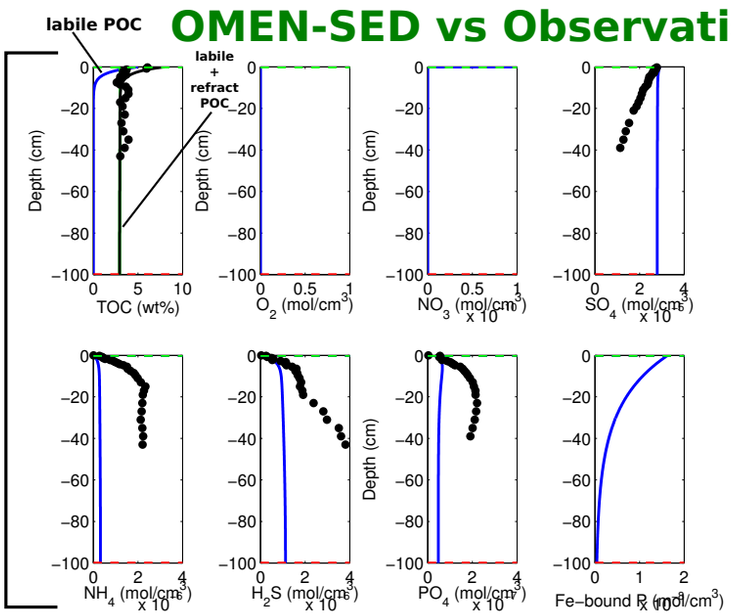
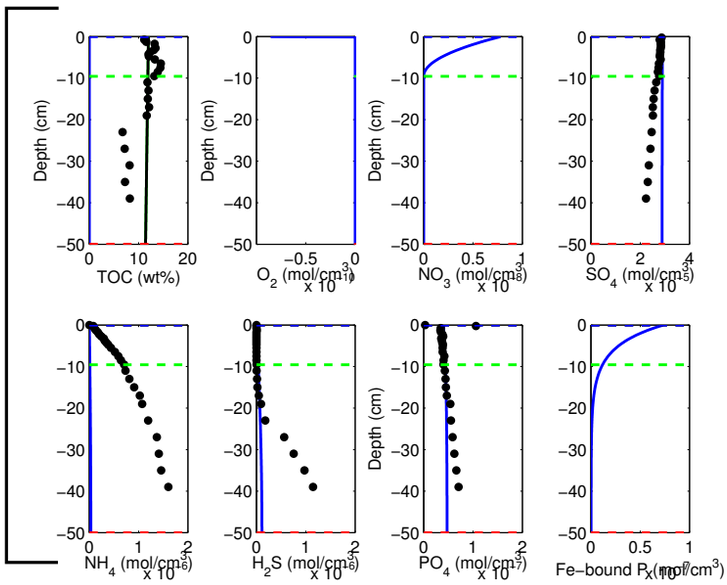
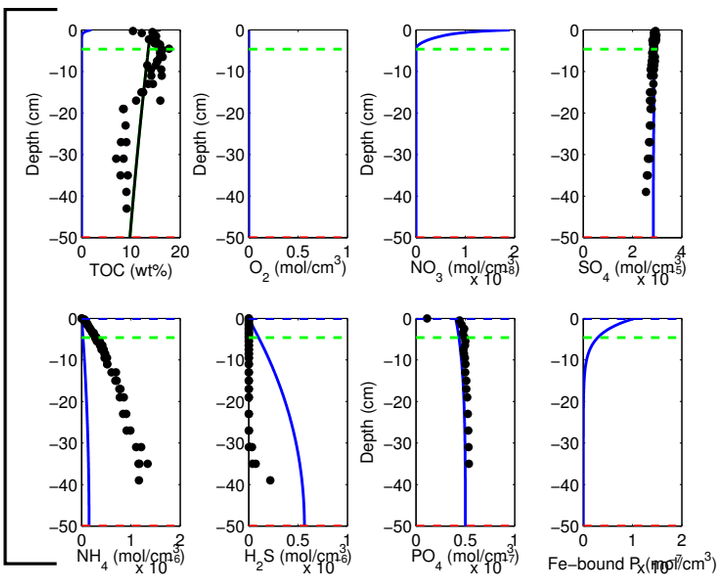
OMEN-SED vs Observations Dale et al. (2015, 2016)



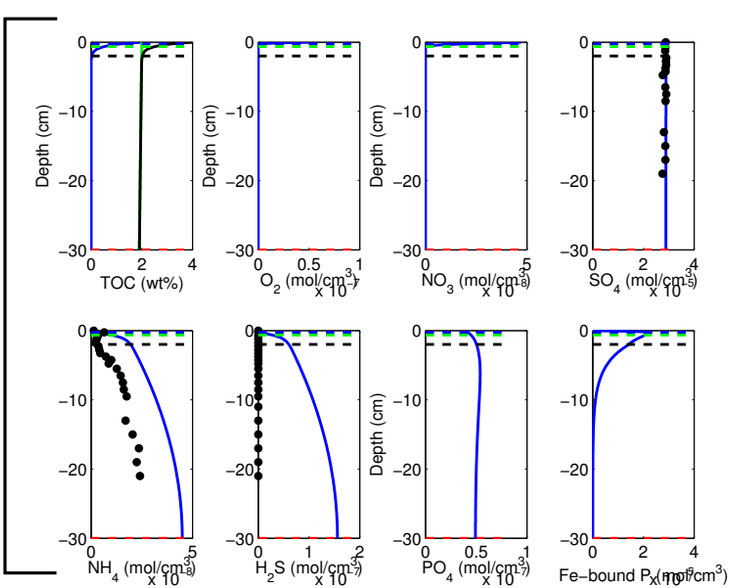
Middle Shelf 74m



Outer Shelf 195m



OMZ 250m



Below OMZ 1015m

Description	k1	k2	POC1	POC2	Temp	Porosity	sed. density	sed acc. Rate	Biot. Coeff	biot. depth	zinf	O2	NO3	NH4	SO4	H2S	PO4
	yr-1	yr-1	wt%	wt%	Celsius	-	g/cm^3	cm/yr	cm^2/yr	cm	cm	microM	microM	microM	milliM	microM	microM
Middle Shelf	0.174	0.0001	5	3	14	0.96	2	0.45	1	0	100	0	0	2	29	30	40
Outer Shelf	0.174	0.0001	0	12	13	0.96	2	0.1	1	0	50	0	7.8	2	29	0	40
OMZ	0.174	0.0005	0	15	12	0.96	2	0.07	0.5	0	50	0	11.9	1.5	29	0	40
Below OMZ	0.174	0.0001	2	2	4.4	0.76	2	0.06	0.01	2	30	50	47	0.697	29	0	40

NOTE:
Diff. sediment depth scales
Diff. concentration scales

RESULTS:
In Model:
SO4: always to high
NH4: always to low, except below OMZ, where very low NH4 values
H2S: too low except for OMZ

Actually for Outer Shelf and OMZ, I just use one POC fraction (1-G model)

Another thing I changed to fit PO4 profile:
Equil. concentr. for authigenic P formation 47e-9 **%was 3.7e-9**

Will ask for NO3 data and TOC at Below OMZ

Questions:

Need a better fit!?
What to play with in the model?