

NewFields Upgrade to RTK CEESCOPE™ for USV Surveys

NewFields has used USVs for industrial water surveying since 2014. To improve usability of their USV systems, NewFields selected the CEE HydroSystems CEESCOPE-USV™ “all in one” instrument package for their latest remotely-operated survey boat, used for innovative mine tailings deposition studies.

NewFields emphasize a solution-oriented approach to consulting assignments, resulting in acquisition of several efficient modern drone survey technologies, including remotely-operated unmanned surface vessels (USVs) for hydrographic survey.

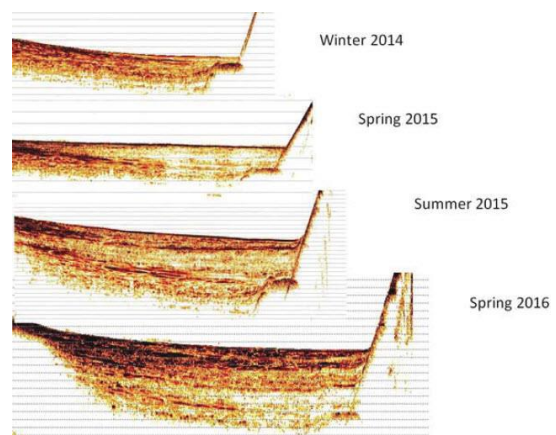
The company wanted to ensure their most recent 2016 USV acquisition presented the best available data package to simplify field operation. Instead of separate GPS, telemetry, and echo sounding components on the vehicle, NewFields’ latest USV was fitted with a CEESCOPE-USV™ data telemetry package with dual channel 33/200 kHz echo sounder and built-in NovAtel RTK GNSS receiver with UHF radio for use with a Topcon RTK base station receiver and UHF transmitter.



HYPACK® software is typically used to acquire data on the shore PC, through the CEE-LINK™ telemetry module.

USV Tailings Deposition Surveys.

NewFields USVs are often used on industrial water and mining waste ponds, although not simply for bathymetry or volume determination. Innovative time-series transects using their CEE dual frequency echo sounders allow NewFields to evaluate deposition and compaction processes in the tailings impoundment. Low frequency sonar penetration may be used to gauge the effectiveness of distribution piping in the impoundment, and monitor the evolution of the deposits as the impoundment ages.



HYPACK® Image courtesy Preston Martin, NewFields.

Having an easy-to-use and reliable USV acquisition package ensures NewFields don’t spend costly field time on setting up and troubleshooting but rather get the data they need.