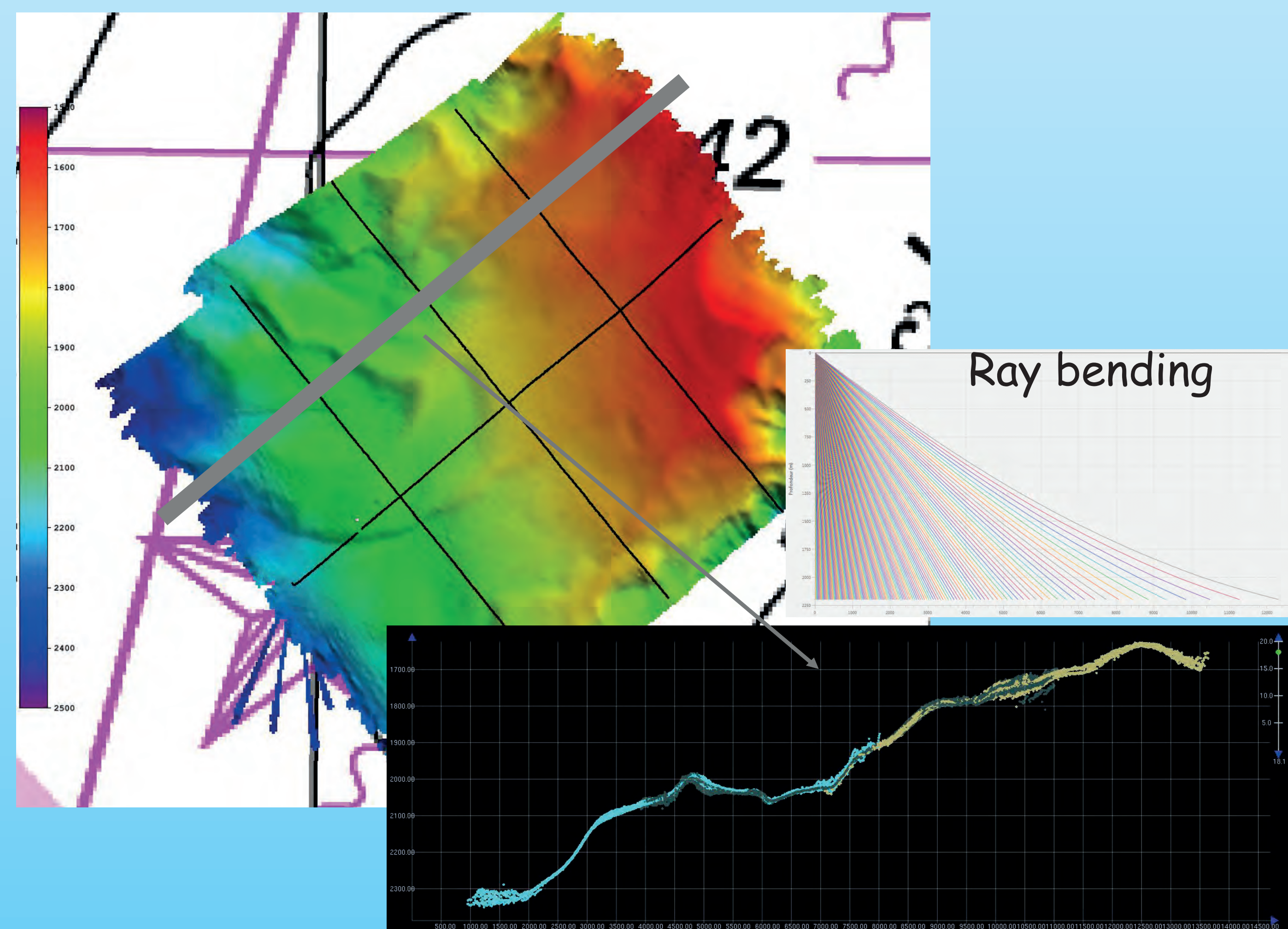
ABSTRACT

If a bathymetric echosounder is the essential device to carry on hydrographic surveys, other external sensors are absolutely also necessary (positioning system, motion unit or sound velocity profiler). And because sound doesn't go straight away into the whole bathymetric swath its measurement and processing are very sensitive for all the water column. DORIS is the very answer for an operational sound velocity profile processing.

BAD SVP PROCESSING



SVP PROCESSED BY DORIS



Data uploading from sound velocity sensors

Collection, validation and integration of metadata

Display, processing and qualification of the SVP

Export to acquisition and postprocessing software

Storage of the project (input, applied processing..)

CONCLUSION & PERSPECTIVES

With DORIS, sound velocity profiles can today be processed both accurately and easily onboard ships. Used by acoustic systems for optimal operational purposes, DORIS clearly provides a significant gain in efficiency and reliability. With DORIS, a new handy freeware is available for the hydrographic and oceanographic communities. It enables simple and efficient processing and management of sound velocity profiles.