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(since 2007)***



***"When thou wouldst deal with water,
seek first the counsel of experience,
and thereafter employ reason."***

(Da Vinci, Leonard)

Precision and Productivity: RS5 Success in Brazil's Urban and Industrial Waterways



Precision and Productivity: RS5 Success in Brazil's Urban and Industrial Waterways



CLEAN SOLD AROUND 40 RS5 SYSTEMS IN BRAZIL

Our clients include:

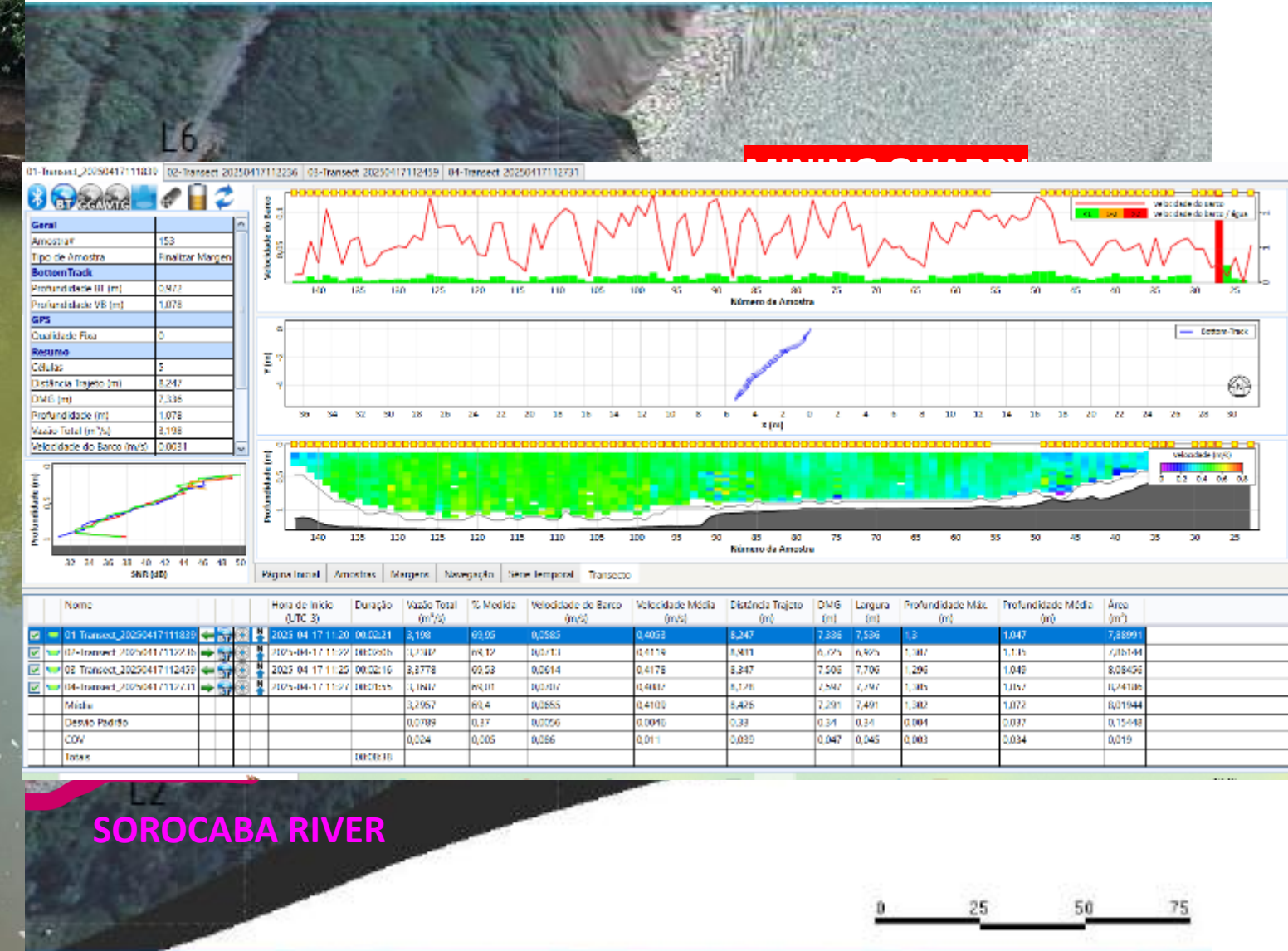
- Consulting firms;
- Private companies;
- Sanitation companies;
- Environmental agencies;
- Mining companies;
- Universities;
- Hydroelectric Power Plant.



CASE 1:

HYDROKARST (CONSULTANT COMPANY)

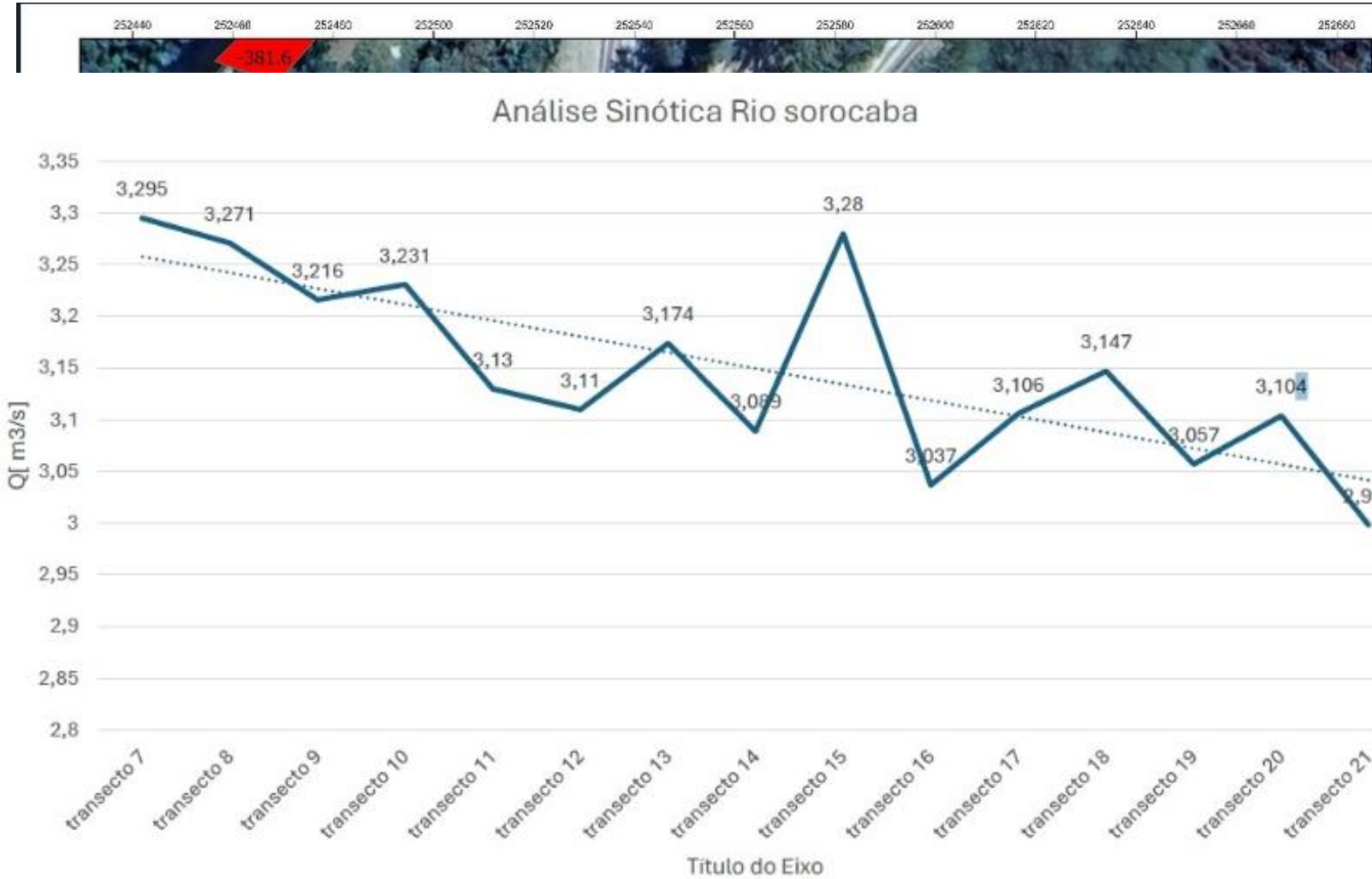
APPLICATION: WATER INFILTRATION IN MINING QUARRY



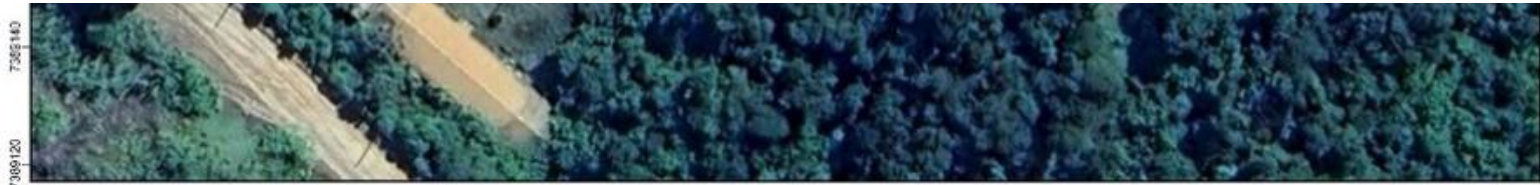
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CASE 1:
HYDROKARST
(CONSULTANT COMPANY)

APPLICATION:
WATER INFILTRATION IN
MINING QUARRY



Perda máx : 874 m³/h
Perda min: 46 m³/h
Perda média: 295 m³/h
Balanço: -104 m³/h



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November, 2015

Mining tailings dam collapse, with an approximate volume of 62 million cubic meters released

CASE 2:

**LABMAR CONSULTORIA
(CONSULTANT COMPANY)**

APPLICATION:

**FLOW MONITORING AFTER
ENVIRONMENTAL
DISASTER**



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CASE 2:
LABMAR CONSULTORIA
(CONSULTANT COMPANY)

APPLICATION:
FLOW MONITORING AFTER
ENVIRONMENTAL
DISASTER



Detail: Locally made
Hydroboard !



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CASE 3:

USINA HIDRELÉTRICA

ITAIPU

(Hydroelectric Power Plant)

APPLICATION:

**DEFINITION THE IMPACTS
OF FLOW DIRECTION IN
FINAL DISCHARGE**

Itaipu technicians are advanced ADCP users and use the equipment in many studies.

In this case, they were interested in determining whether the directions of river flow currents impact the total flow.

They noticed that even when changing the position of the RS5 during crossings, the flow directions changed, but the final discharge did not!

They developed a support so that the RS5 always remained in the same position during all measurements.

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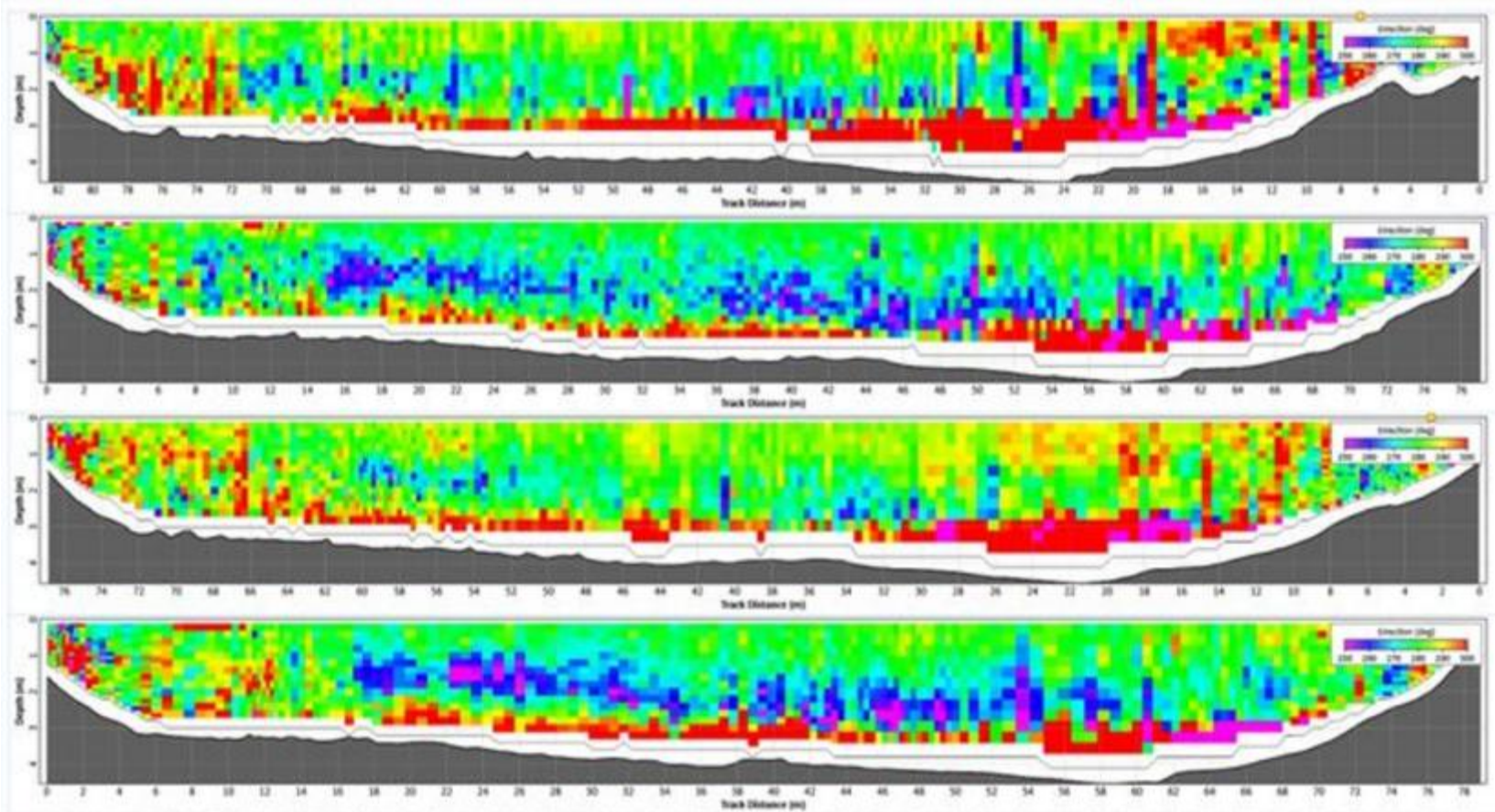
CASE 3:
USINA HIDRELÉTRICA
ITAIPU
(Hydroelectric Power Plant)

APPLICATION:
DEFINITION THE IMPACTS
OF FLOW DIRECTION IN
FINAL DISCHARGE



YELLOW: from the Right bank to the Left bank

RED: from the Left bank to the Right bank



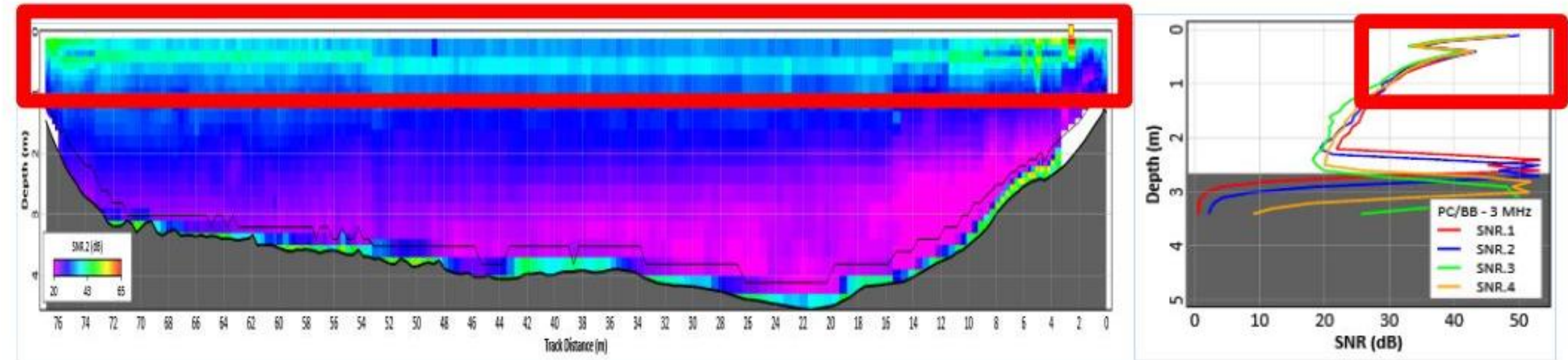
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CASE 3:

**USINA HIDRELÉTRICA
ITAIPU
(Hydroelectric Power Plant)**

APPLICATION:

**DEFINITION THE IMPACTS
OF FLOW DIRECTION IN
FINAL DISCHARGE**



As the RS5 discretizes the speed profile very well, it was possible to see this behavior on the surface

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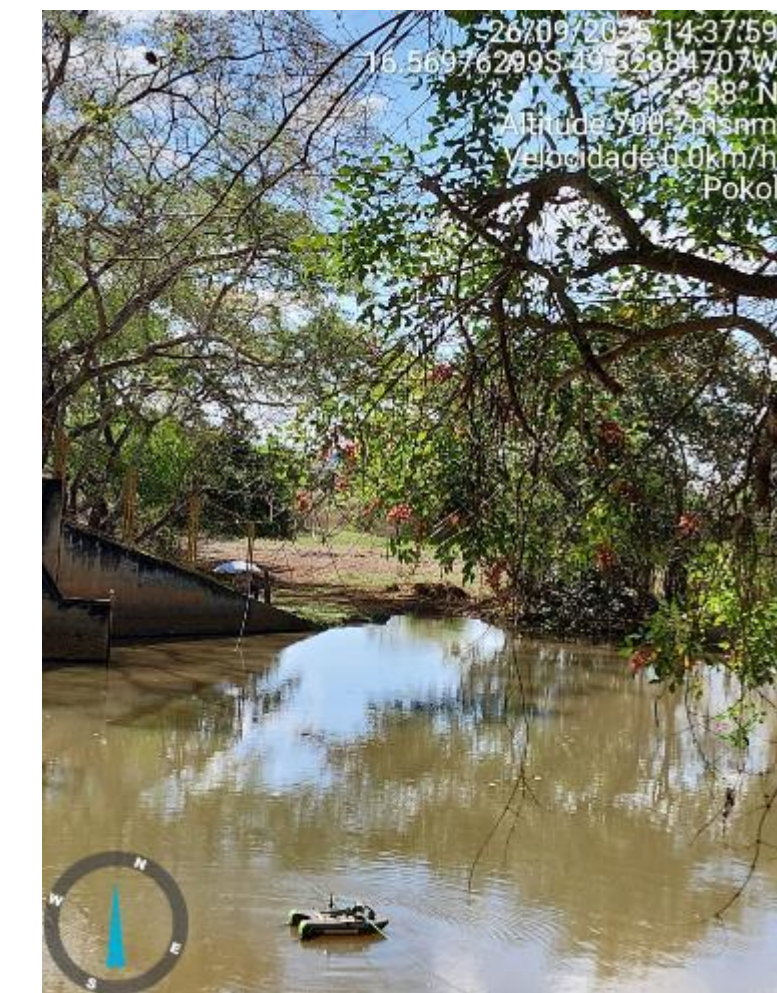
CASE 4:

SEMAD

(Environment Secretariat of
the State of Goiás)

APPLICATION:

Monitoring of Maximum
and Minimum Flow Rates
for Flood and Water
Supply Management



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CASE 5:

EPAGRI

(State Agriculture Research)

APPLICATION:

**Flow Monitoring for
Farmers and Flood
Monitoring**



Epagri's work in strengthening family farming, valuing local knowledge, and disseminating environmentally responsible practices gives it a civilizing role.



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CASE 6:

MRN
(Mining Company)

APPLICATION:

**Compliance with
Environmental Conditions
and Granting of Water Use**



**Located in an Environmental Protection
Area.**



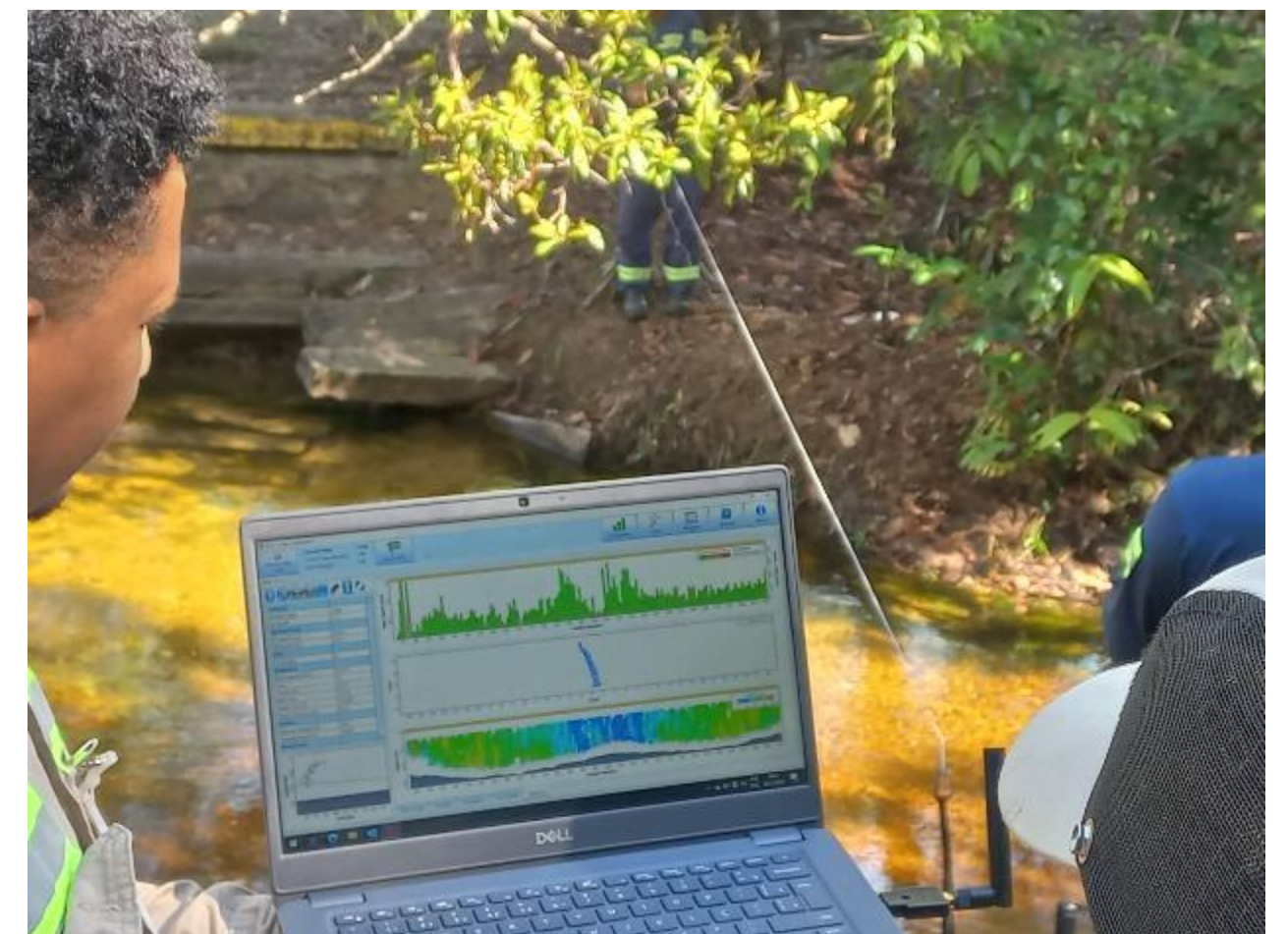
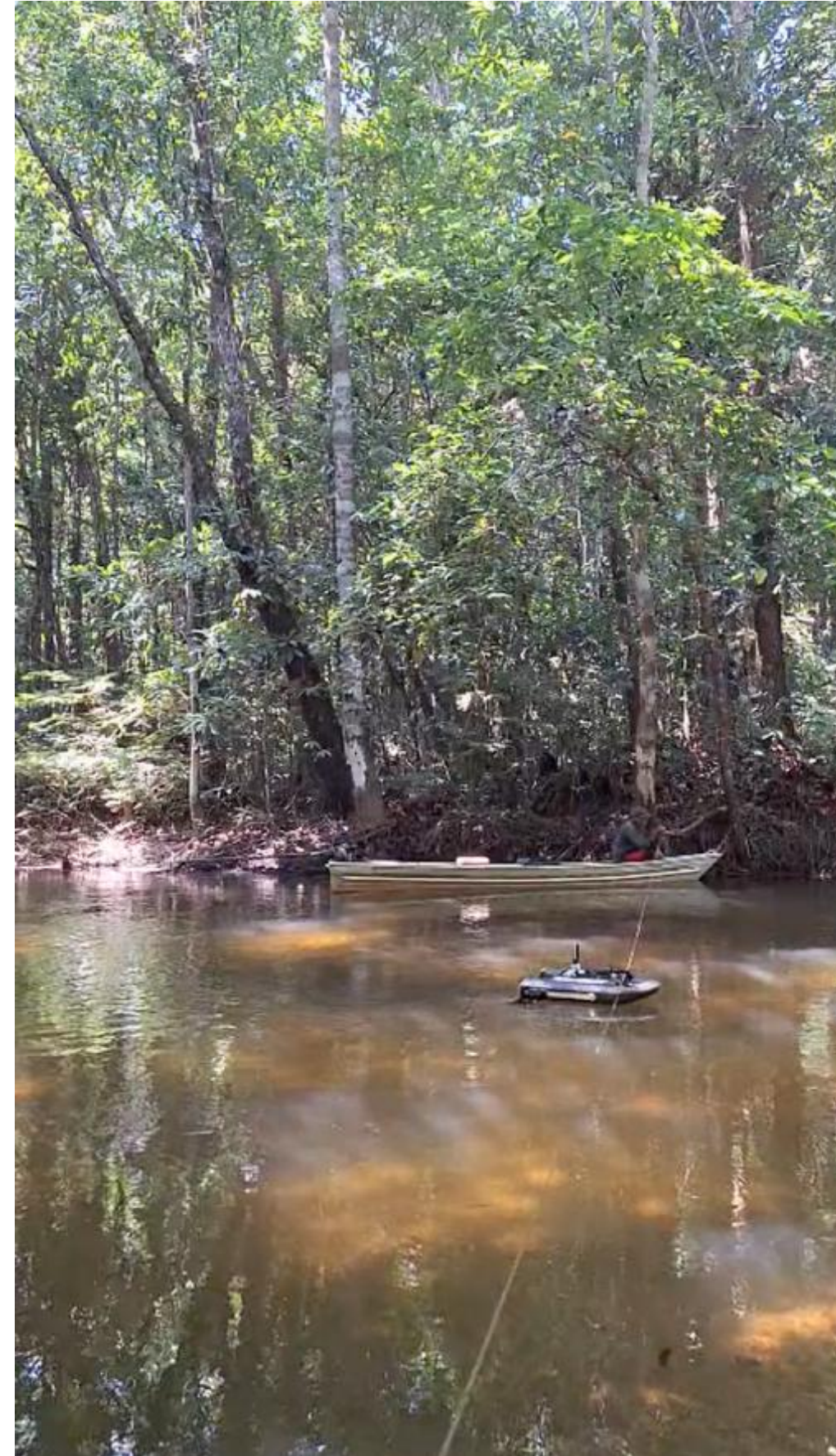
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CASE 6:

MRN
(Mining Company)

APPLICATION:

**Compliance with
Environmental Conditions
and Granting of Water Use**



The RS5 received many compliments!!!



- ✓ Possibility of defining an extrapolation method similar to QREV;
- ✓ Indicate the preferred Moving Bed file;
- ✓ Export processing report;
- ✓ Export kml files of traverses according to different references (BT, GGA, VTG);
- ✓ Import *.riv files;

The RS5 received many compliments!!!



- ✓ Possibility of "deactivating" beams that caused problems without invalidating the fieldwork;
- ✓ Possibility of saving the edited file (unlike RSL);
- ✓ Use with Hypack software for bathymetric surveys in shallow areas;
- ✓ Easy to operate;
- ✓ RS5 + Hydroboard Micro = practical and light

And before closing...



THANK YOU VERY MUCH!!!



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