

color code horizontal

	data rosette file from BOUM web site november 2008 : information on station characteristics :coordonnées, depth, date
	data rosette file from BOUM web site november 2008 information on individual bottles
	data bacterial production : France Van Wambeke, unvalidated data set, 26 november 2008
	BP : bacterial production ngC/l/h
	err BP : error according duplicates, ngC/l/h (abslute value of the difference between the 2 duplicates divided by 2)
	ld : detection limite reached for the eppendorf technique (dpm more than those of the blanks)
	technique incoporation of 3H leucine into proteins
	<u>microcentrifuge technique</u>
	volume incubated 1.5 ml
	final concentration of leucine added : approx 23 nM (16.20 nM radioactive - Perkin elmer 115 Ci/mmole -, + 6.66 nM cold leucine)
	Incubations were run in the dark, at the in situ temperature during 2 to 6 hours according expected activities
	stop of the incubation by addition of 5% final TCA
	precipitation by centrifugation at 16 000 g of the trichloacetic acid (TCA) precipitate
	(3 runs of centifigations : total killed sampled, TCA precipitate rinsed with 5% TCA, TCA precipitate rinsed by 80 % ethanol)
	addition of scintillation liquid 1.8 ml PACKARD ultimagold MV
	storage in the fridge
	counting back in the laboratory on a Packard 1600 TR scintillation counter (July-August)

	filtration technique (concerns only layers > 200m at the deep casts CTDs numbers 71, 114 and 186)	
	volume incubated 50 ml	
	final concentration of leucine added : approx 10 nM (10 nM radioactive - Perkin elmer 115 Ci/mmmole -)	
	Incubations were run in the dark, at the in situ temperature during 15 to 20 hours according expected activities	
	stop of the incubation by addition of 20% formalin (2% final)	
	filtration through 0.2 µm polycarbonate filters until the filter is dry	
	extraction by addition of 9 ml of 5 % TCA on the filter during 10 minutes	
	filtration, rinse with 5% TCA	
	storage in the fridge	
	counting back in the laboratory on a Packard 1600 TR scintillation counter (July-August)	
	data on ectoenzymatic activity alkaline phosphatase : France Van Wambeke, unvalidated data, 26 november 2008	
	Utilisation of the fluorogenic substrate MUF-P	
	C1 :MUF-P hydrolysis rate (nmol/l/h) obtained using trace concentration of MUF-P (0.025 µM)	
	sd C1 : standard error of hydrolysis rate - obtained from analysis of the regression curve : increase of MUF fluorescence= f(time of incubation)	
	C6 :MUF-P hydrolysis rate (nmol/l/h) obtained using close to saturating concentration of MUF-P (1 µM)	
	sd C6 : standard error of hydrolysis rate - obtained from analysis of the regression curve : increase of MUF fluorescence= f(time of incubation)	
	Vm	nmol/l/h Maximum rate of hydrolysis obtained from non linear analysis of hydrolysis rate =f (MUF-P concentration), adjusted to $V = V_m \times S / (K_m + S)$, MUF-P set of concentration used : 0.025, 0.05, 0.1, 0.25, 0.5, 1 µM
	err Vm	nmol/l/h standard error of Vm calculated from the non linear regression

	Km	nM Michaelis Menten constant
	err Km	nM standard error of Km calculated from the non linear regression
	r2 reg	r2 of the non linear regression curve
color code vertical		
	short station	
	site C	
	site B	
	site A	