

AQUA PARK

EMMA 2

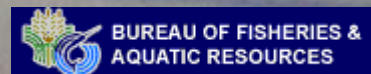
**Planning and management of
aquaculture parks for sustainable
development of cage farms in the
Philippines (AquaPark)**

Preliminary Sediment Results

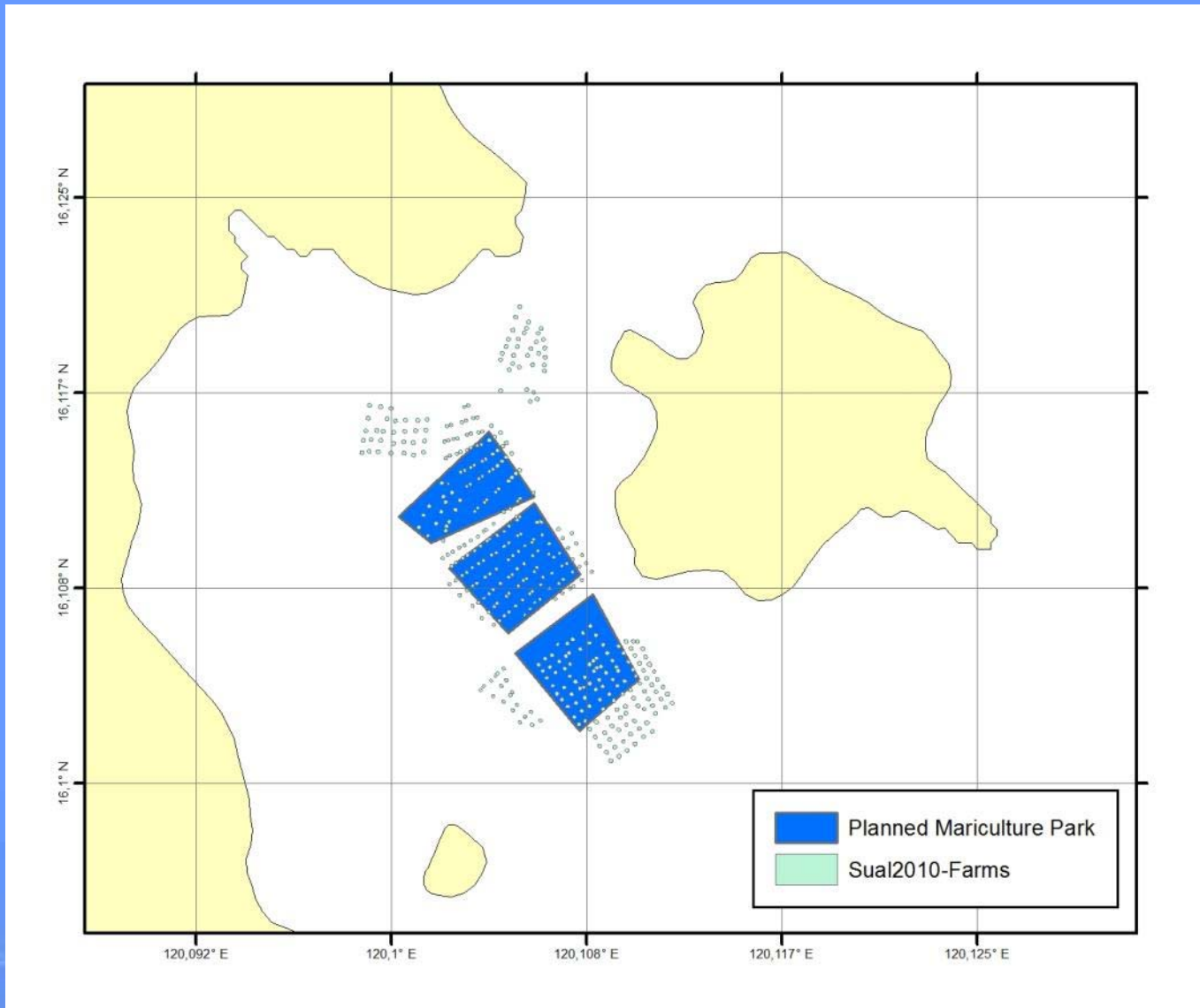
Rune Palerud, Akvaplan-Niva

Mid-term results

EMMA 2

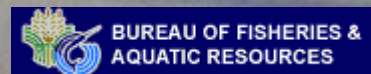


SUAL

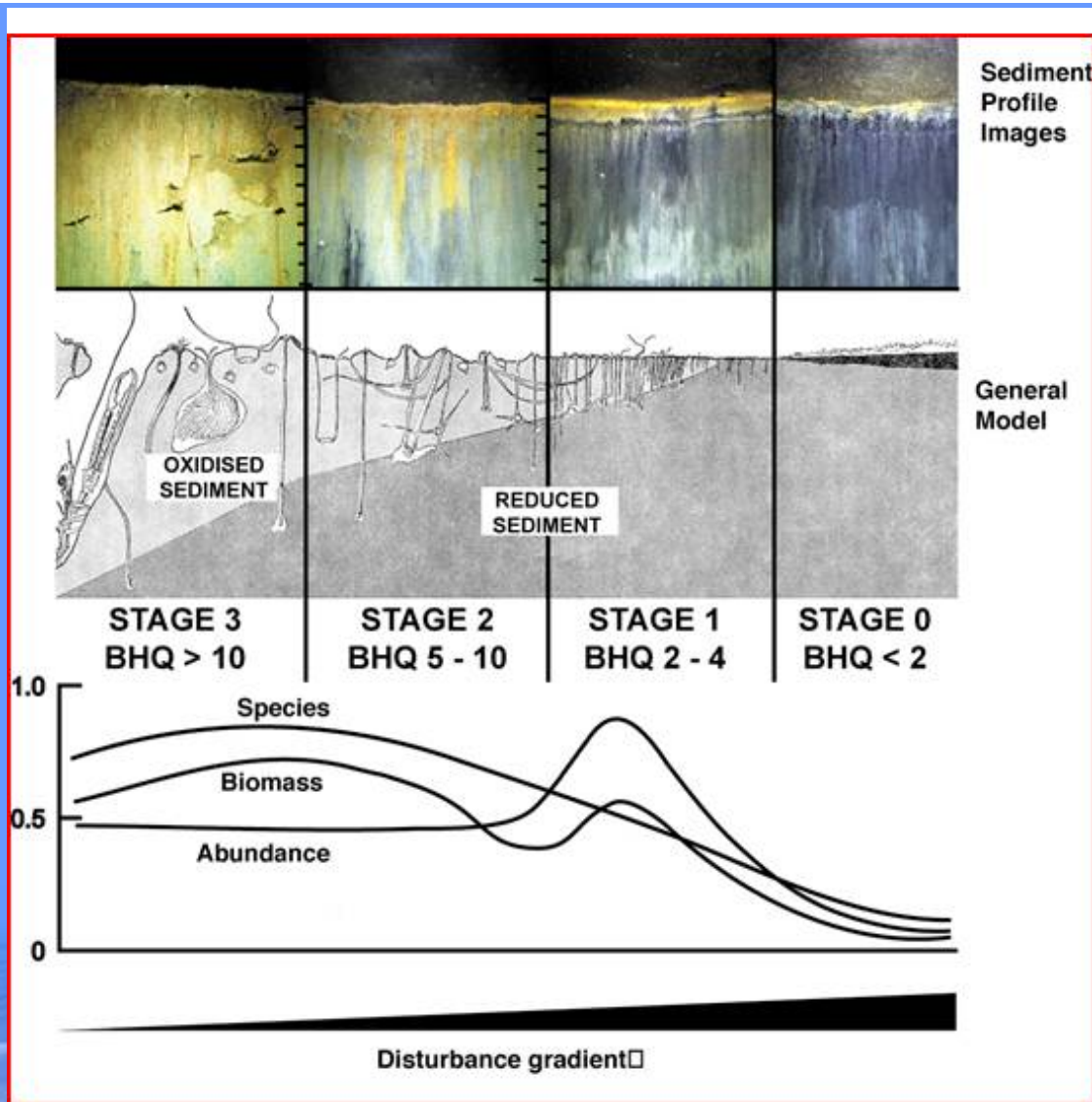


Mid-term results

EMMA 2

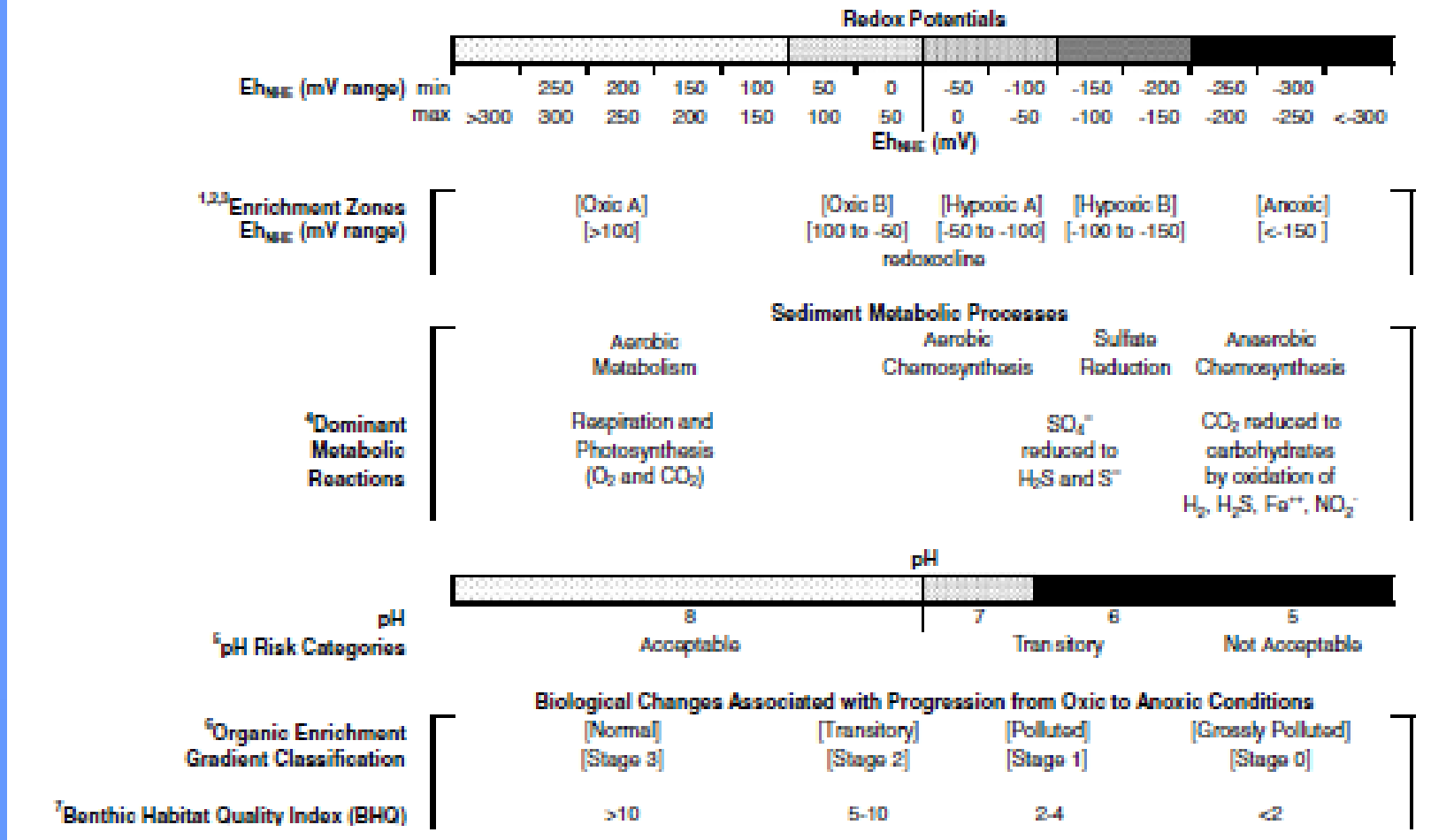


Rosenberg, 2001

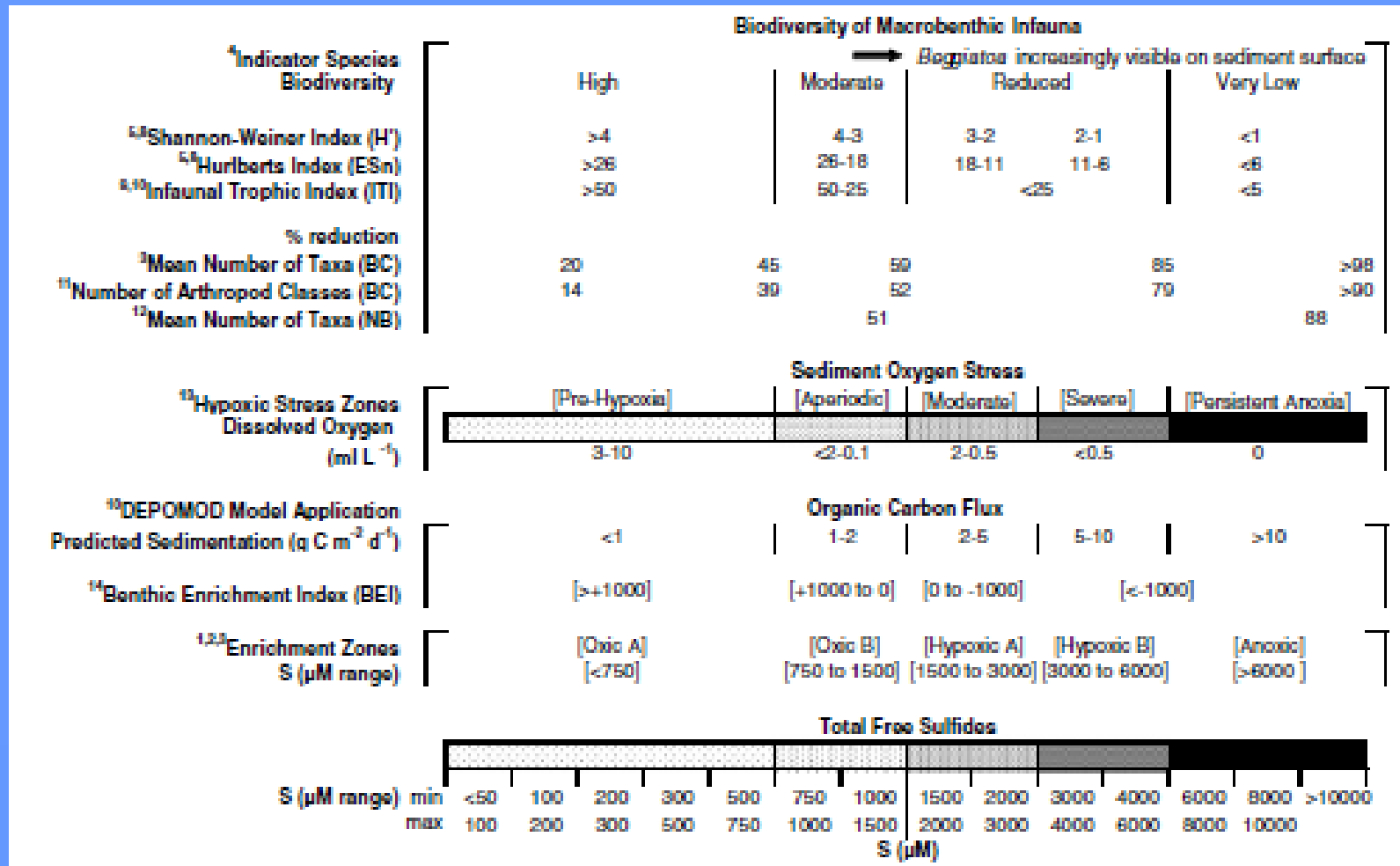


Hargrave et al. 2008

B.T. Hargrave et al / Marine Pollution Bulletin 56 (2008) 810-824



Hargrave et al. 2008

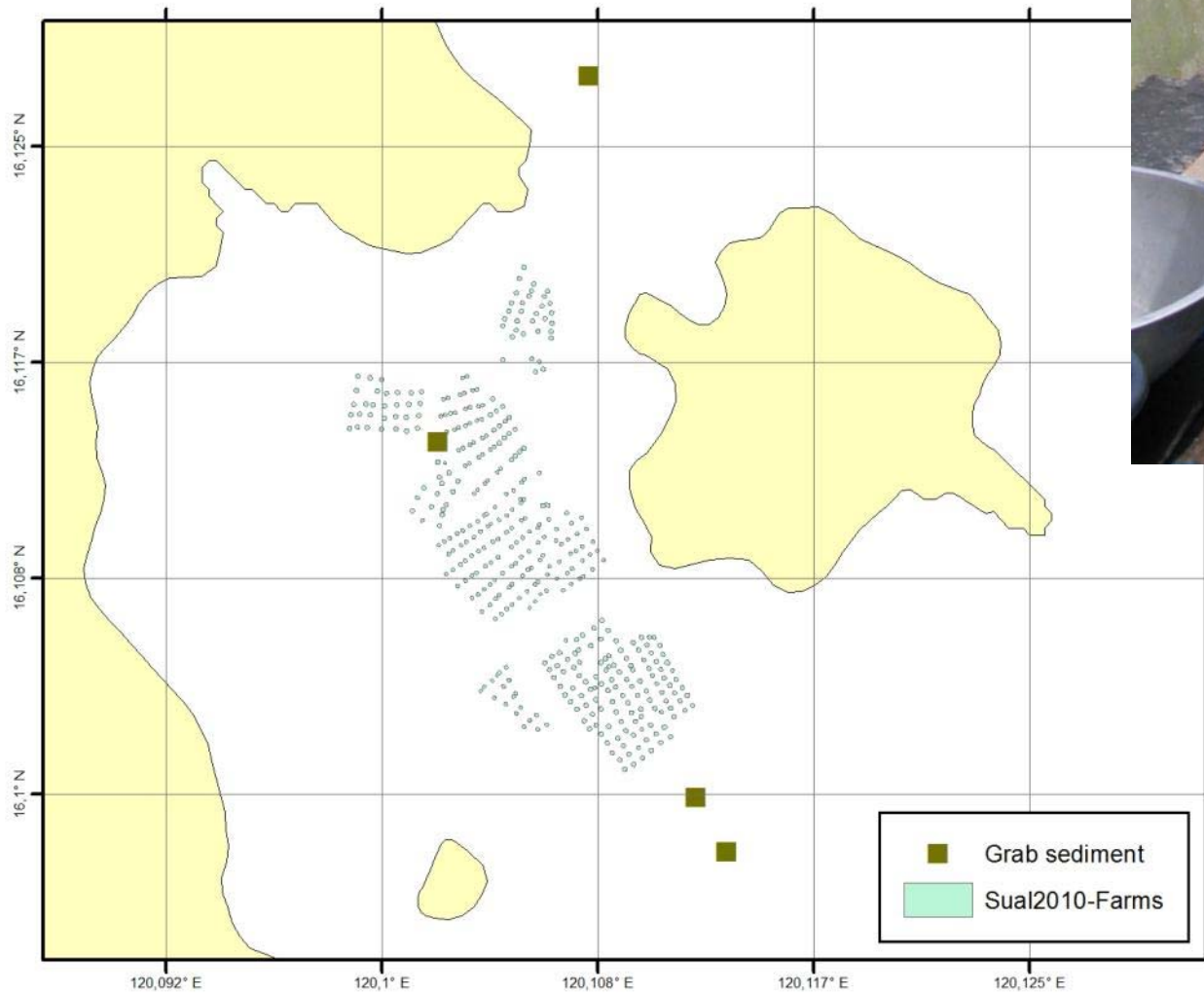


Norwegian standard

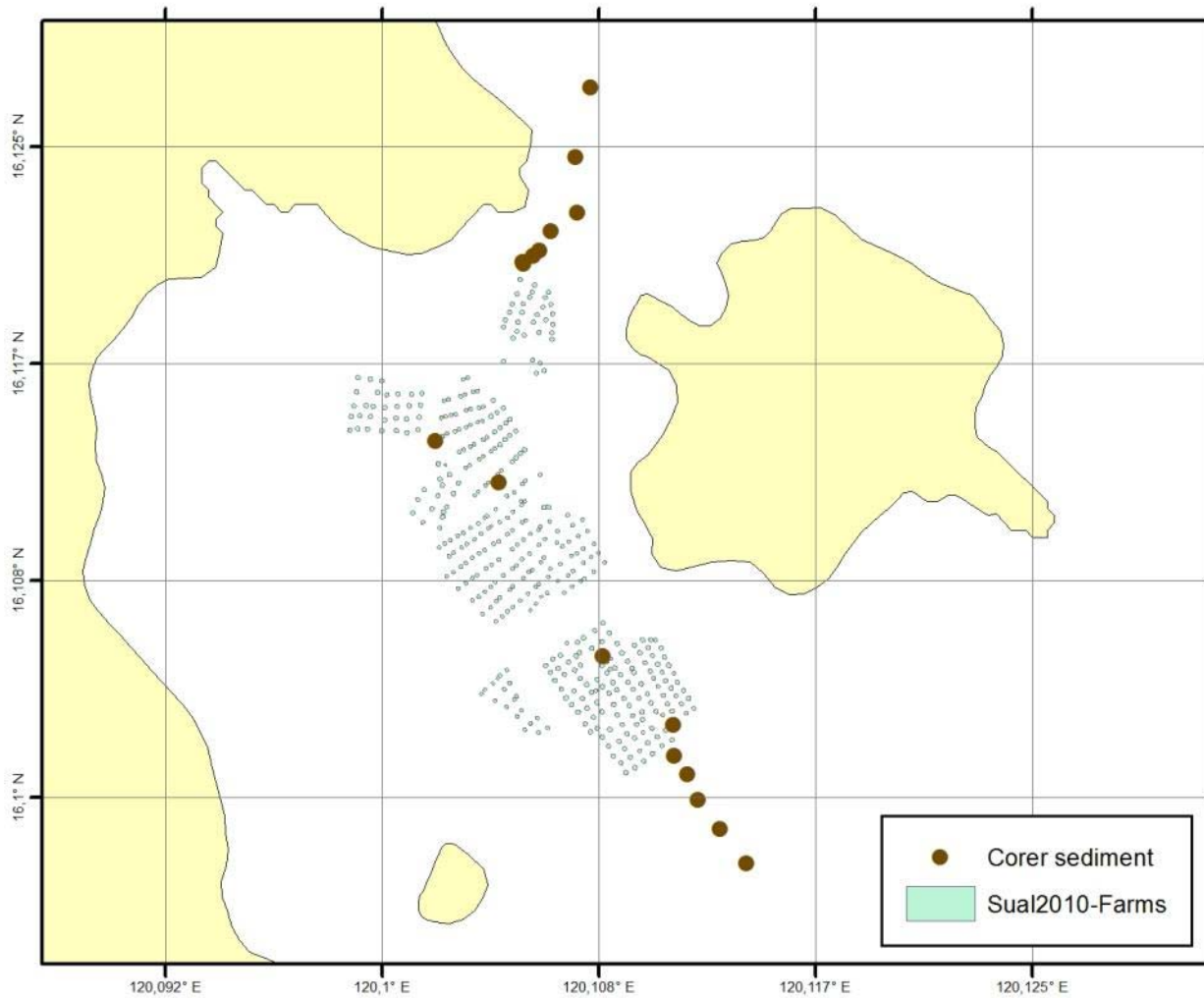
Tabell 6. Klassifisering av tilstand for organisk innhold i sediment og bløtbunnsfauna.

	Parametre	Tilstandsklasser				
		I Meget god	II God	III Mindre god	IV Dårlig	V Meget dårlig
Sediment	Organisk karbon (mg/g)	<20	20-27	27-34	34-41	>41
Artsmangfold for Bløtbunnsfauna	Hurlberts indeks (ESn=100)	>26	26-18	18-11	11-6	<6
	Shannon-Wiener indeks (H)	>4	4-3	3-2	2-1	<1

Grab sampling stations in Sual



Corer sampling stations in Sual



Mid-term results

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Natural sediment

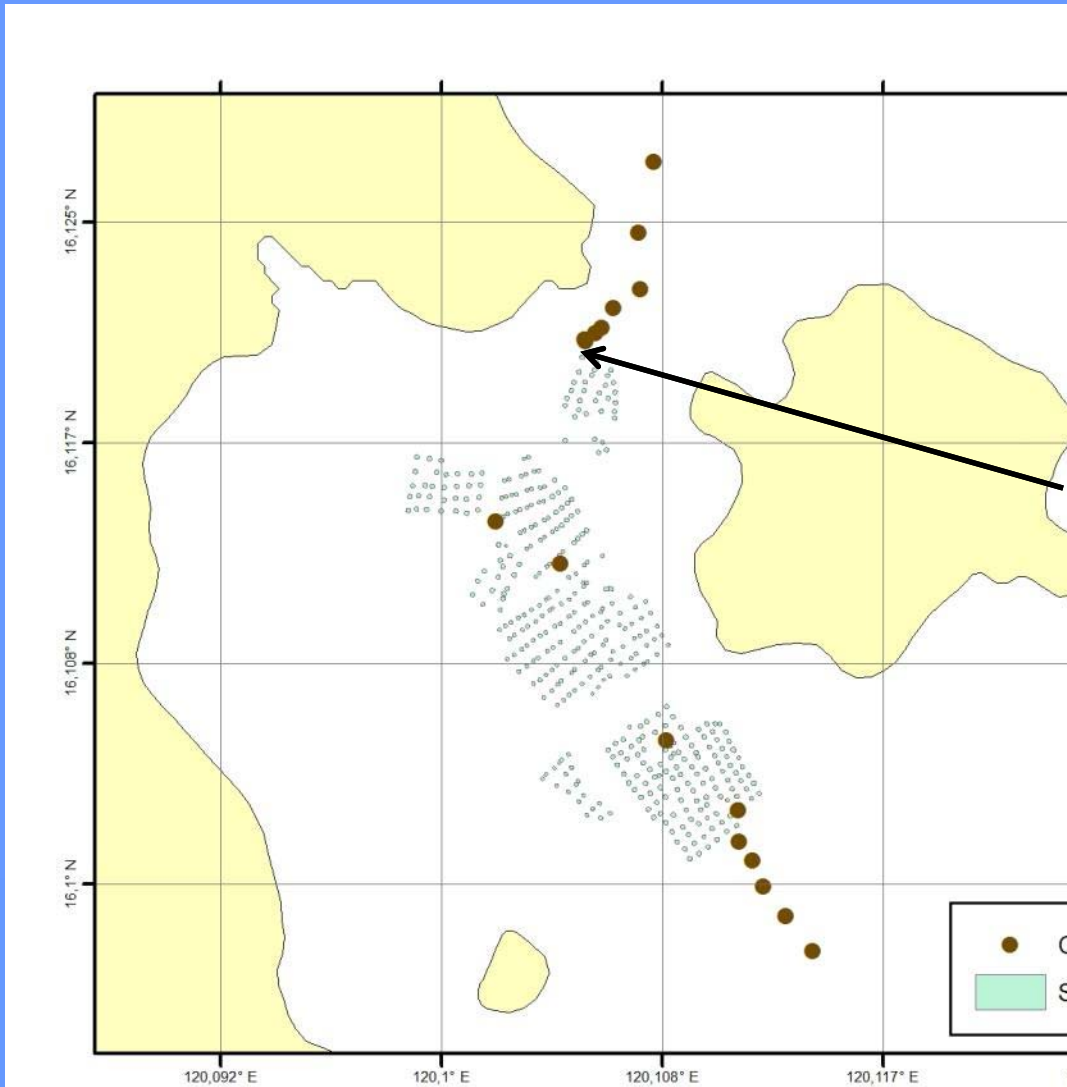
Heavily impacted sediment



Mid-term results

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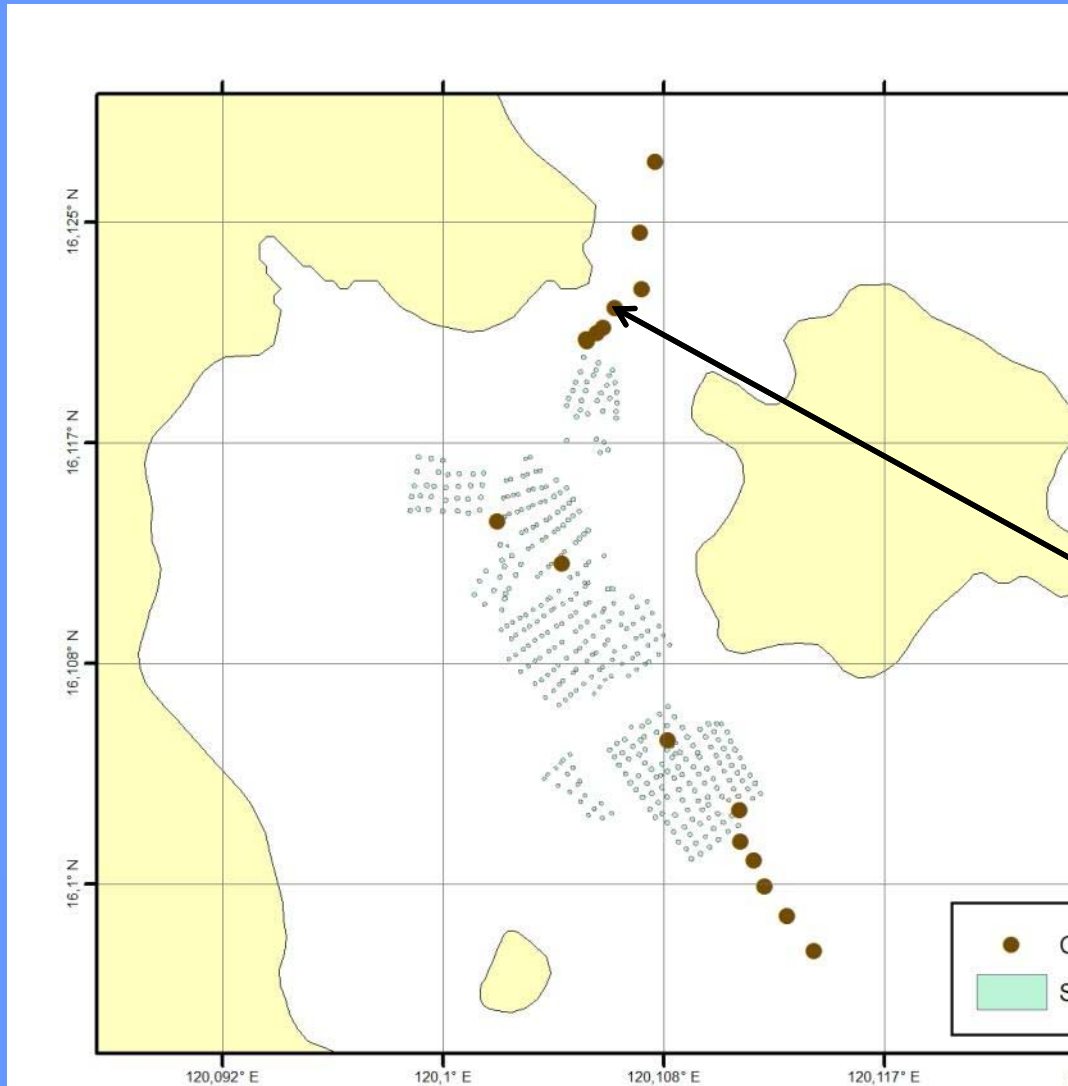
Corer at cage 20 cm black layer



Mid-term results

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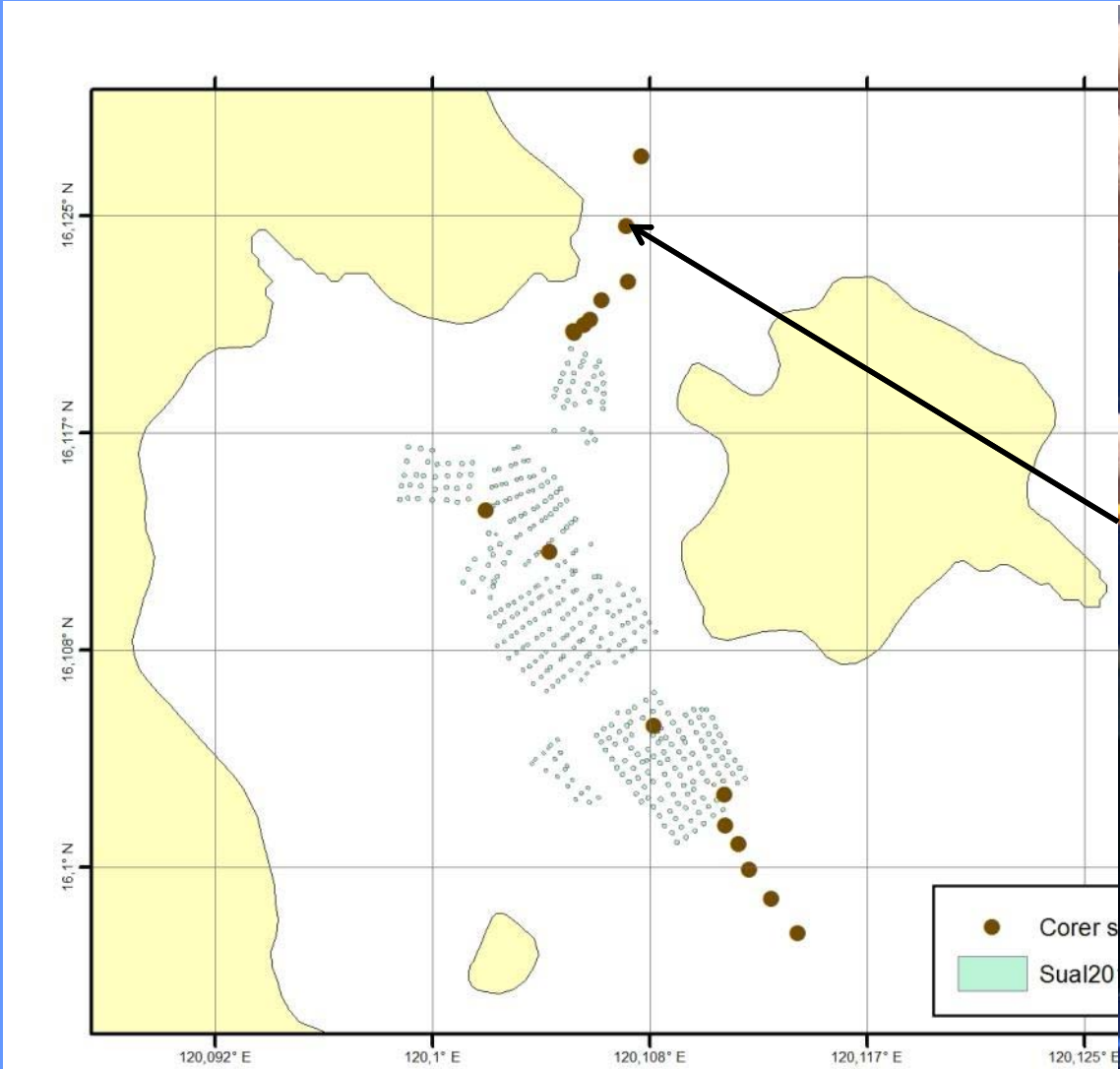
Corer 87 m from cage 13 cm black layer



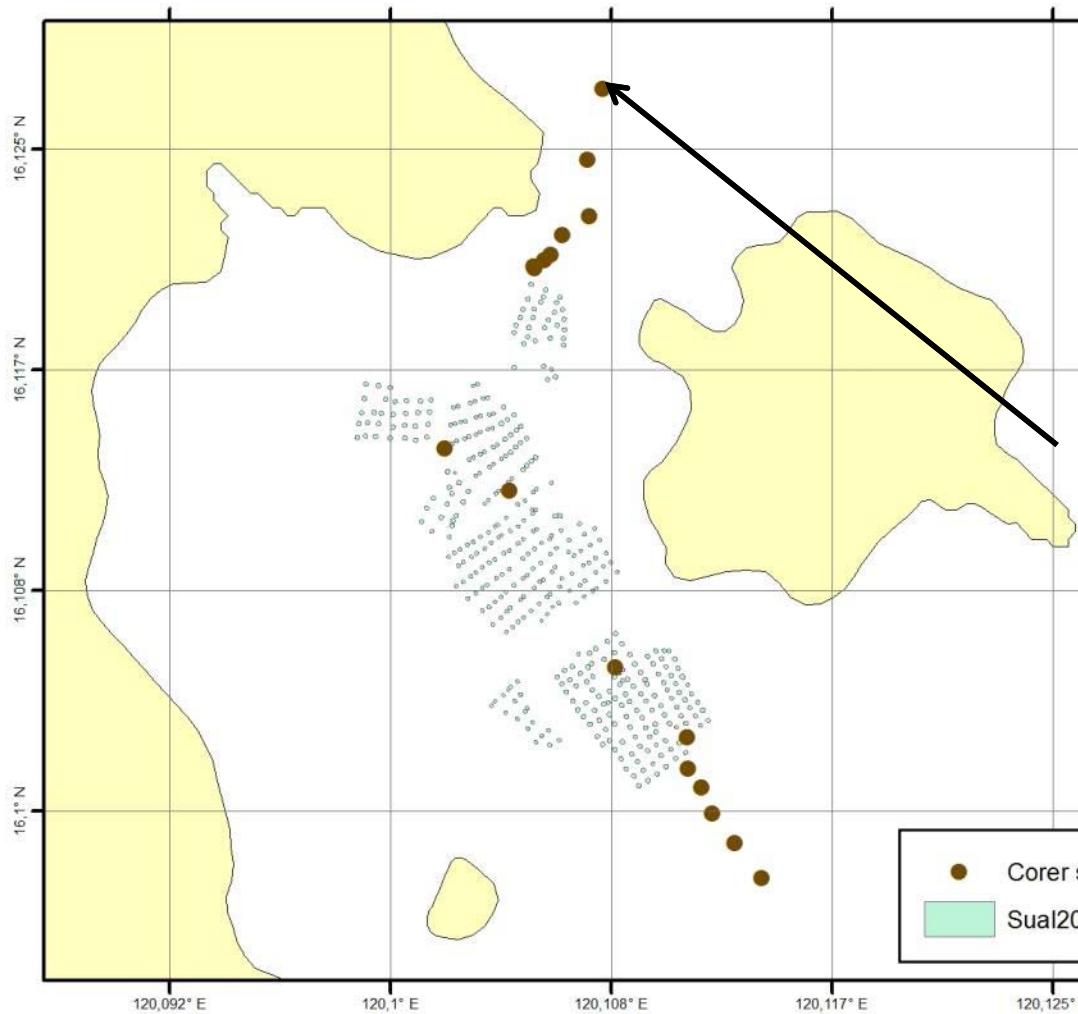
Mid-term results

EMMA 2

Corer 500 m from cage 5 cm black layer



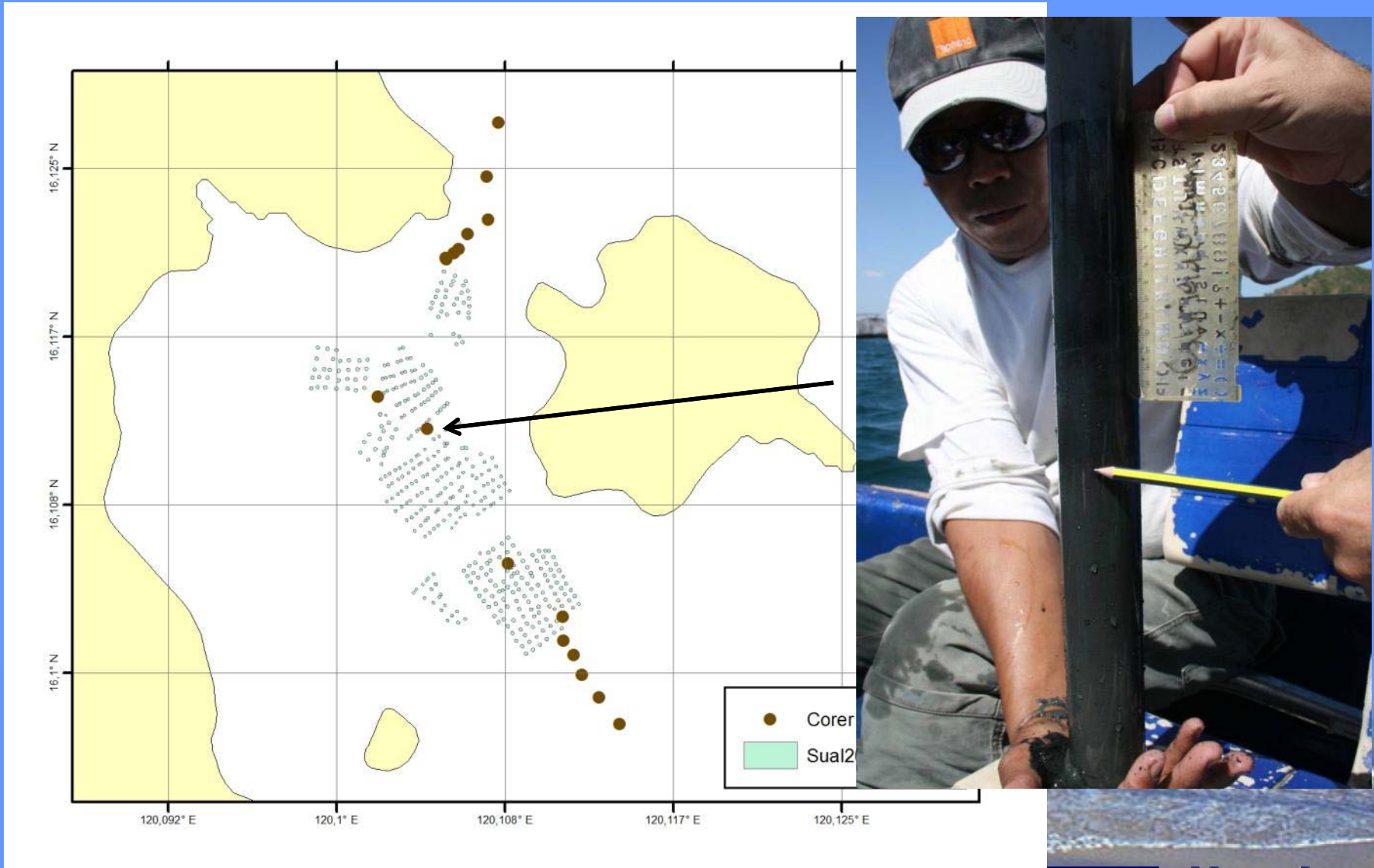
Corer 800 m from cage no black layer



Mid-term results

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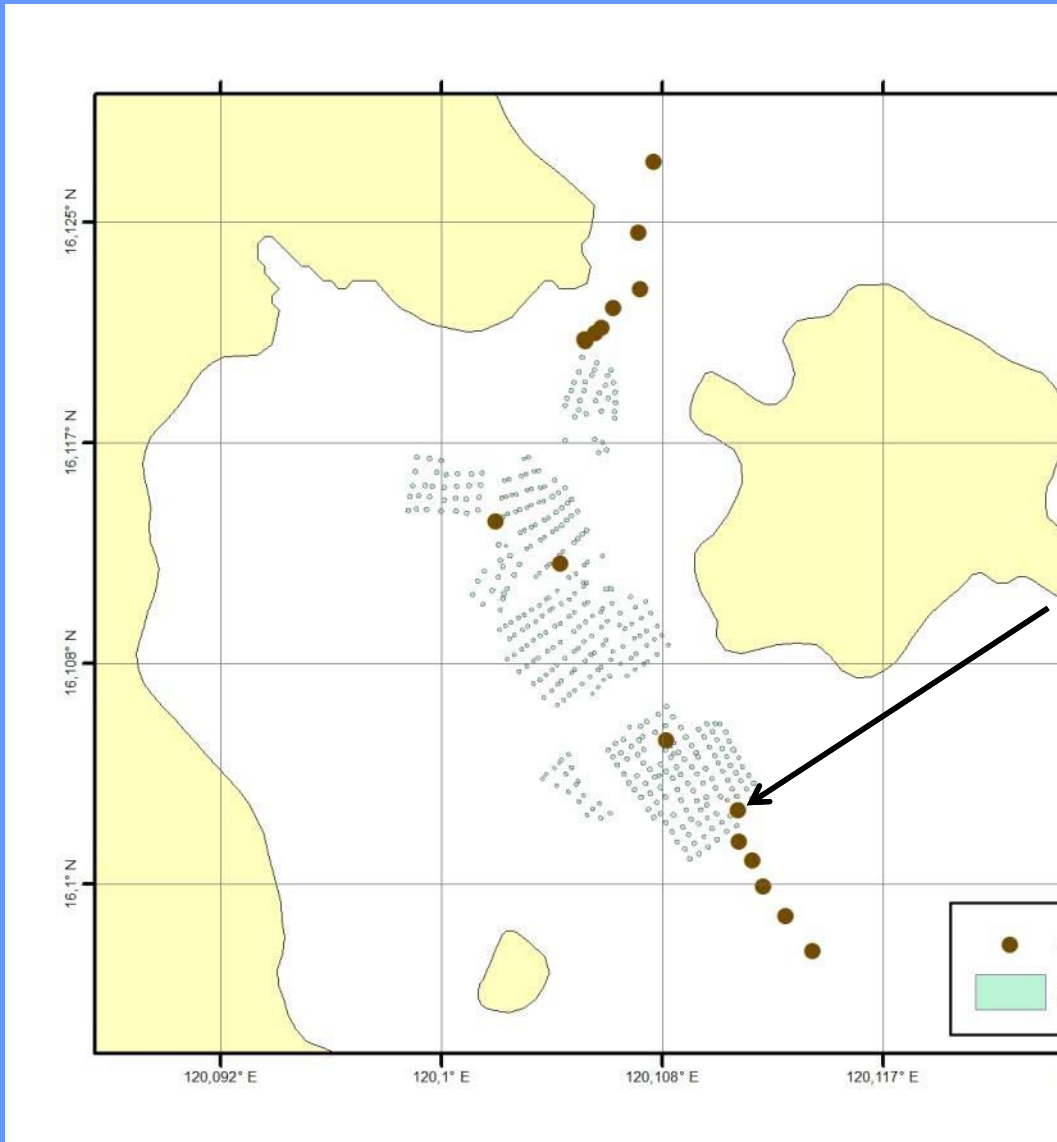
Corer in cage area 20 cm black layer



Mid-term results

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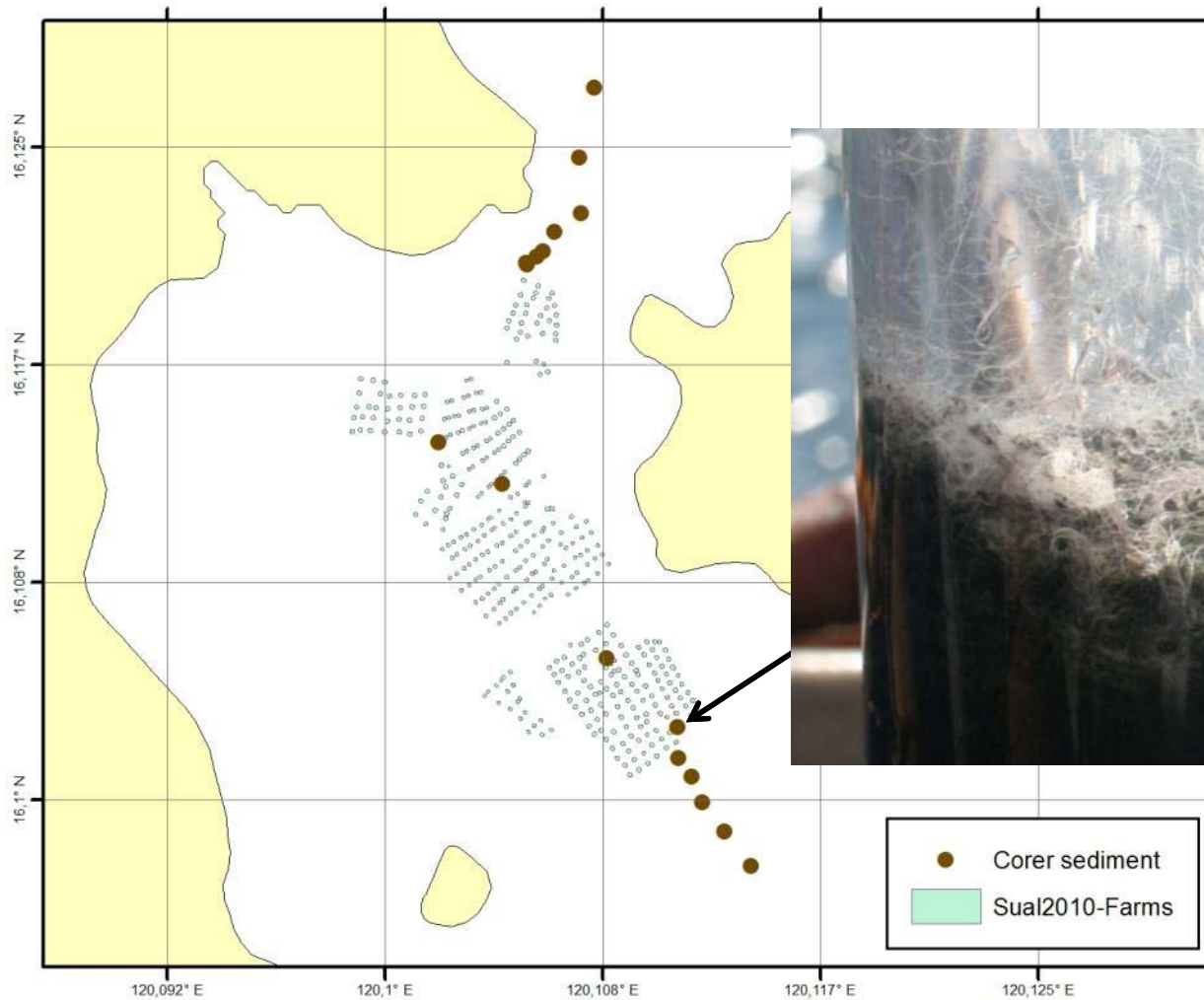
Corer in cage area 23 cm black layer



Mid-term results

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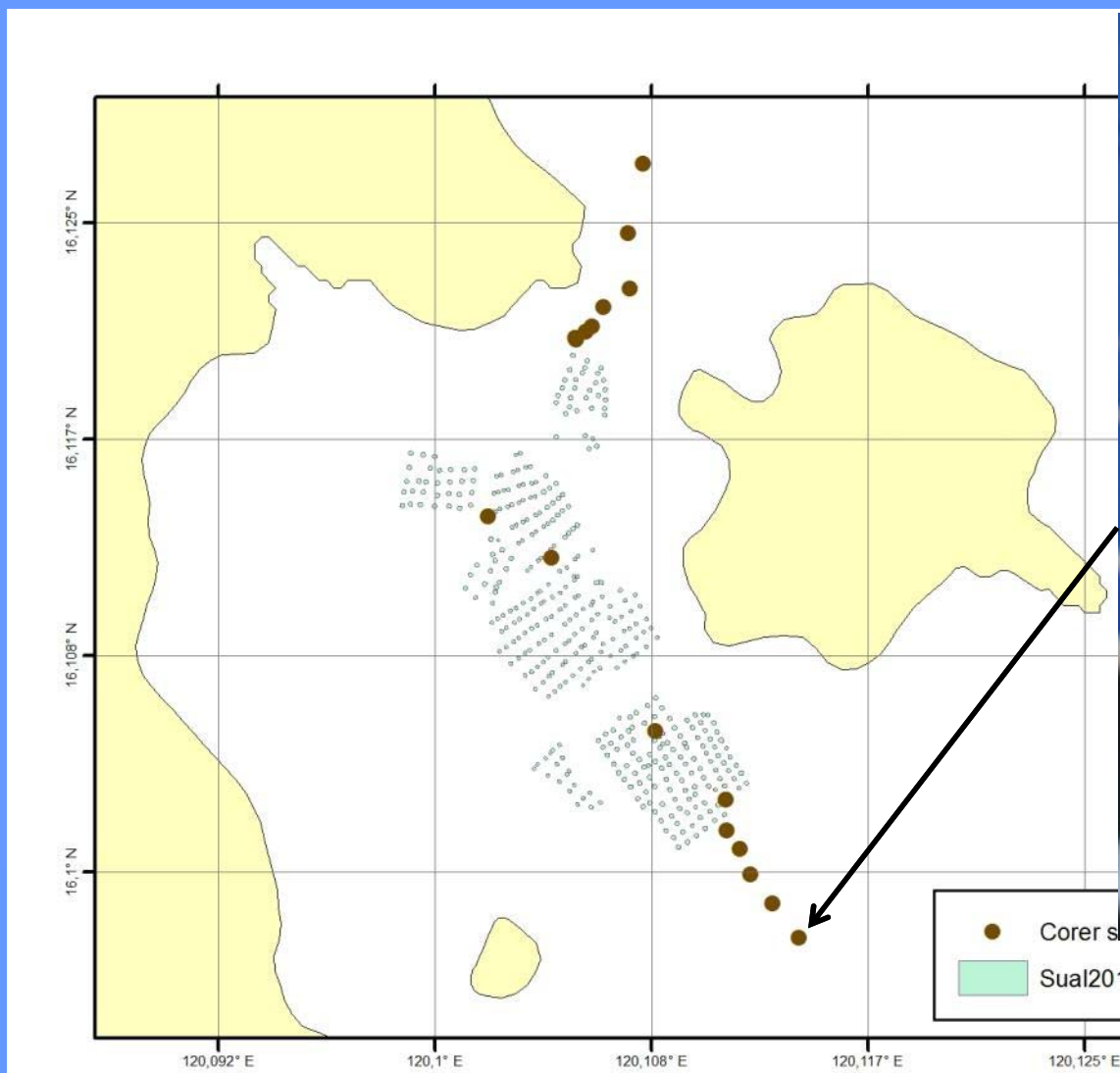
Corer in cage area Anoxic bacteria layer



Mid-term results

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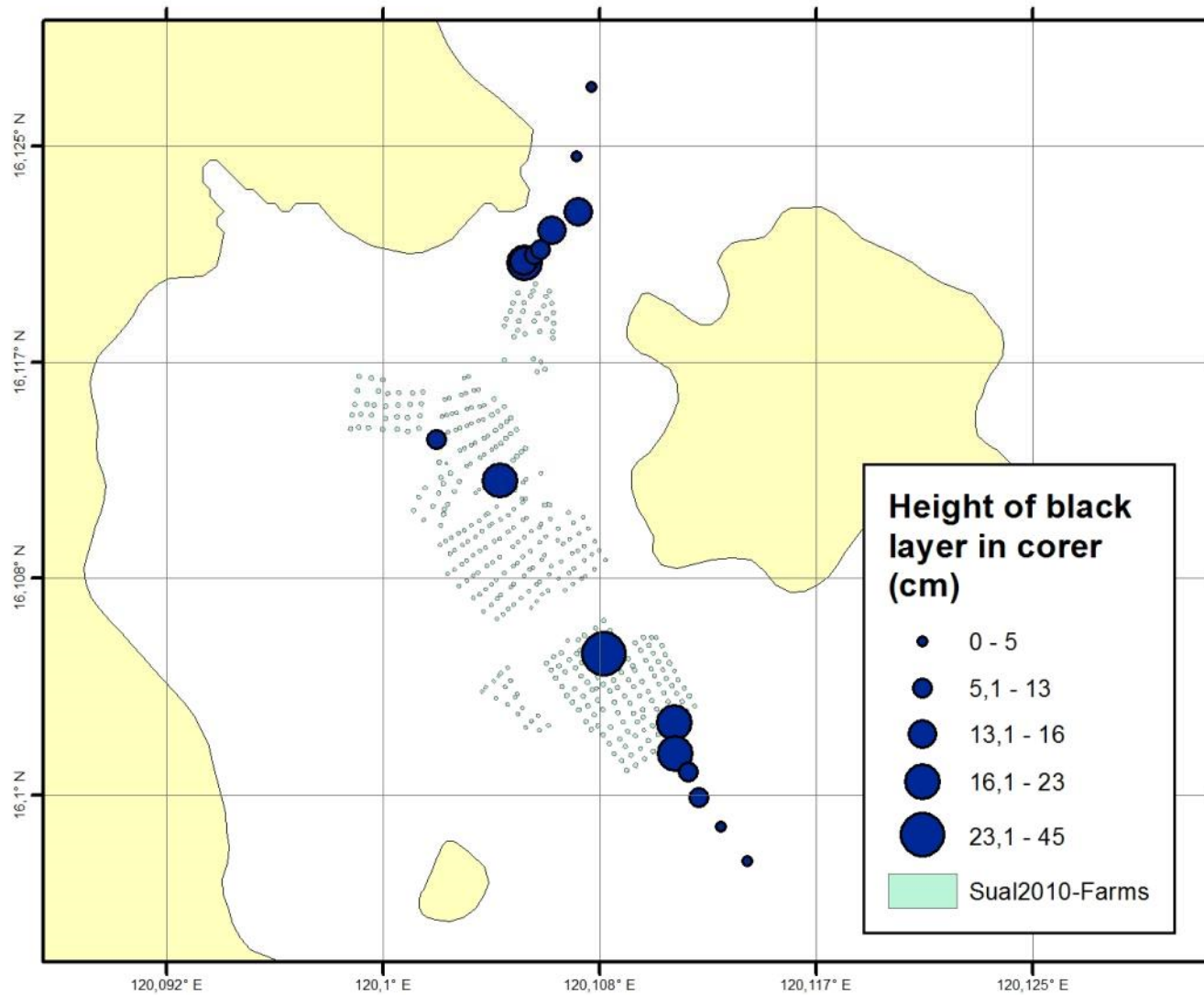
Corer 600 m from cage no black layer



Mid-term results

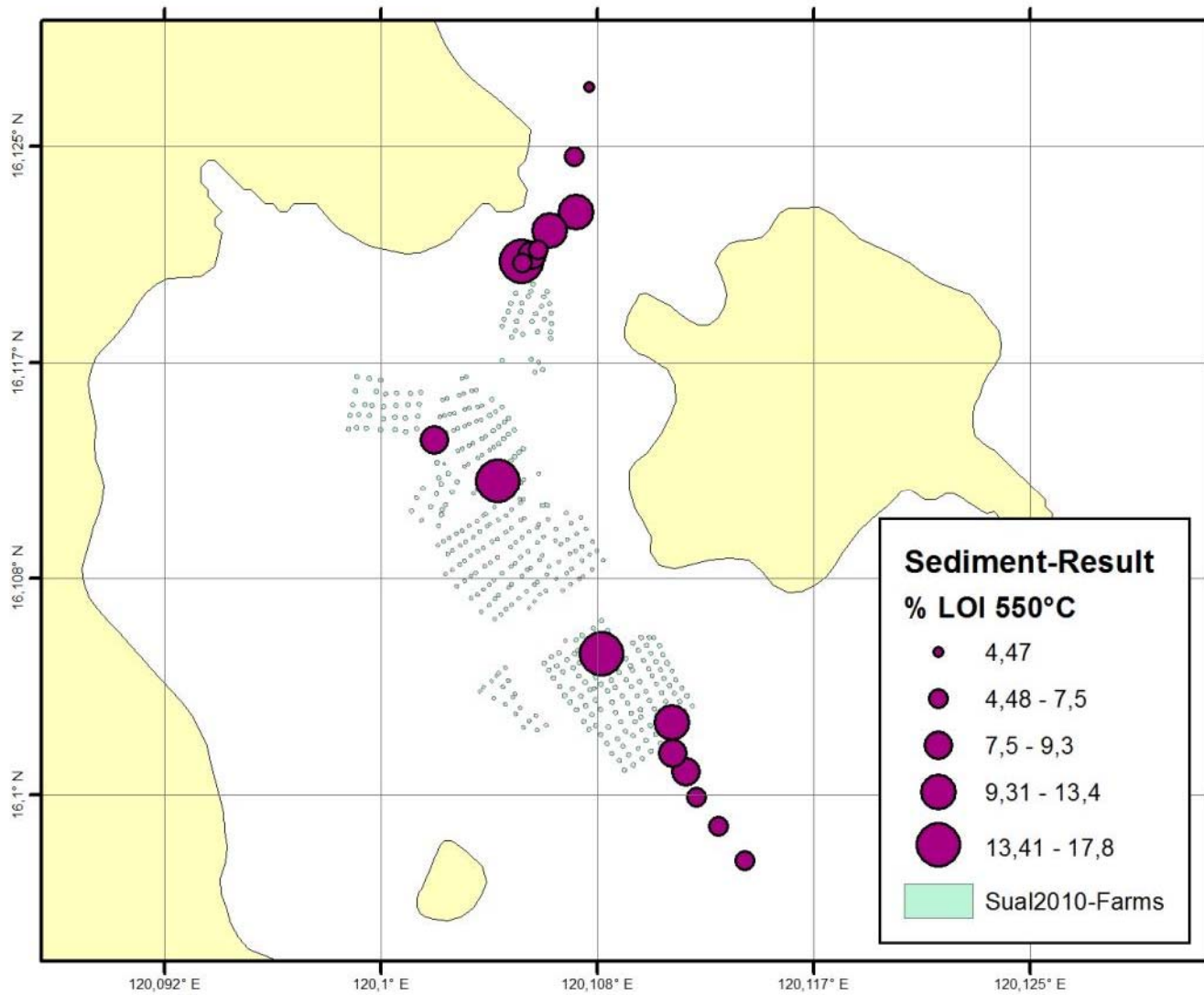
EMMA 2





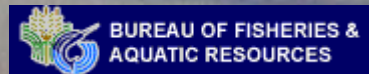
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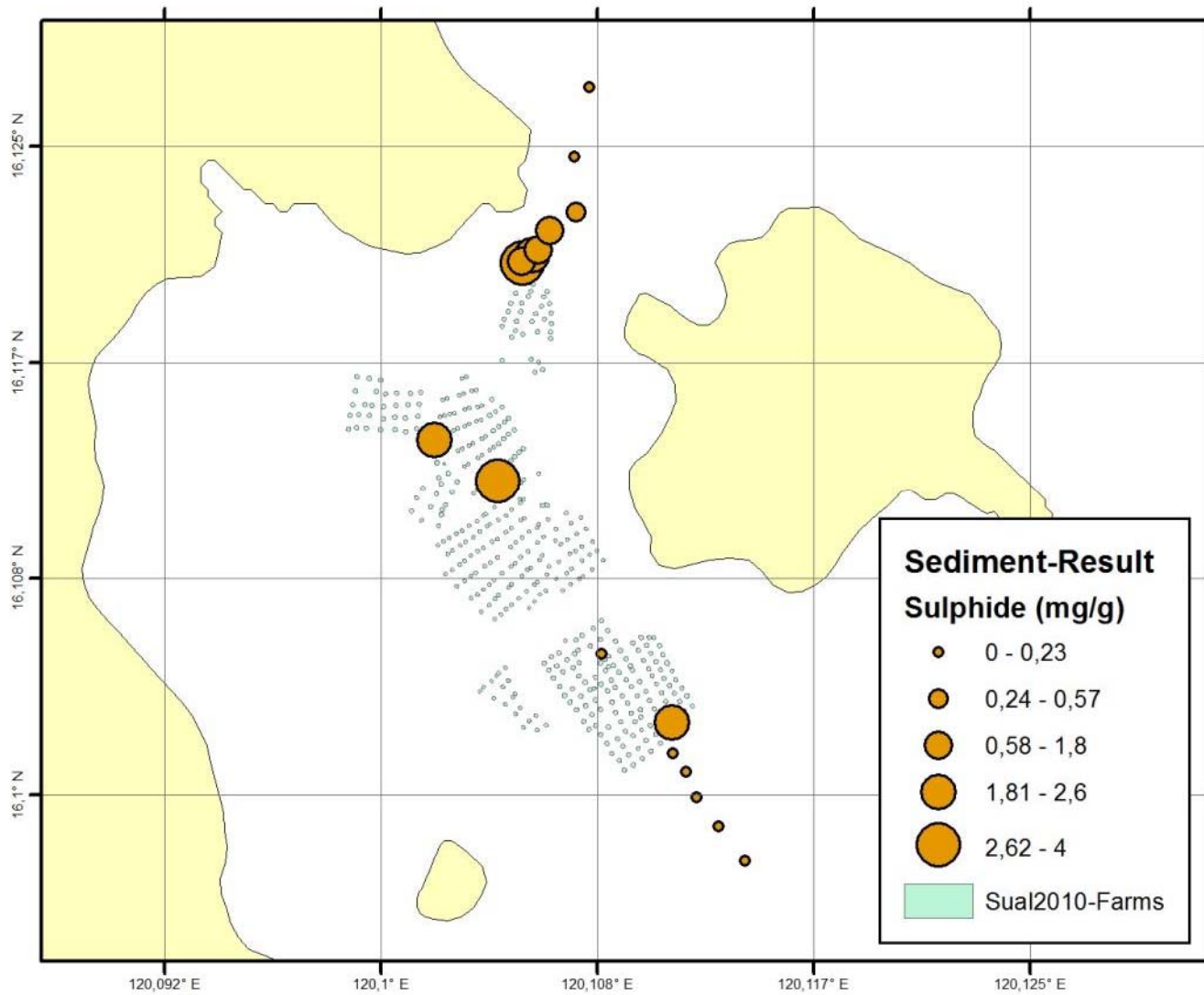
EMMA 2



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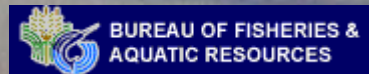
EMMA 2





Mid-term results

EMMA 2





SALAMAT PO

Mid-term results

EMMA 2

