



# Quesnel Lake IOS Data Collection

2002-2010

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# Instrument Measurements

## Soundings

Center line + 1km transects

## Temperature moorings

15 moorings 9<sup>th</sup> year

M9 – TD(5m)

TS(300m)

T various to 500m

## CTD

Oxygen

Transmissometer

Backscatter

Fluorometer

Sediment (subjective)

## ADCP

Fixed (Cariboo Island shelf)  
Vessel Mounted

100kHz Sounder

## Drifters

## Weather

temperature

pressure

wind

rainfall

Lake level (pressure sensor)

# Water Chemistry

Ammonia

Chlorophyll A

Total Phosphates

Soluble Reactive Phosphate

Nitrates

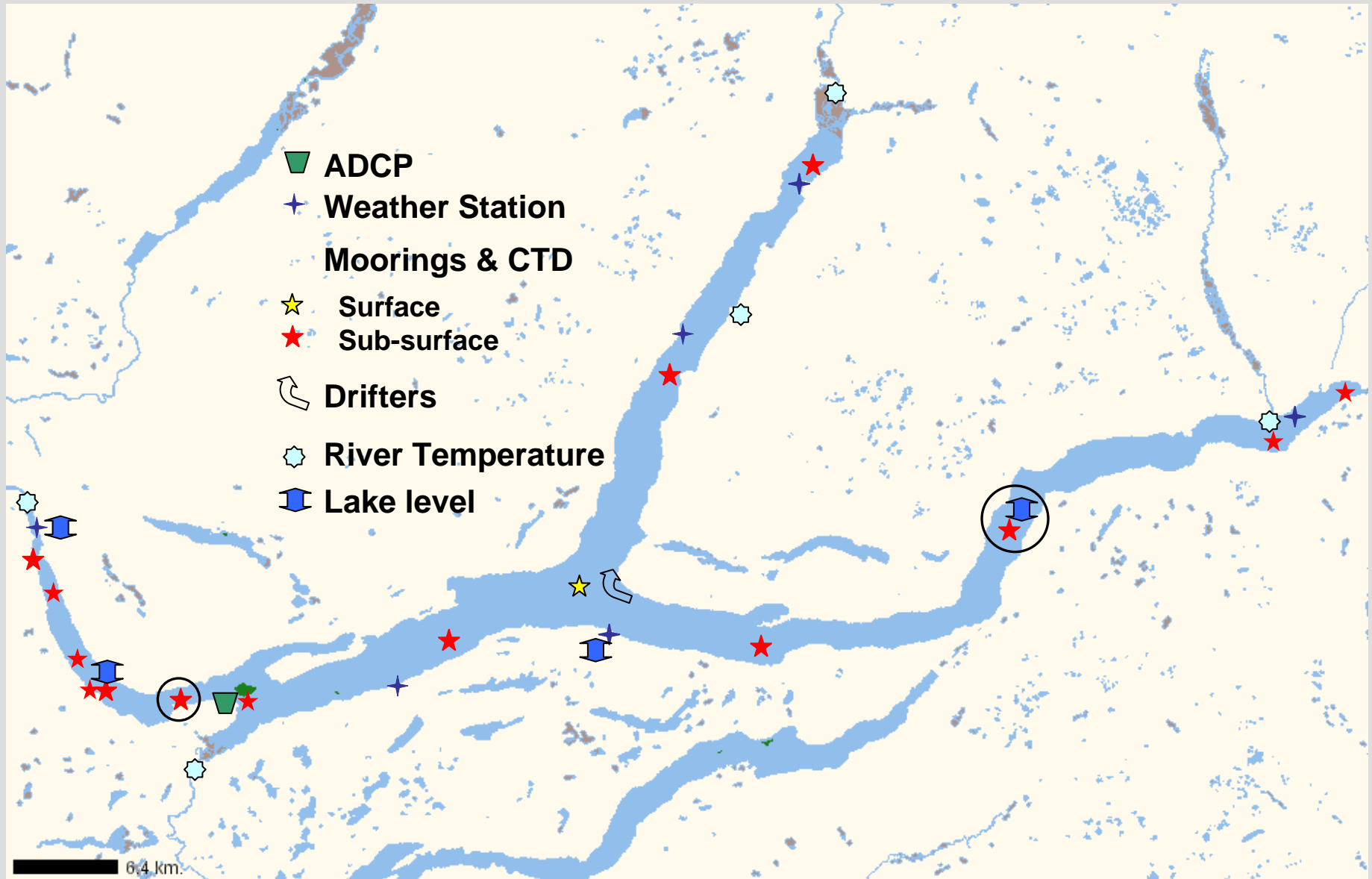
Salinity

Oxygen

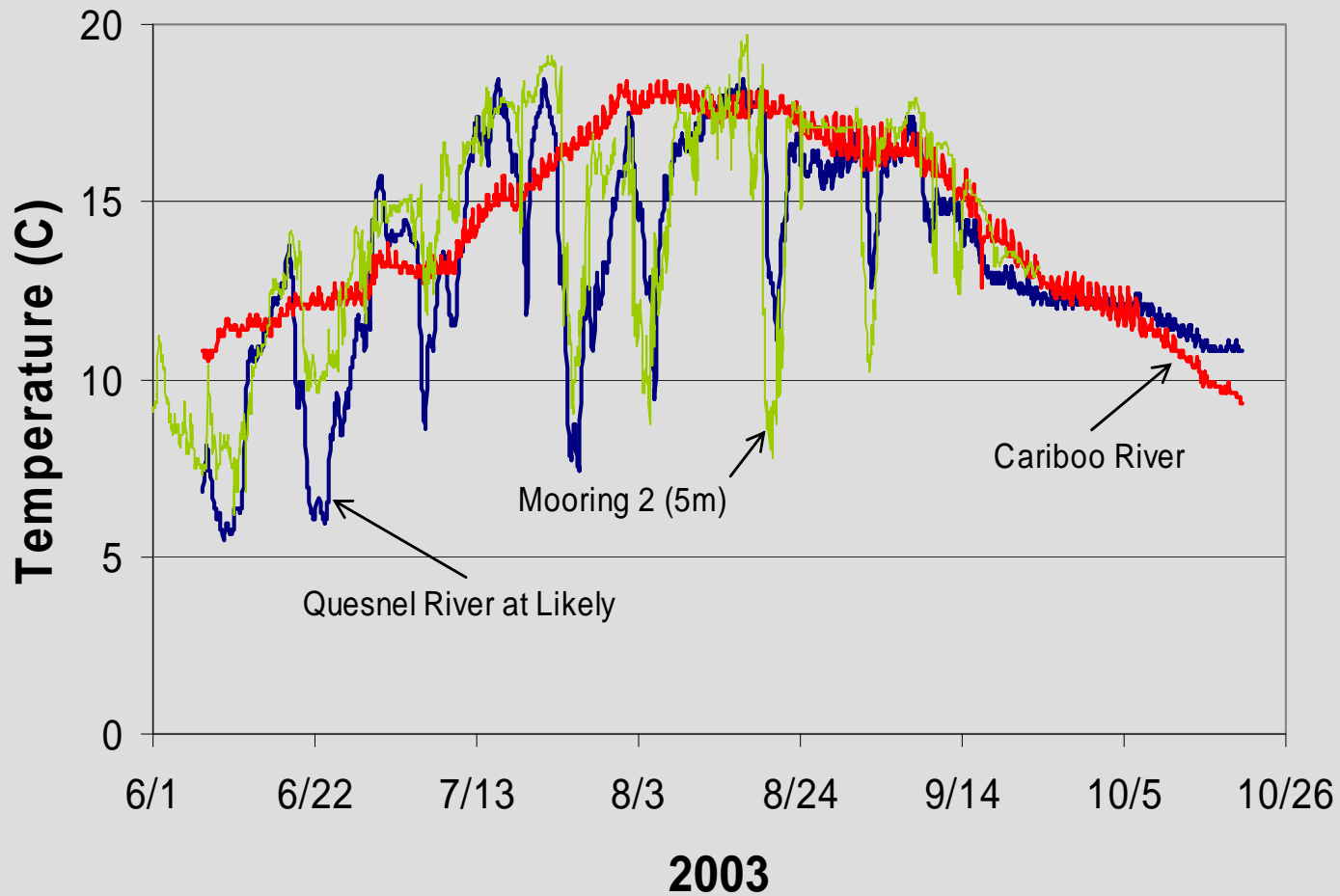
Phaeopigments

Soluble Reactive Silicates

# Quesnel Lake

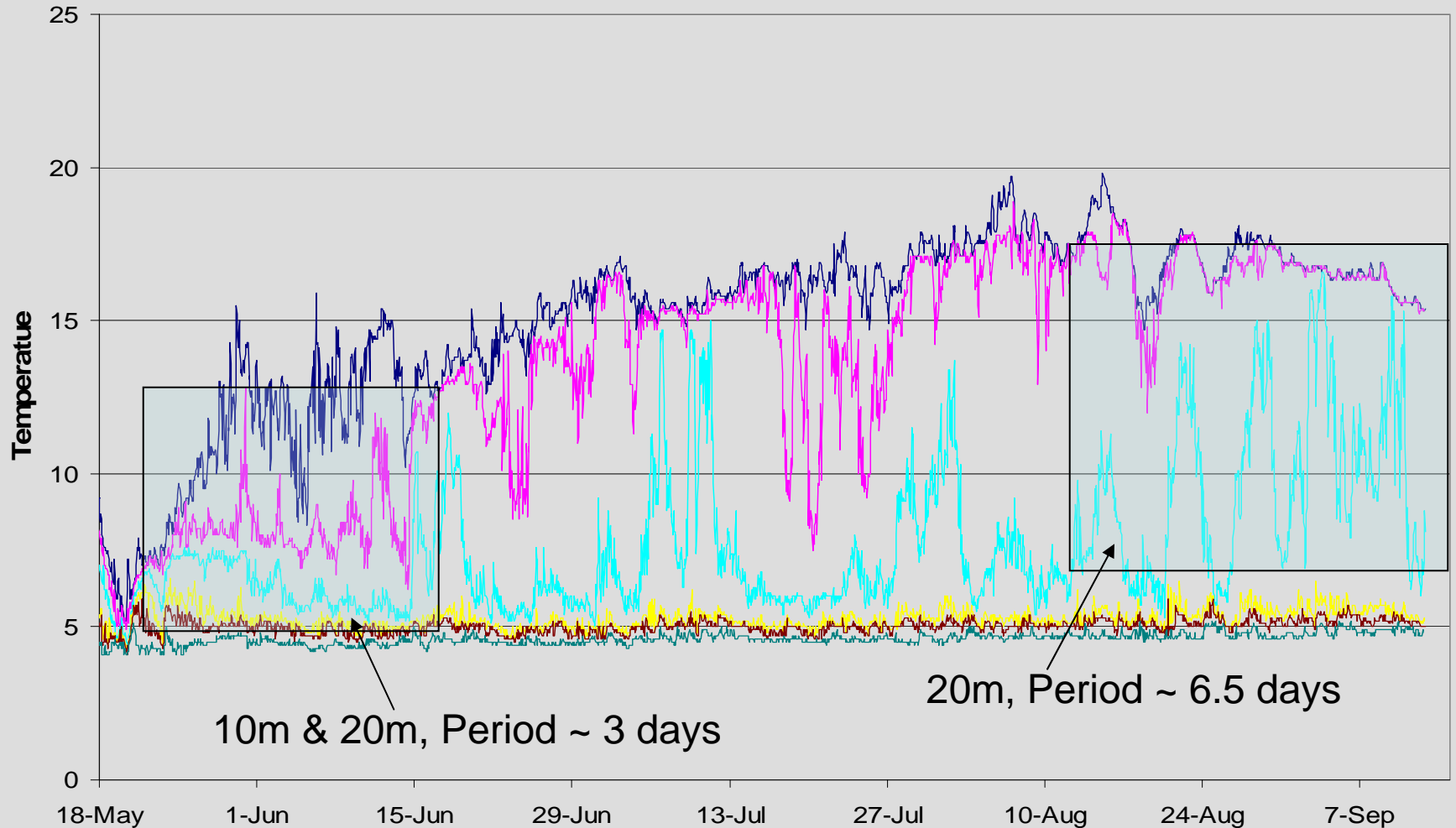


# River and Lake Temperature Summer 2003



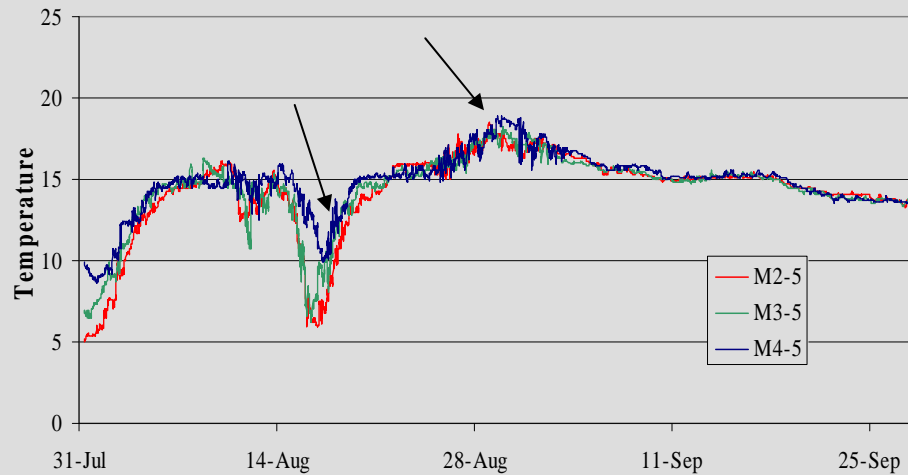
# Periodic Internal Waves

## Quesnel Lake Mooring 4 2005



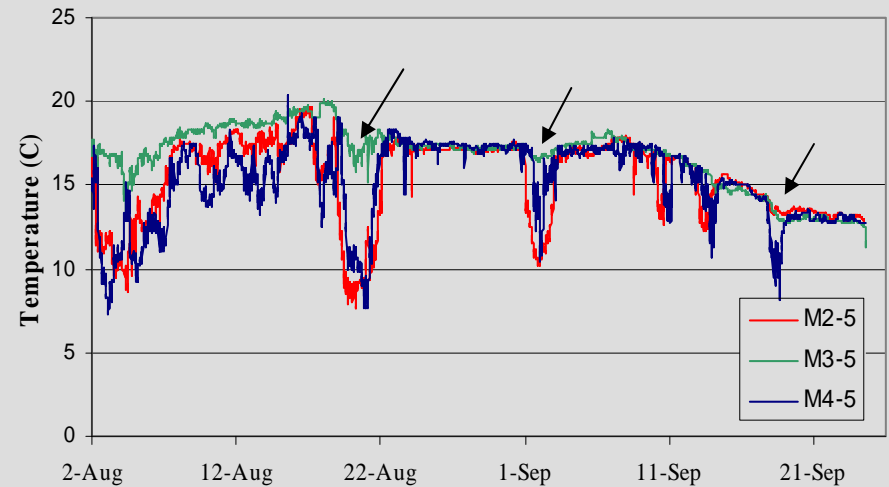
# West Basin Multi-Mode Temperature Variation

Surface Temperatures Summer 2002



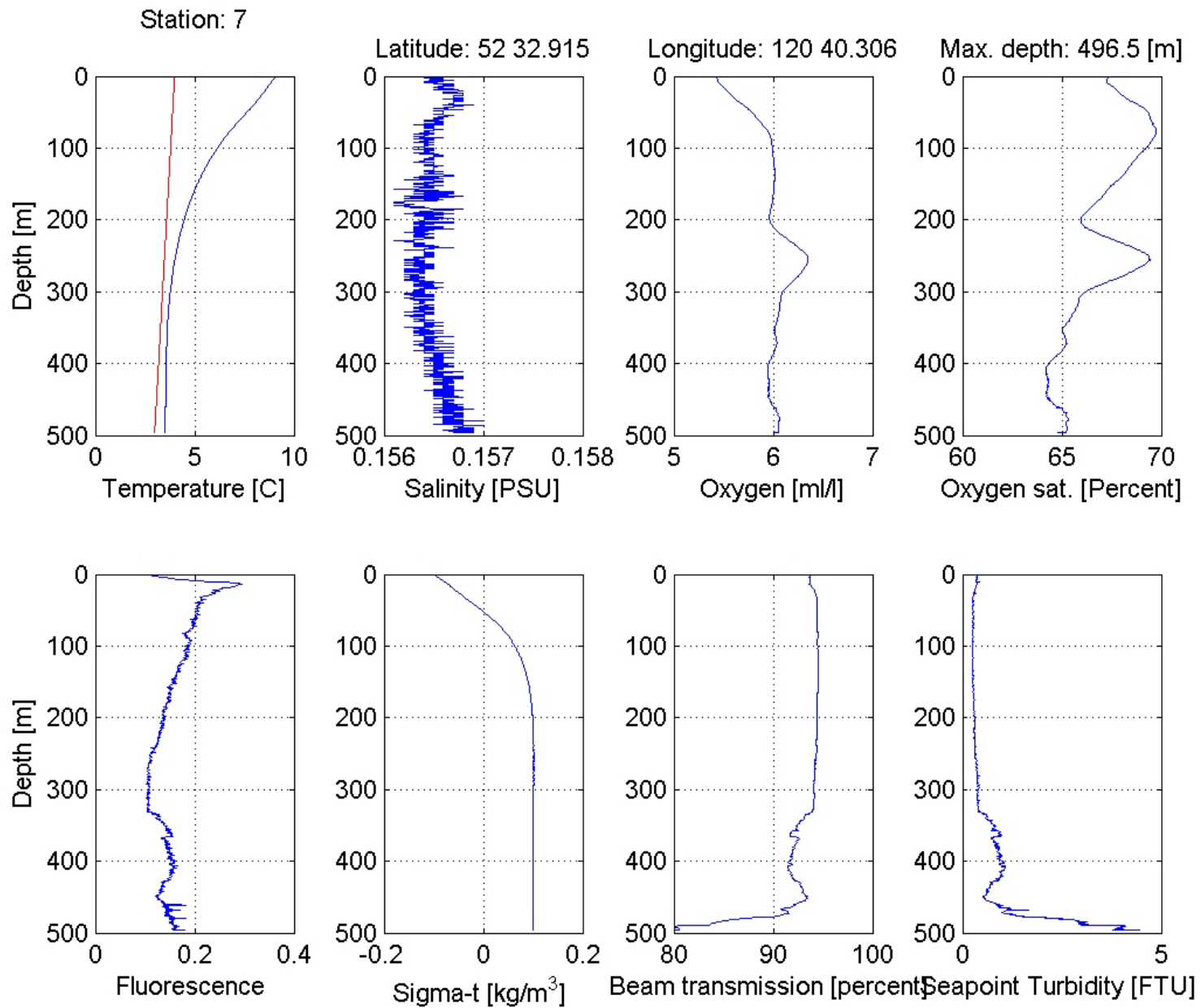
Synchronous

Surface Temperatures Summer 2003



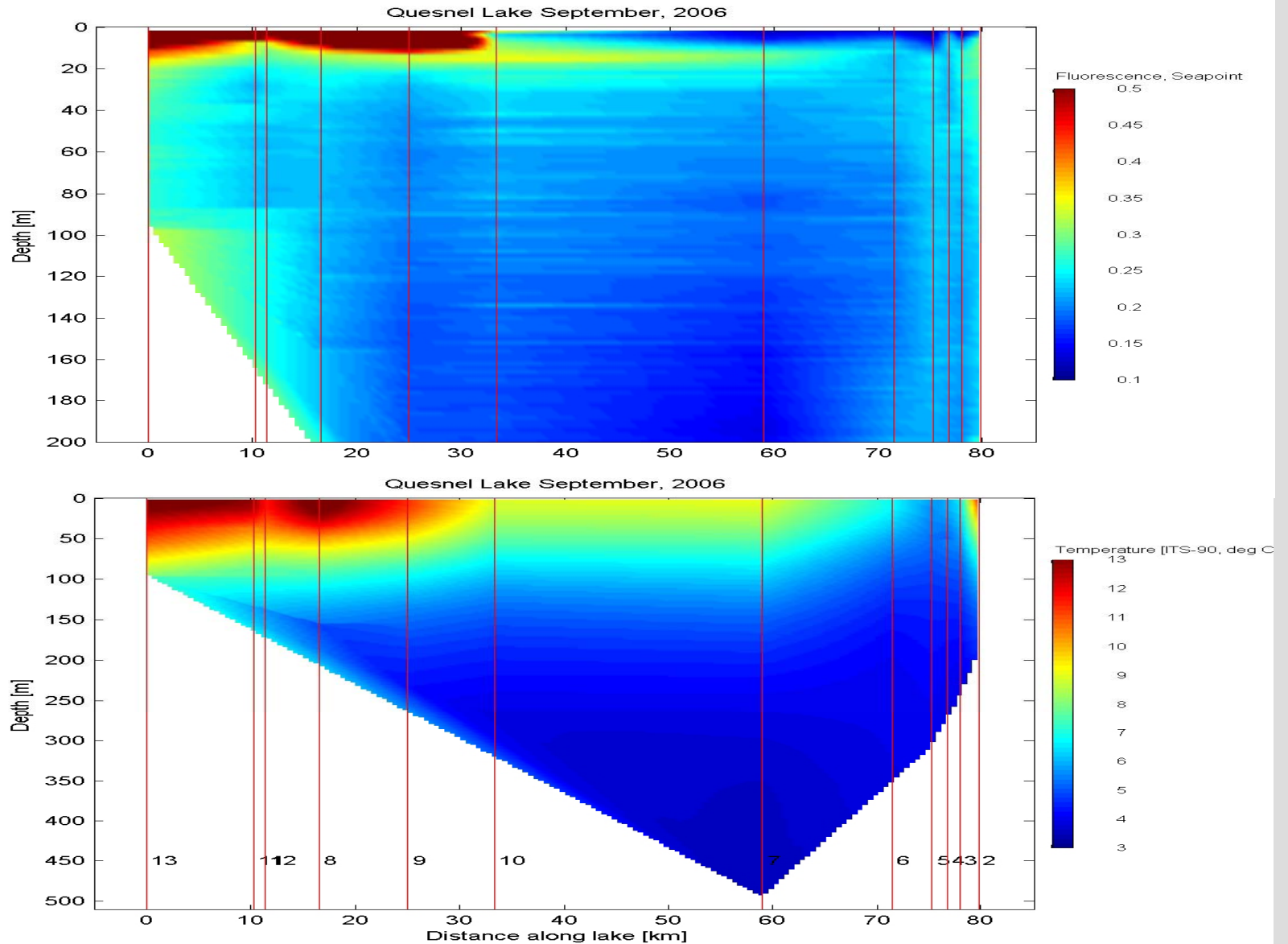
Asynchronous

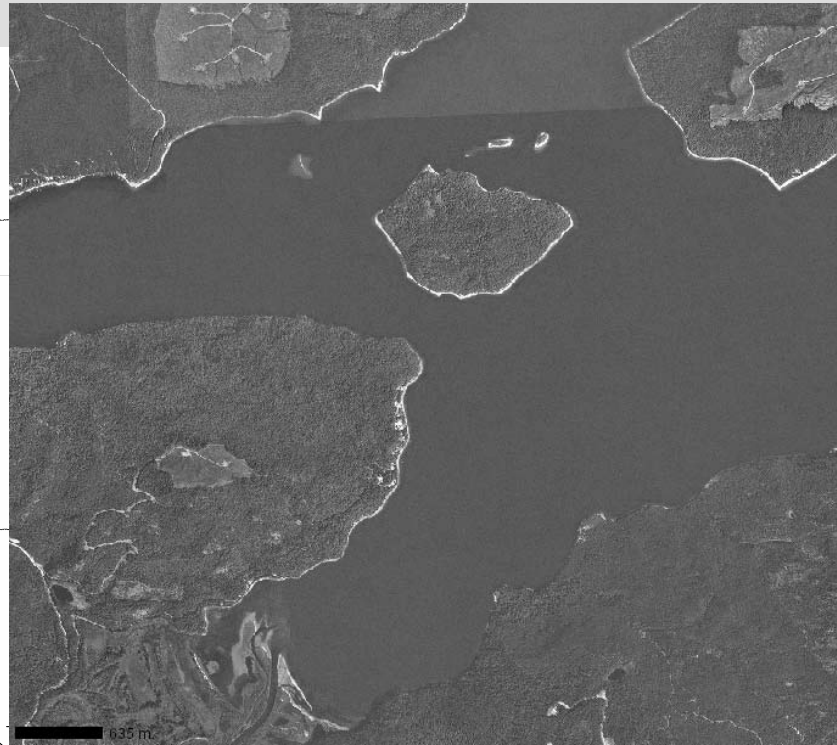
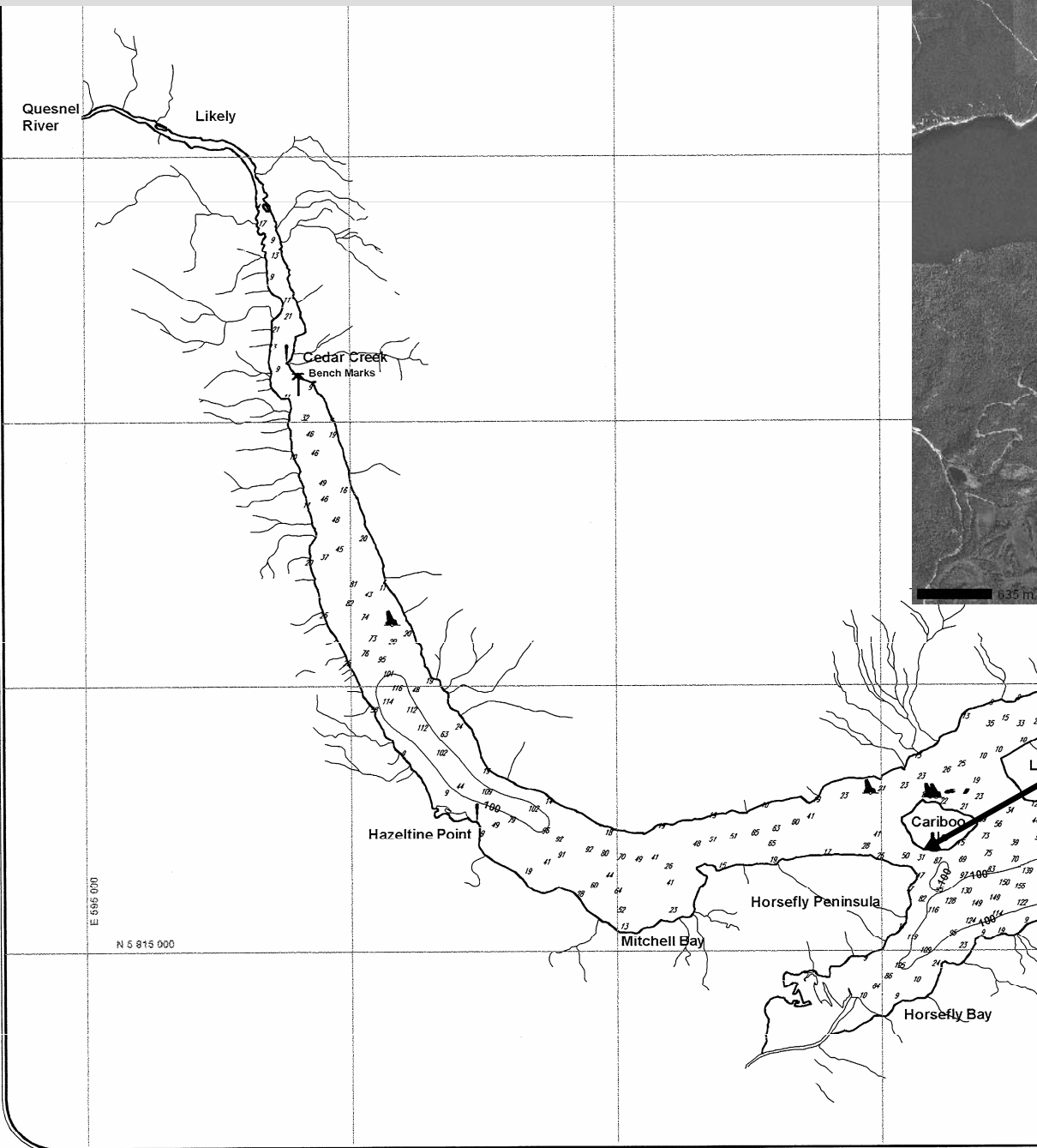
# May 2008



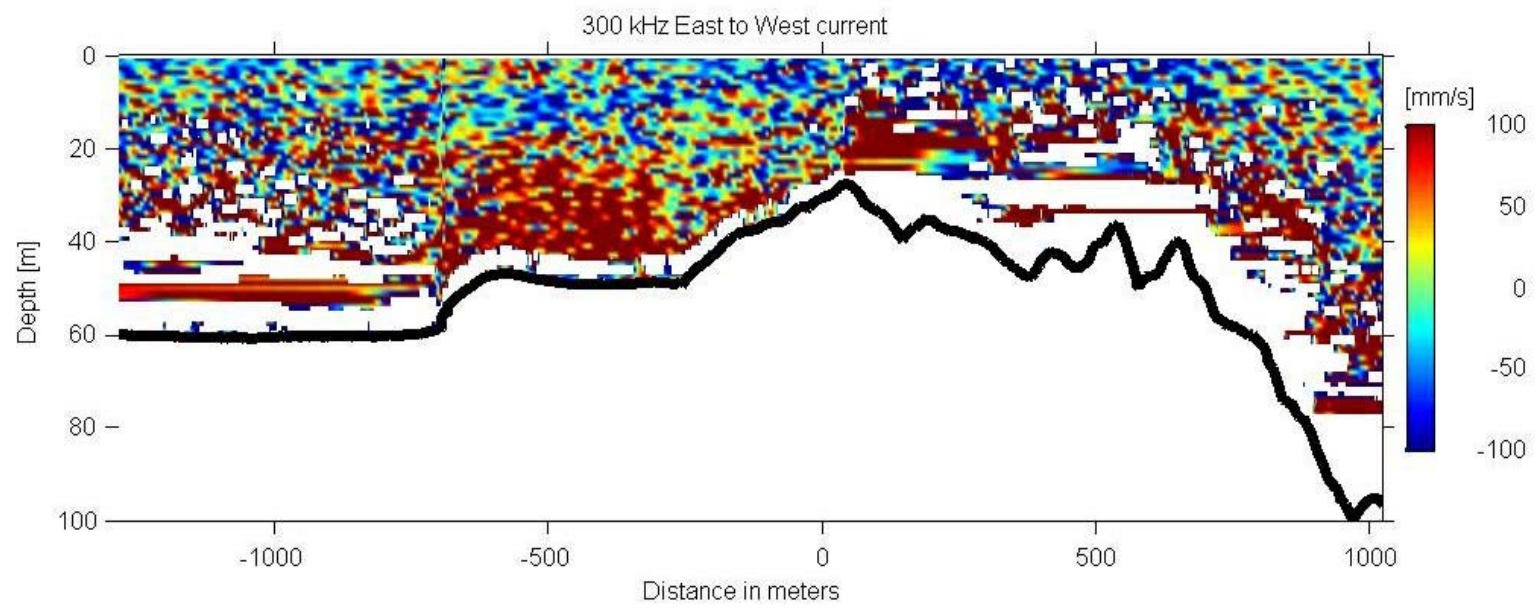
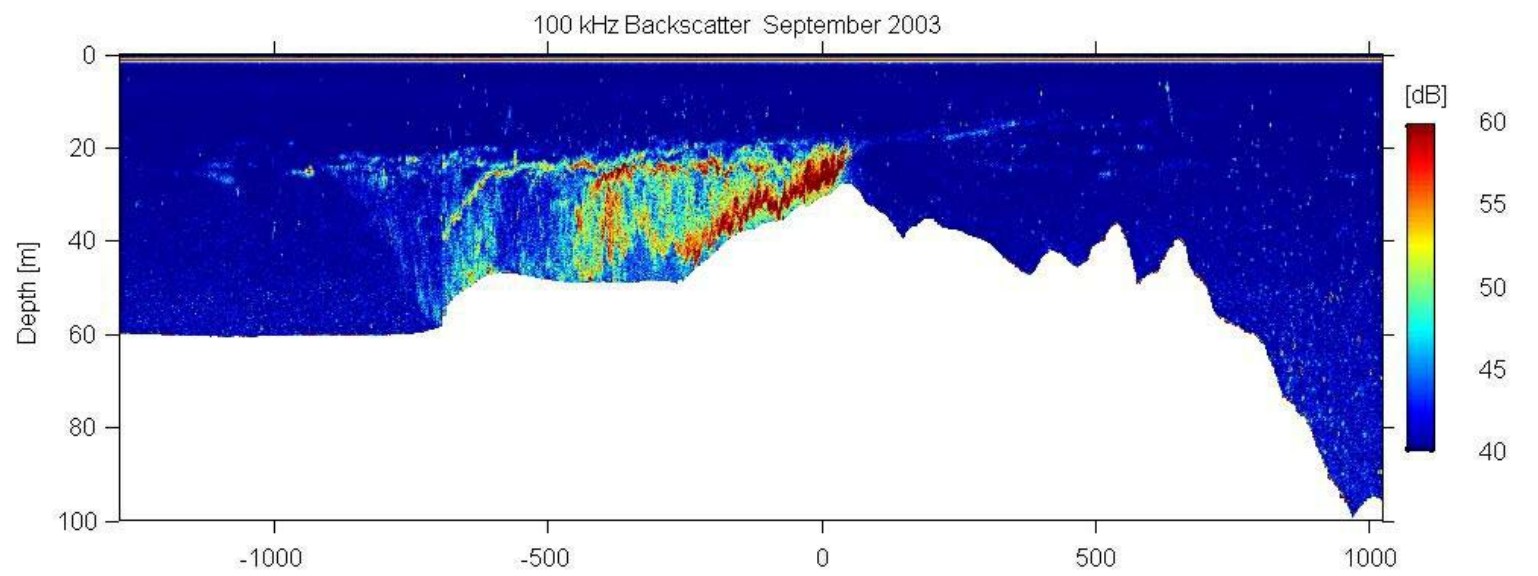


# Productivity Fall 2008

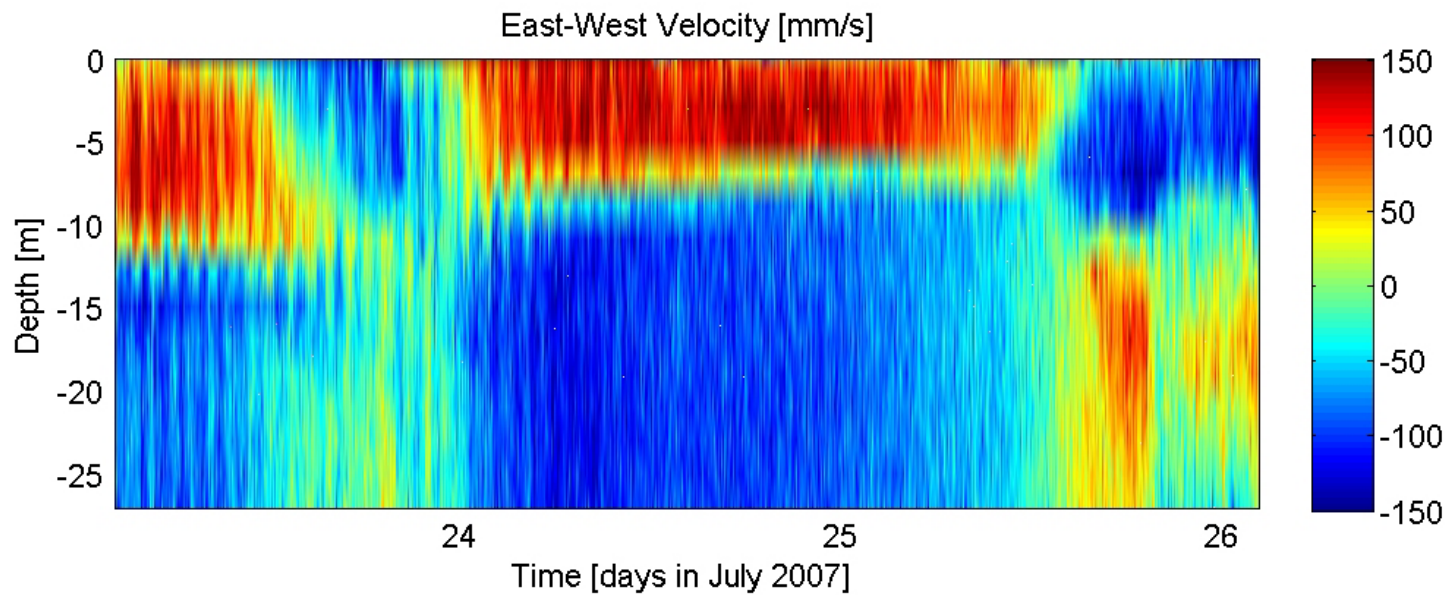
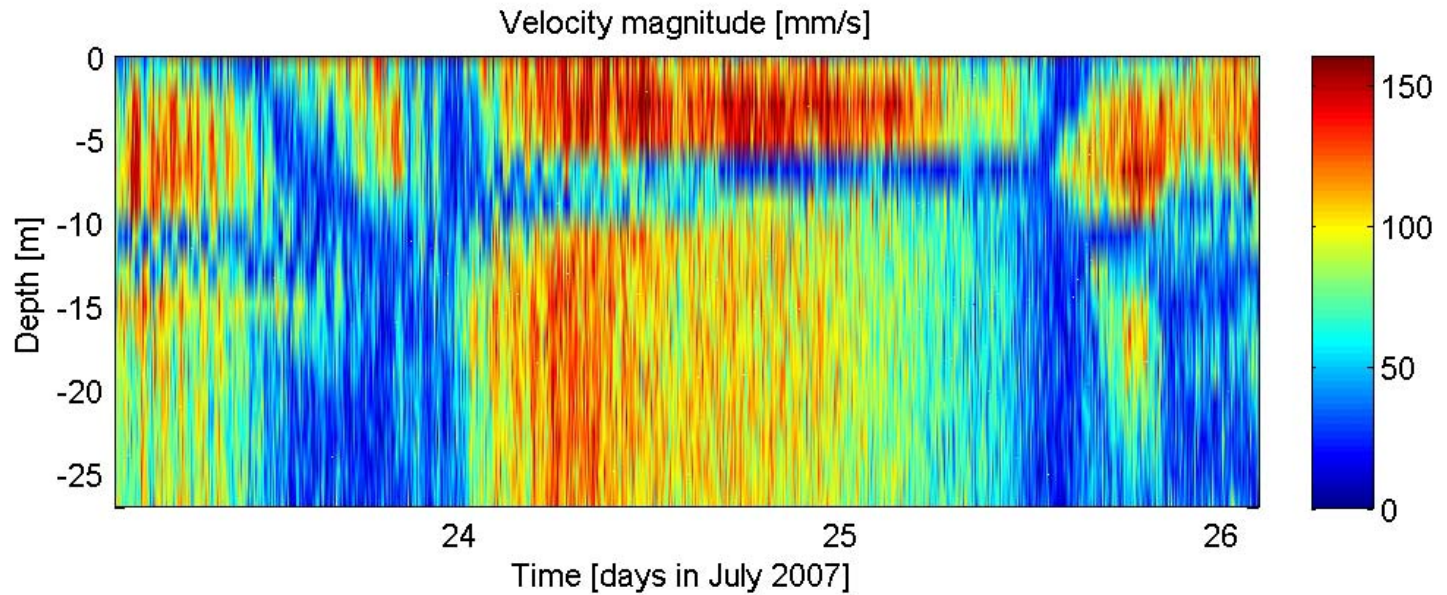




**Cariboo Island Shelf**

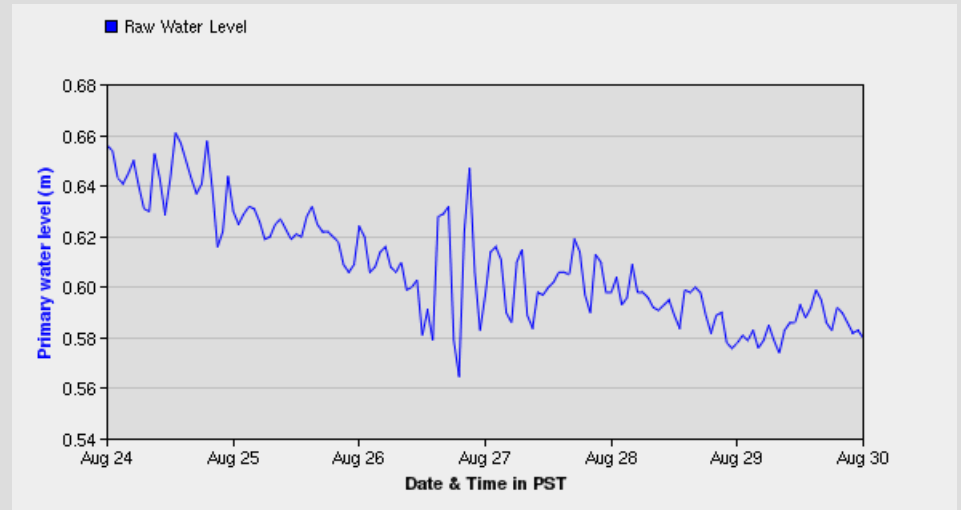


# ADCP Measurement of Bidirectional Flow



# Quesnel Lake Seiching

Lake Component	Seich Periods in Minutes (calculated)	Pressure Gauge Periods in Minutes (Fourier analysis)
East Arm Middle Reach	7	10
West Basin	24	20
East Arm only	41	45
Main Lake	62	60
Whole Lake (2 Basins)	75	75



**QUESNEL RIVER AT LIKELY [BC] (08KH001)**





