

Green Edge 2016

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10/8/2016 4 am
6/2016 7/2016

Qala1 recovery

Qala2 recovery

N69.5°

N69.3°

N69.1°

N68.9°

N68.7°

N68.5°

Image © NASA

W62.25°

W61.75°

W61.25°

W60.75°

W60.25°

W59.75°

W59.25°

W58.75°

W58.25°

W57.75°

W57.25°

W56.75°

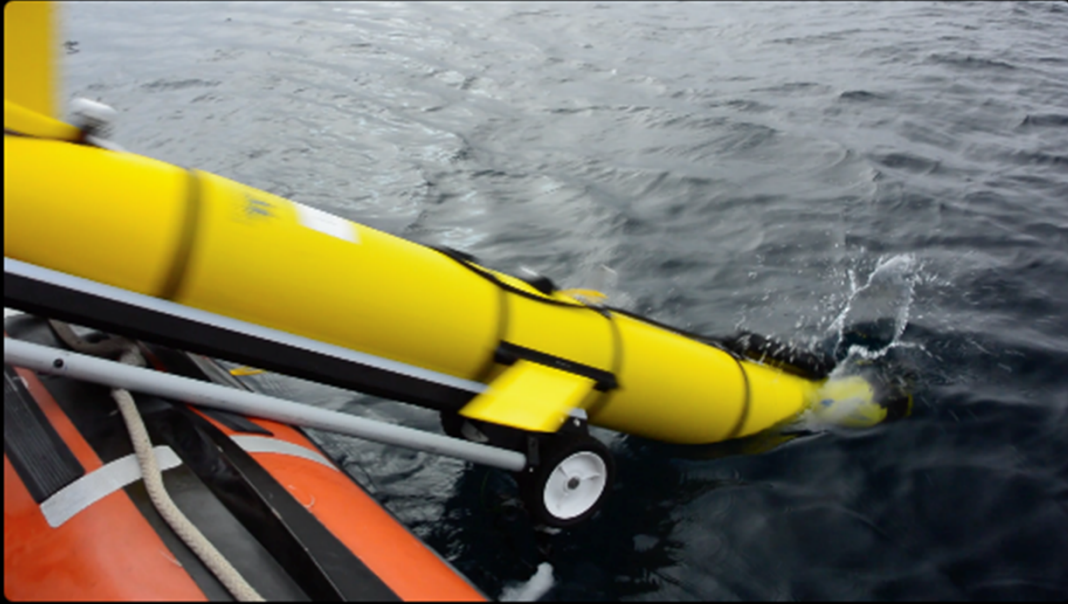
Qala2 deployment

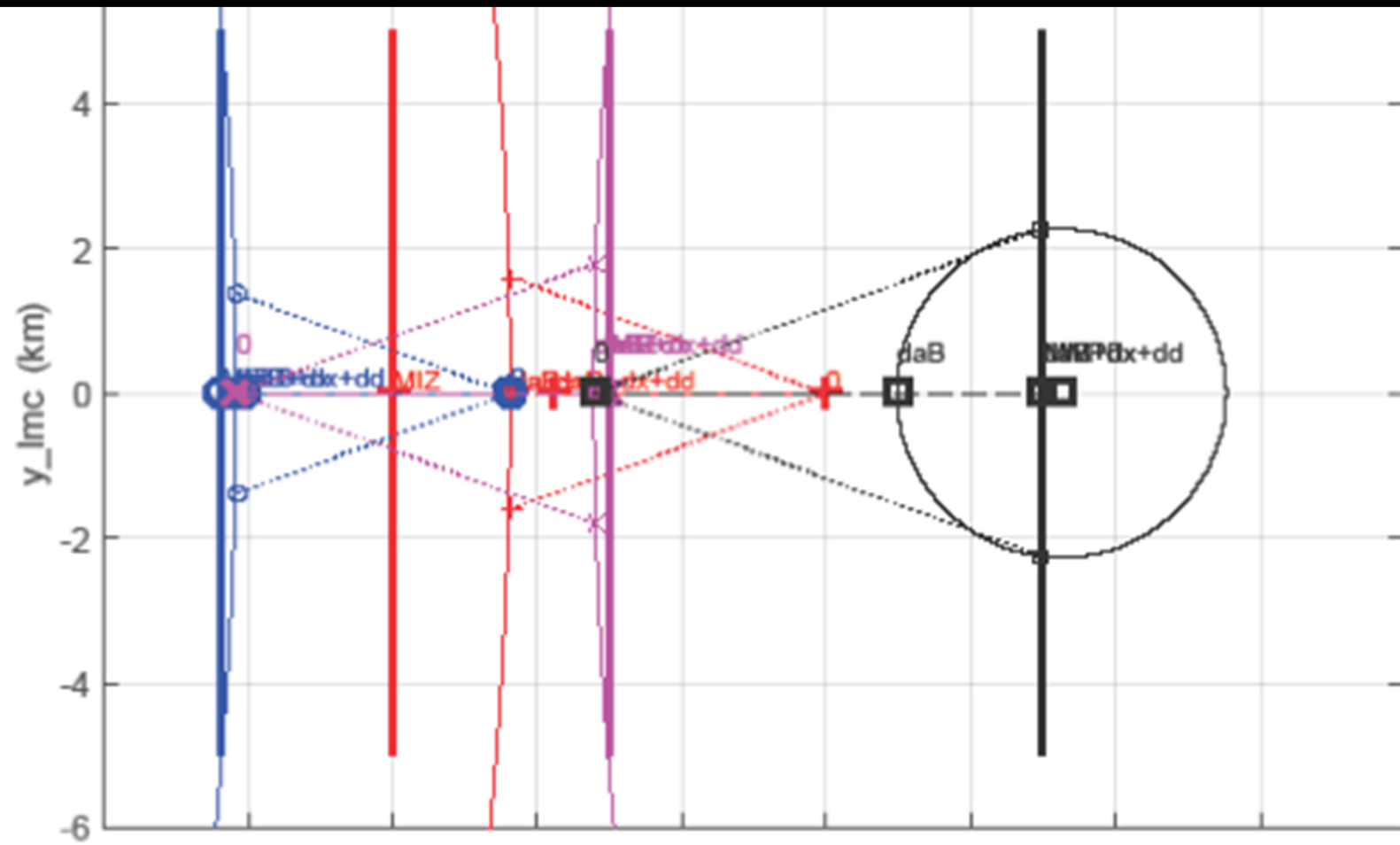
Qala1 deployment

Google earth

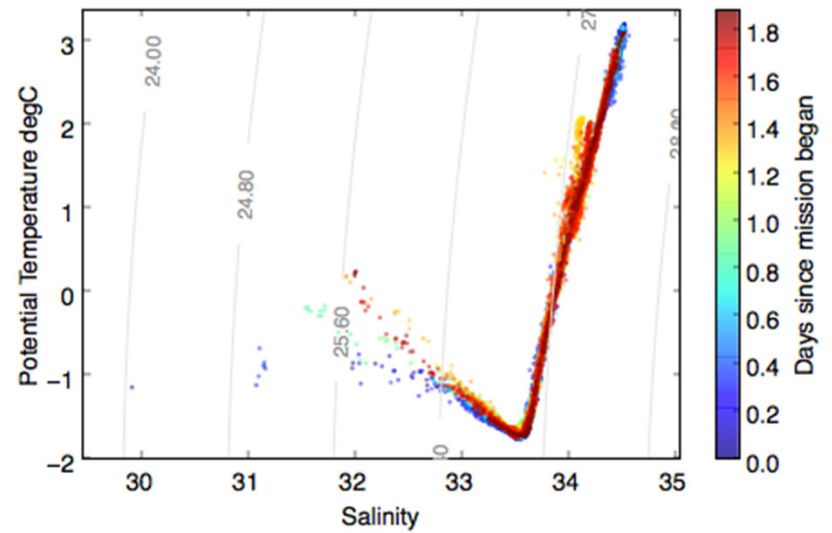
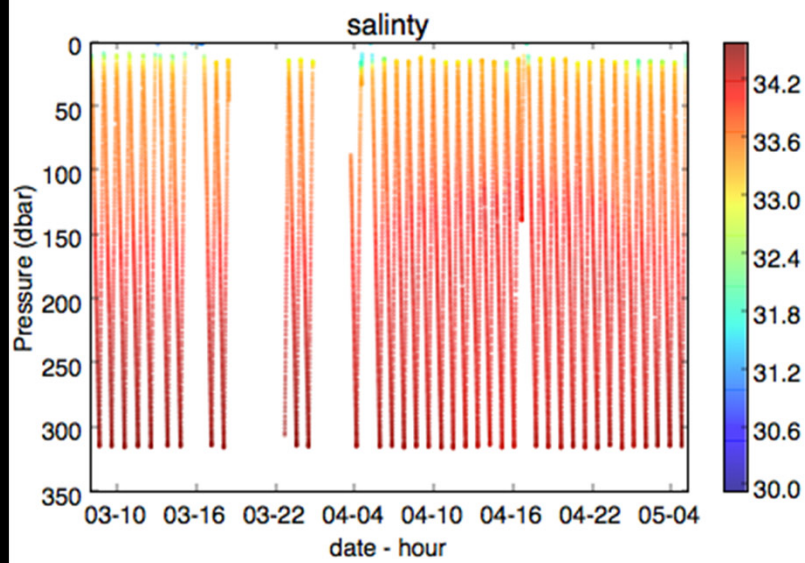
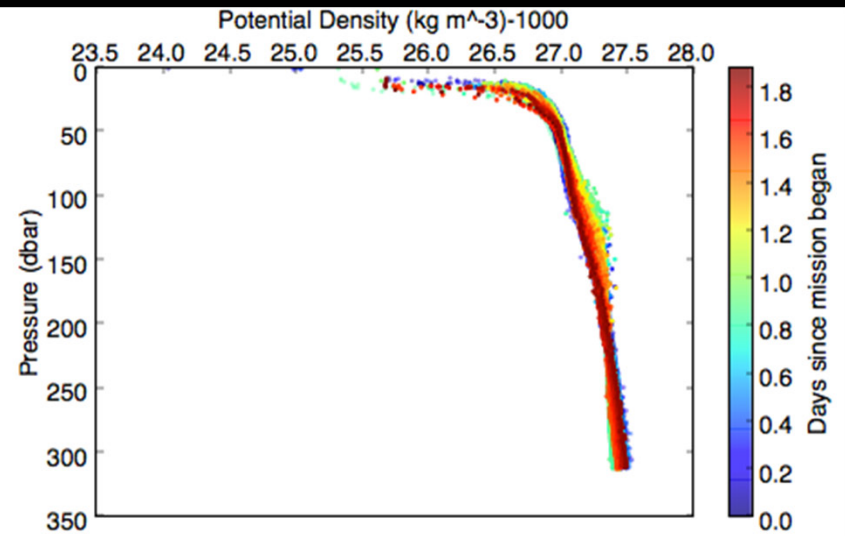
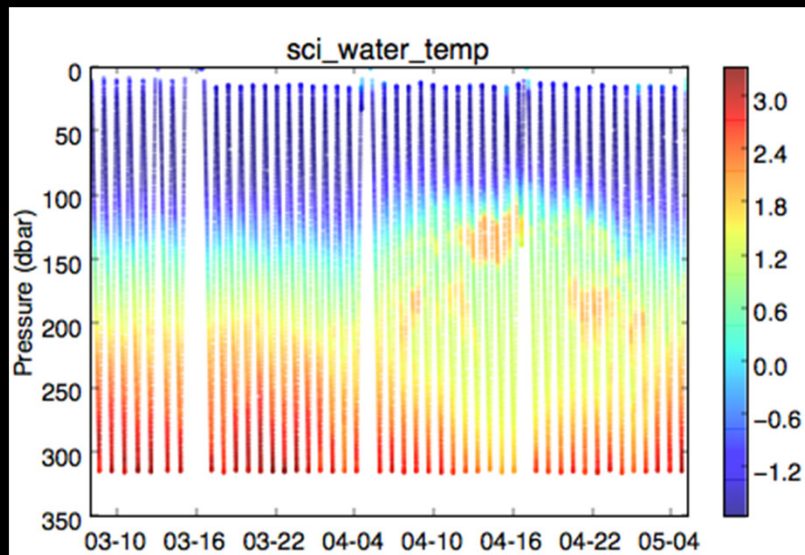
69° 2.013' N 59° 29.185' O 046v-1317 m altitude 210.70 km

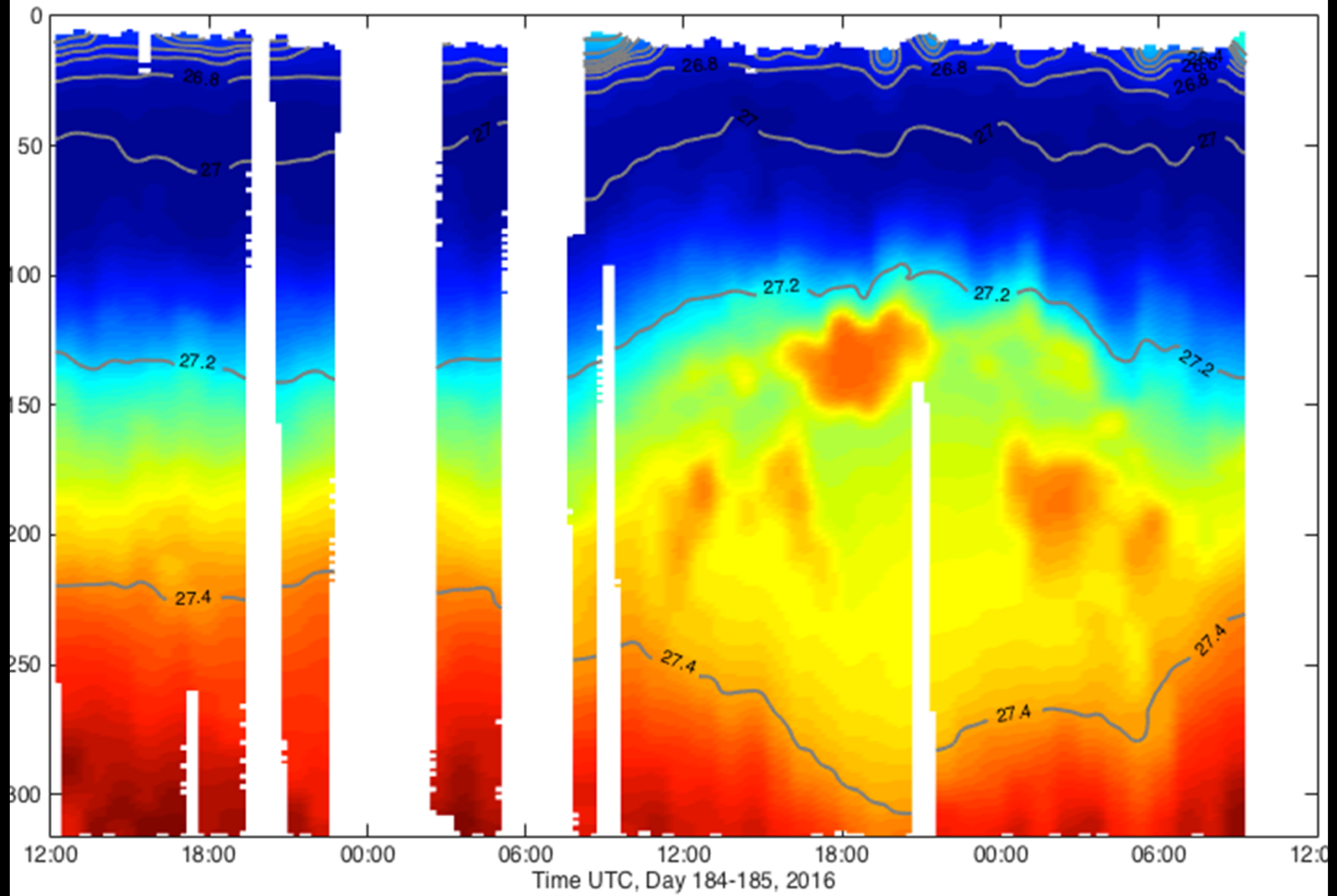
Viaje guiado

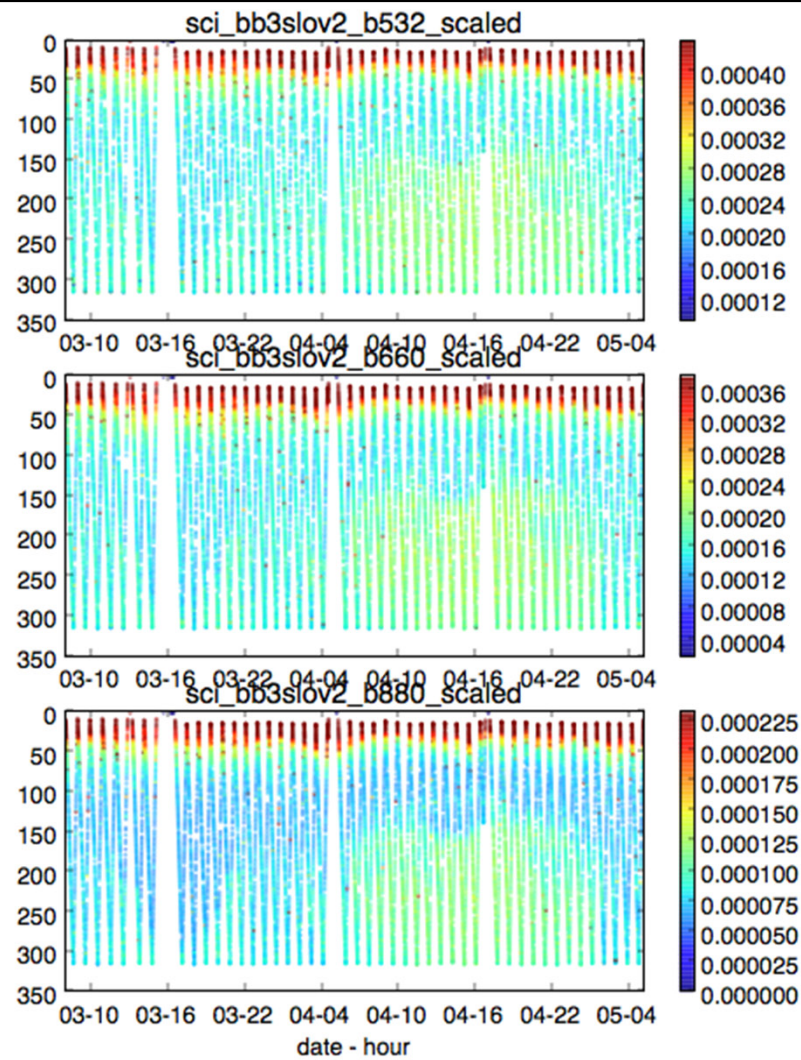
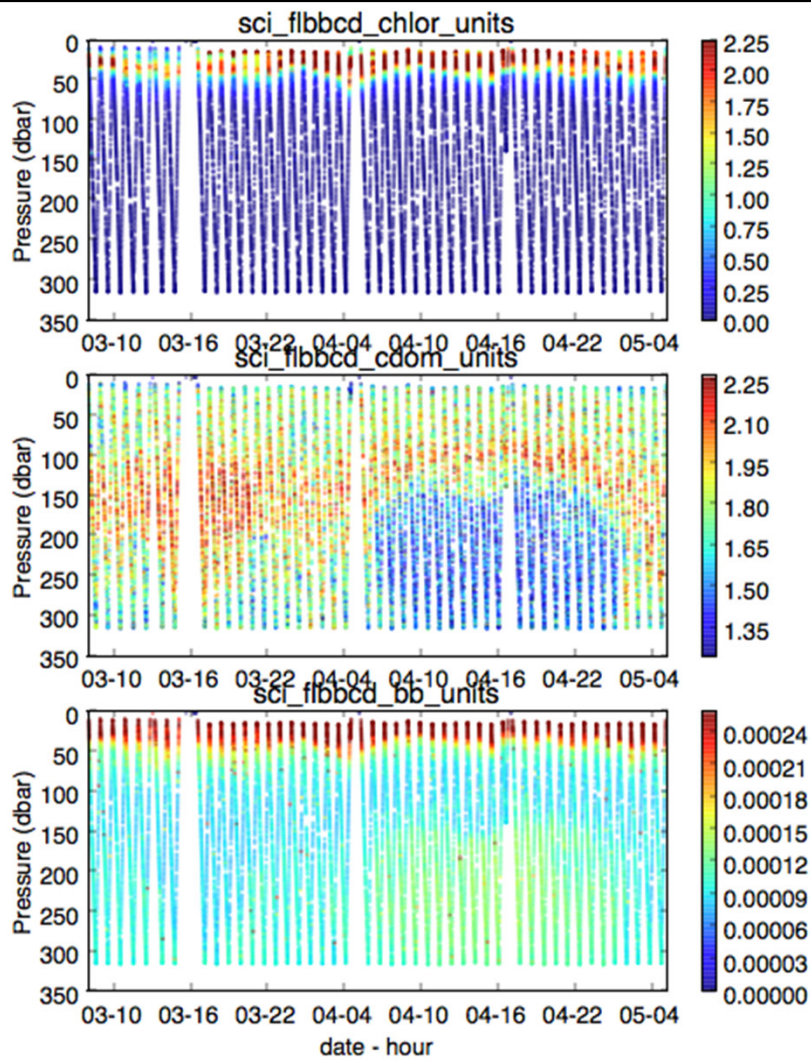


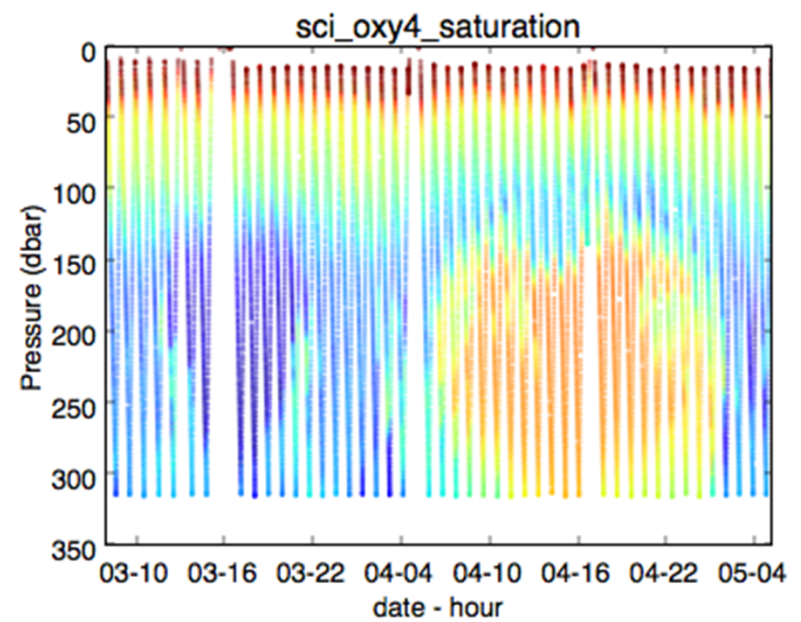
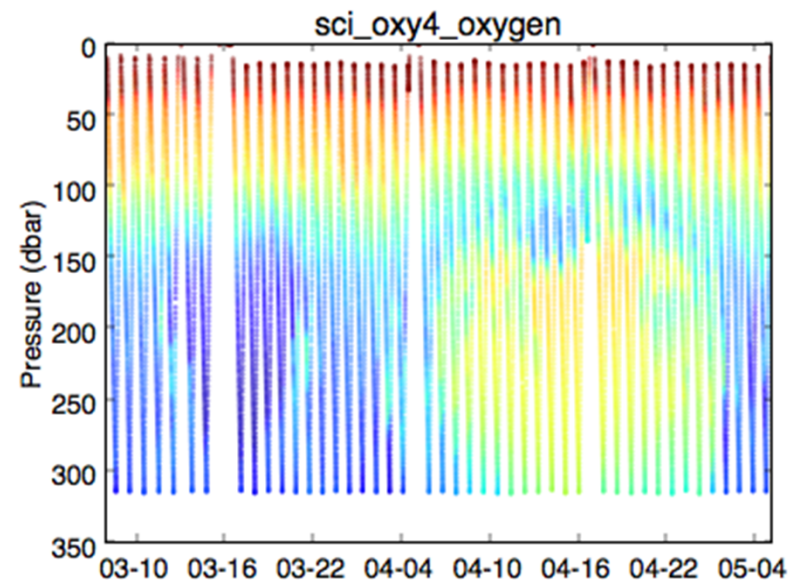
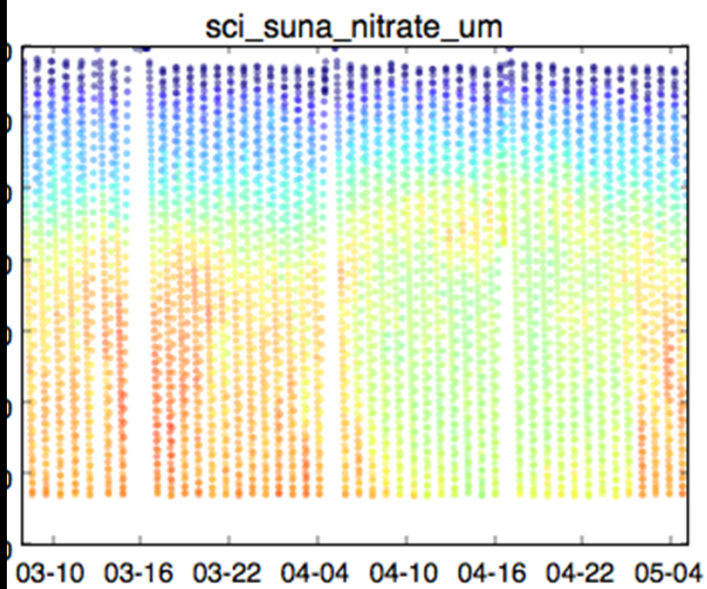


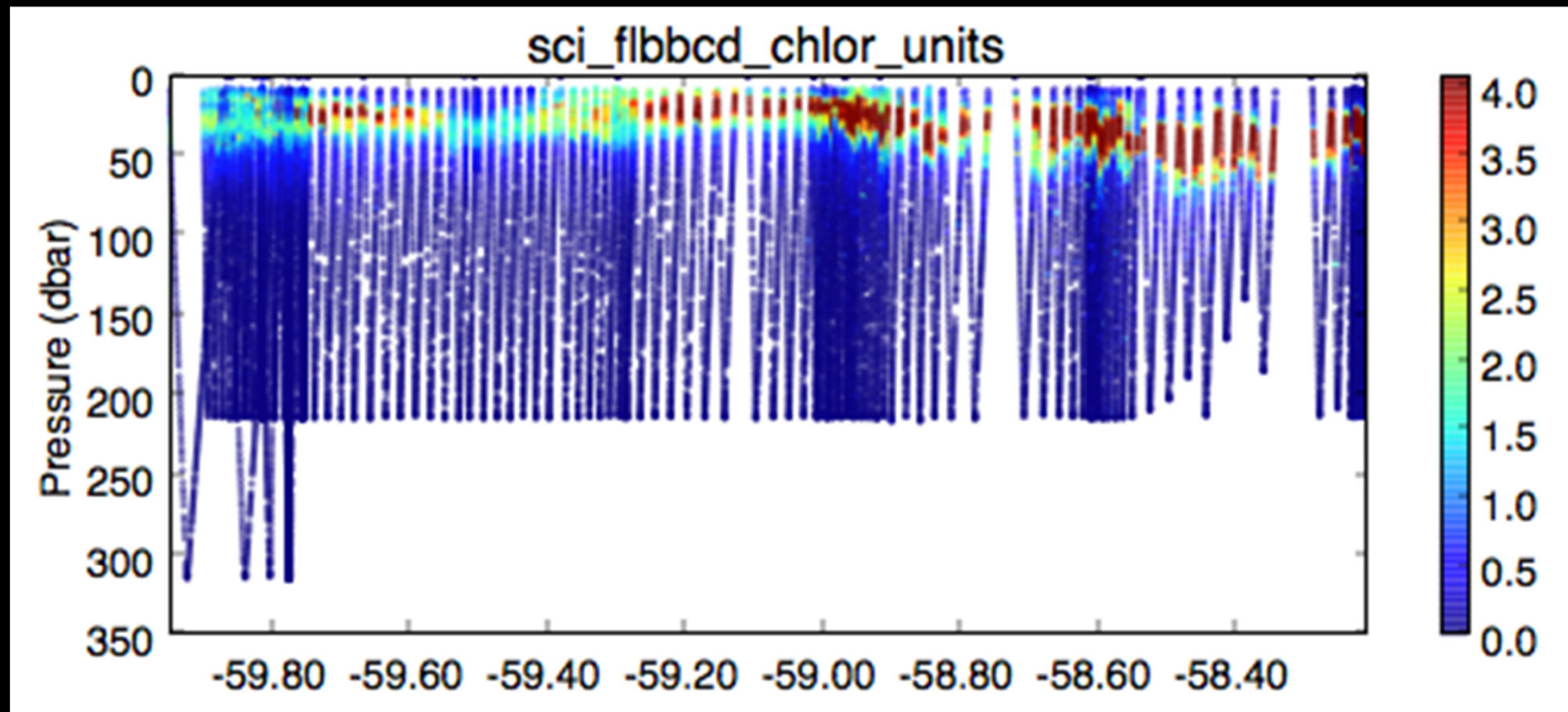




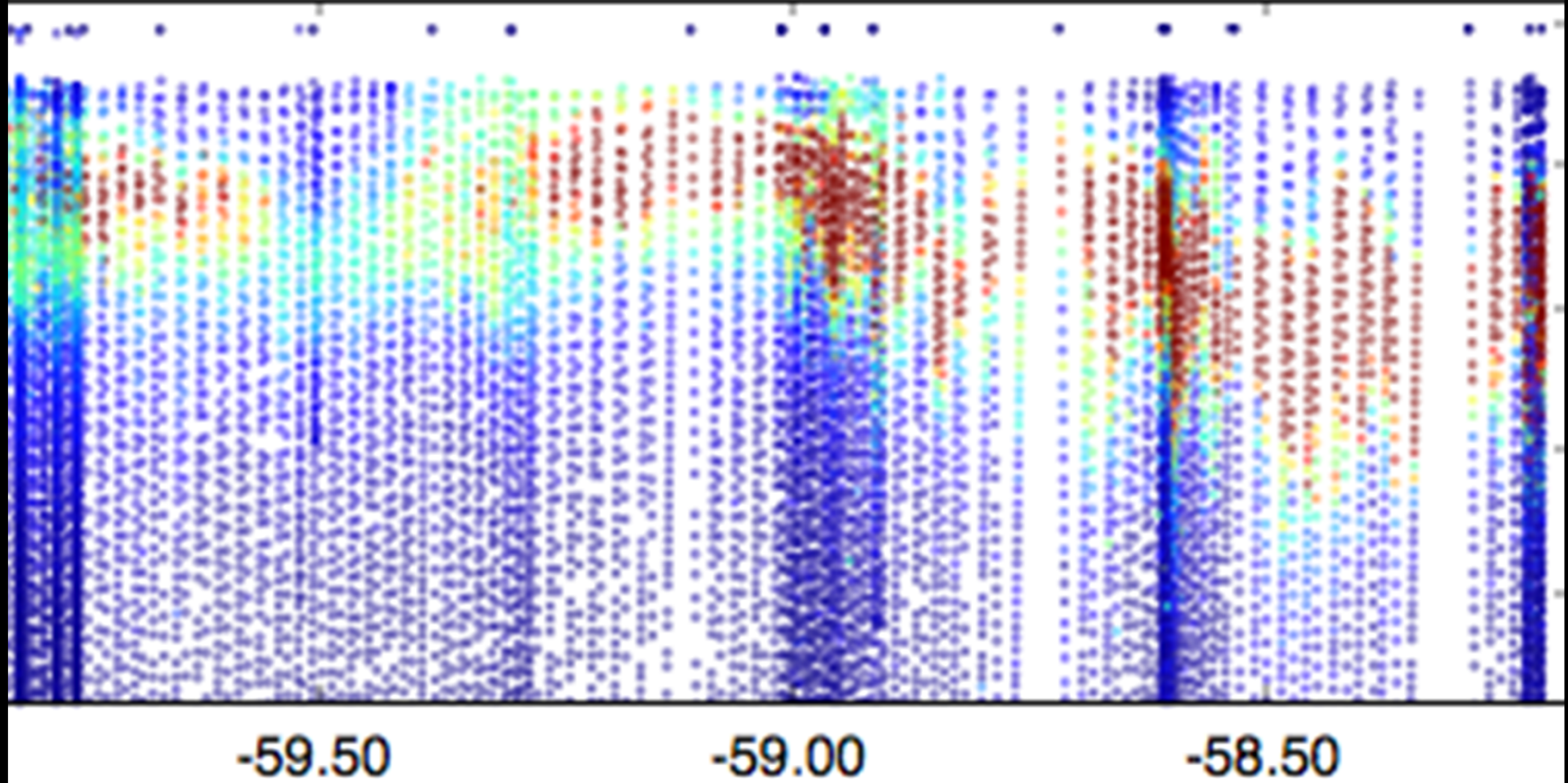






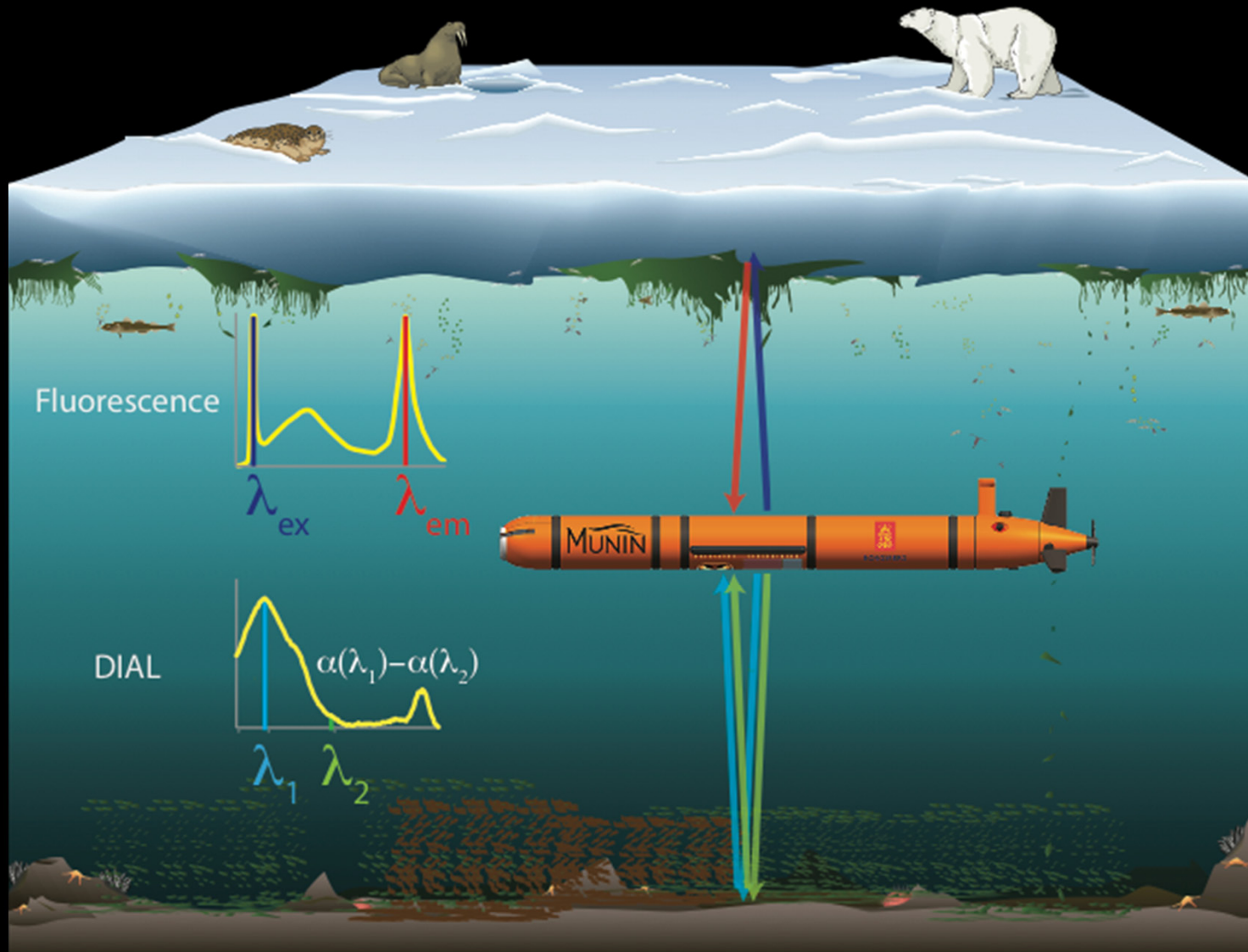


sci_flbbcd_chlor_units





Observing Arctic Substrates Using AUVs with LIDAR



	ICELIDAR	ICELIDAR2	ICEDIFLUOR	ICEDIAL	ICELIDAR3
Year	0	1 (CNRS-funded)	2	2	3-4
Approach	Laser depolarization by ice	Laser-induced fluorescence of chlorophyll	Differential response of laser-induced fluorescence of chlorophyll	Differential absorption of chlorophyll and other algal pigments	Fixed pulsed LIDAR for 2-D point cloud or scanning/structured-illumination pulsed LIDAR for 3-D point cloud of fluorescence or differential absorption response
Source	1 CW source: λ_1 $\lambda_1 = 532 \text{ nm}$	1 pulsed source: λ_{ex} $\lambda_{ex} = 445 \text{ nm}$	1 pulsed source: λ_{ex} $\lambda_{ex} = 405 \text{ nm}$	2 pulsed sources: λ_1, λ_2 $\lambda_{1,2} = 488, 532 \text{ nm}$	Pulsed source(s). Time-response, range-gated detectors
Detector	2 detectors: λ_1 , \square and \perp polarization components	1 detector: λ_{em} $\lambda_{em} = 685 \text{ nm}$	2 detectors: $\lambda_{em1}, \lambda_{em2}$ $\lambda_{em1,2} = 532, 685 \text{ nm}$	2 detectors: λ_1, λ_2	Could be implemented for any of the proposed biomass detection approaches (fluorescence, DIAL)

