

# Mean effects of atmospheric nutrient inputs in the pelagic Mediterranean Sea

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**G. Crispi and A. Crise**



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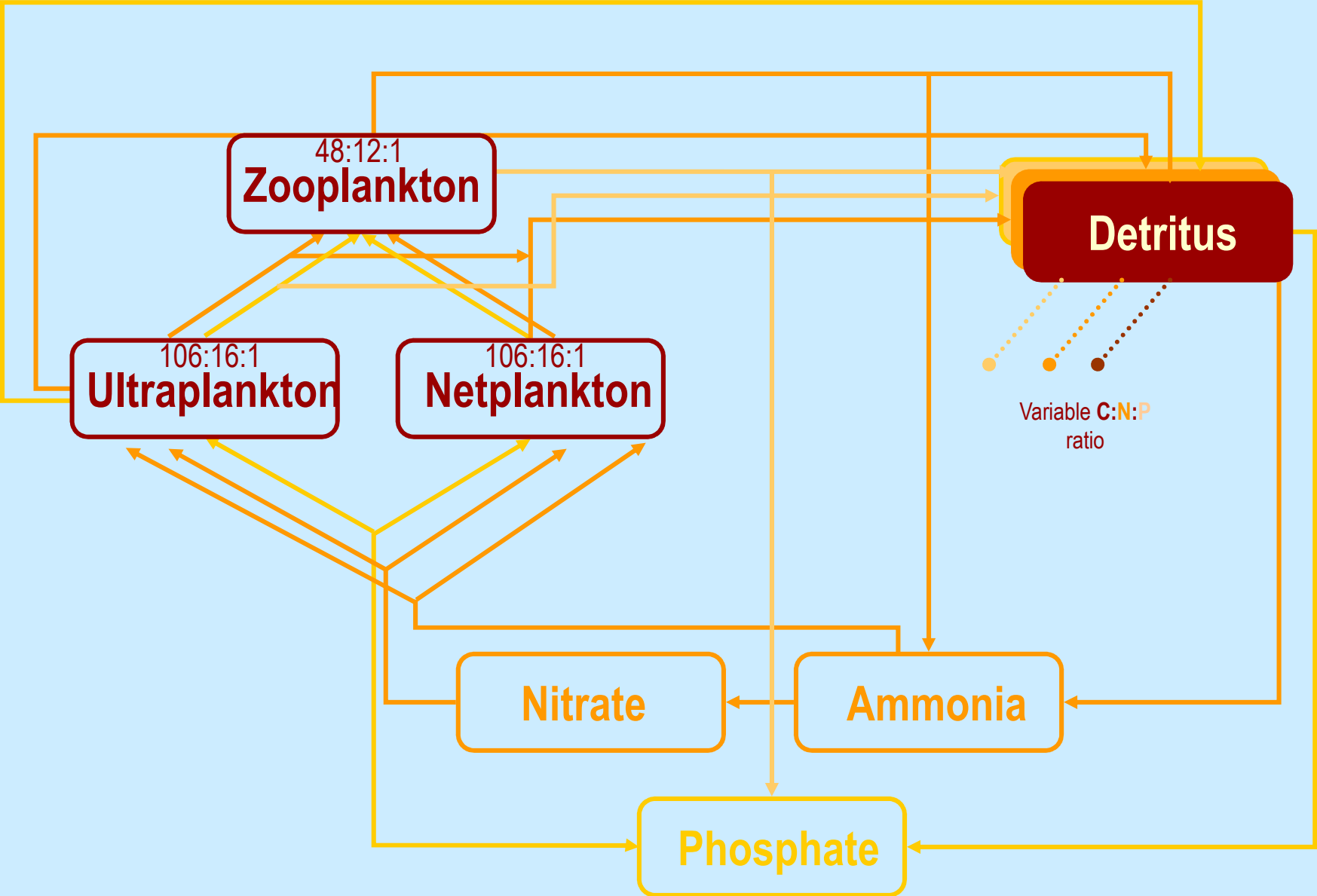


# ECHYM

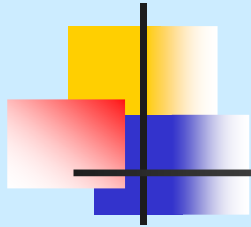
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- Nutrient limitation
- Phytoplankton seasonal cycling
- Matter recirculation

# ECHYM Biochemical Compartments



# Initial conditions for Nutrients



- Nitrate vertical profiles
- Ammonia null
- Redfield for  $\text{PO}_4$

Depth  
(km)



Alboran (Coste et al., 1988)

Ligurian (Coste et al., 1988)

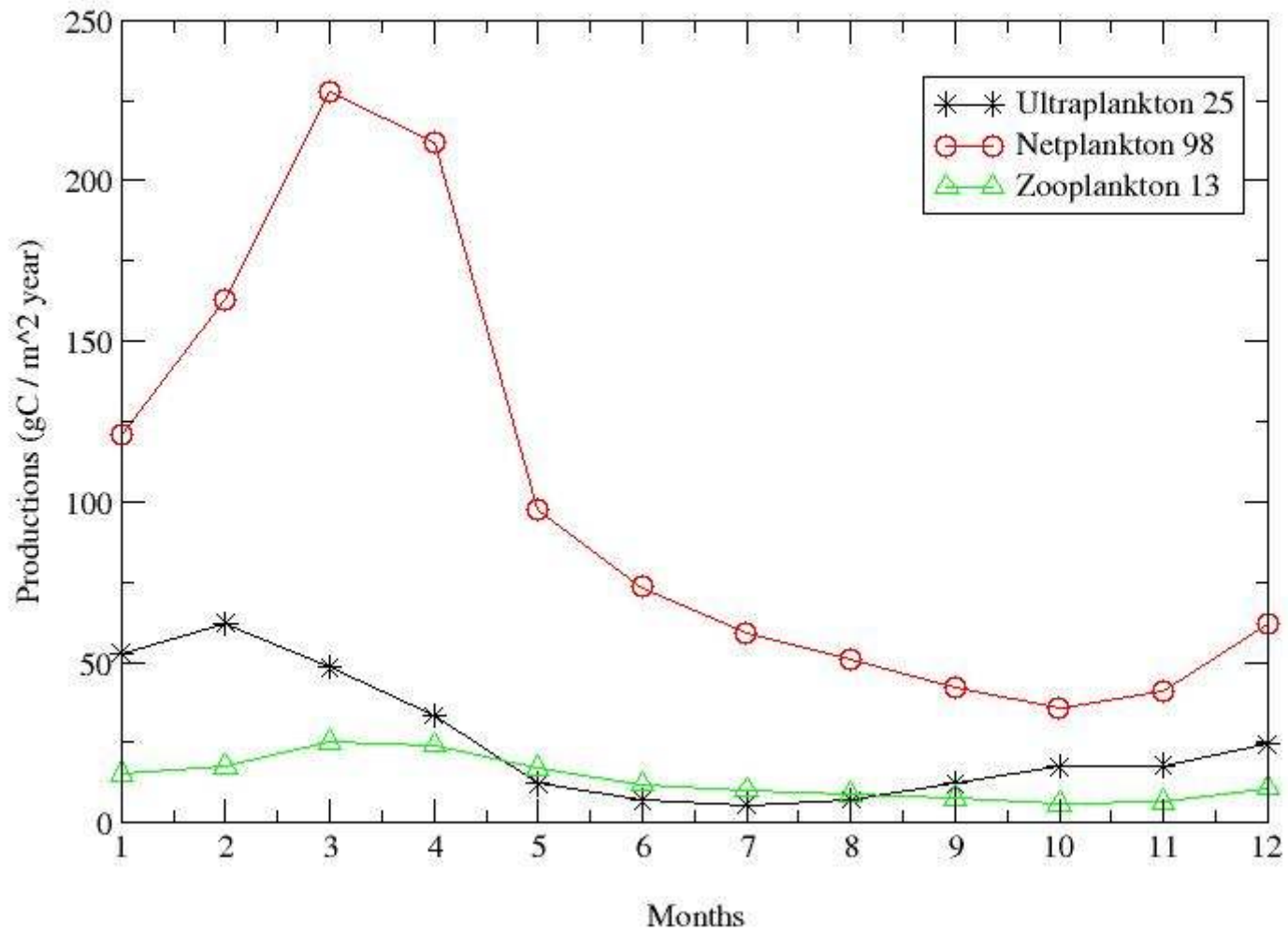
Tyrrhenian (POEM Group, 1992)

Eastern Med. (Rabitti et al., 1994)

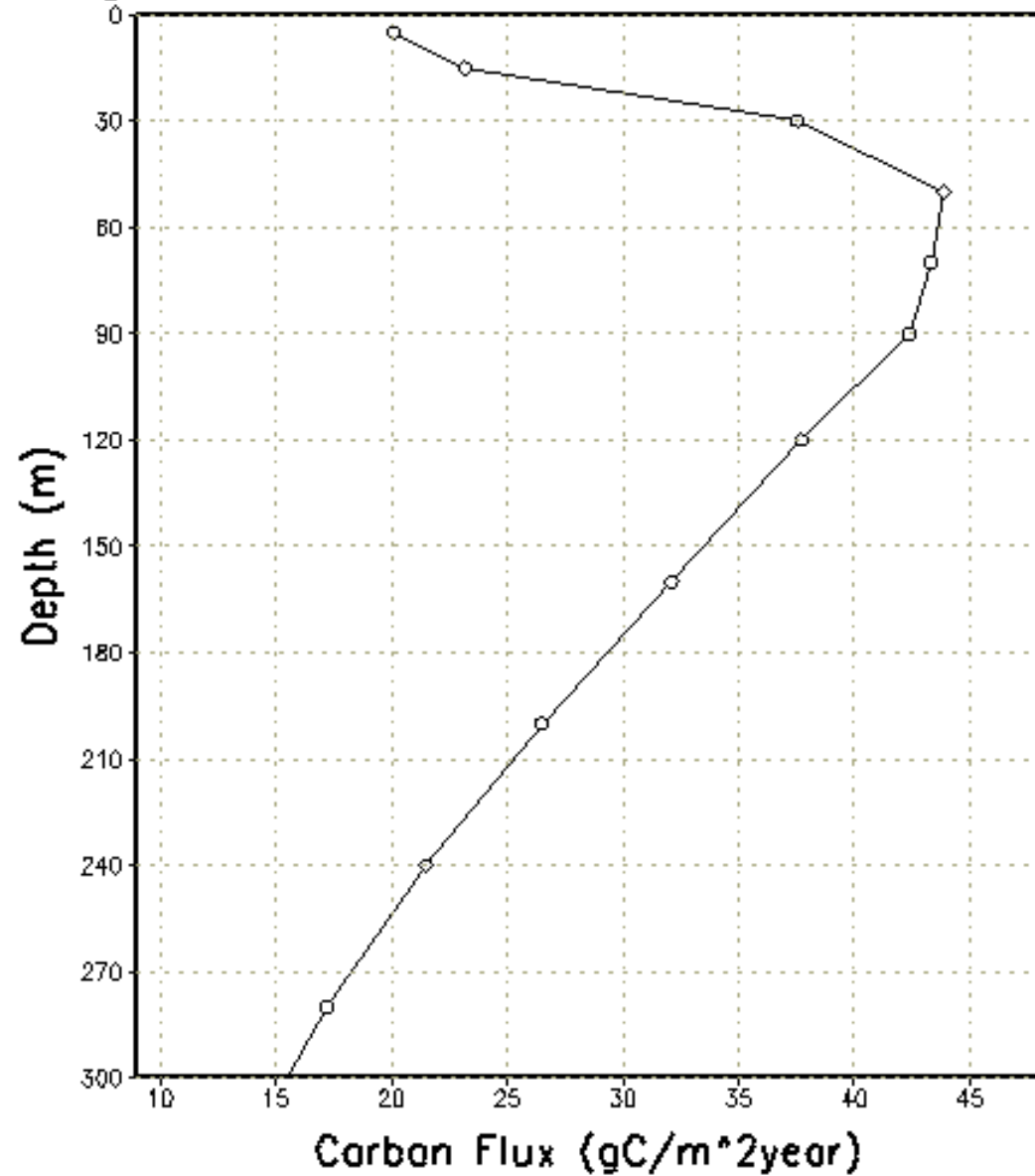
Aegean (McGill, 1970)

Initial Concentrations ( $\mu\text{MN/l}$ )

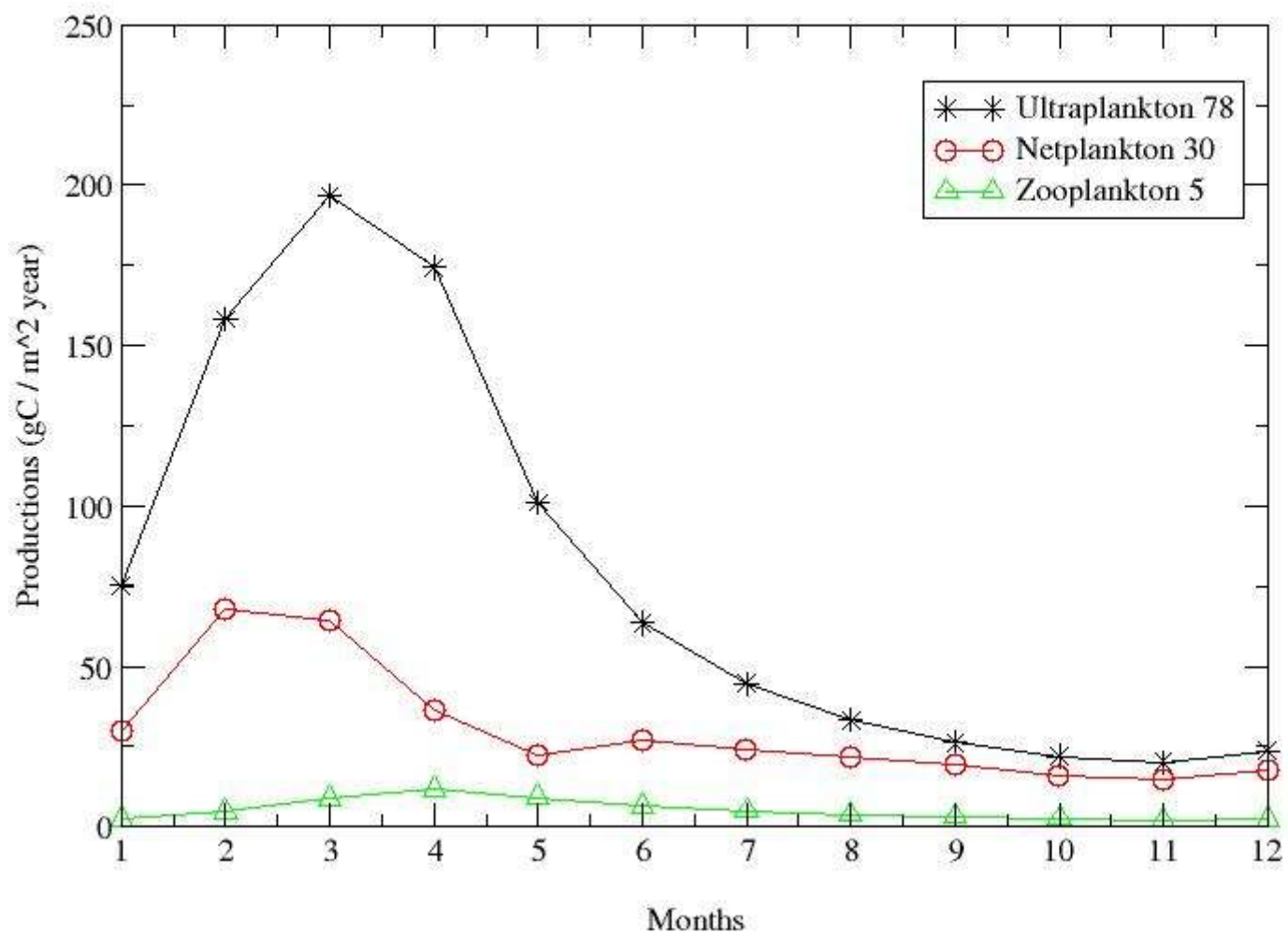
## Western Basin Productions



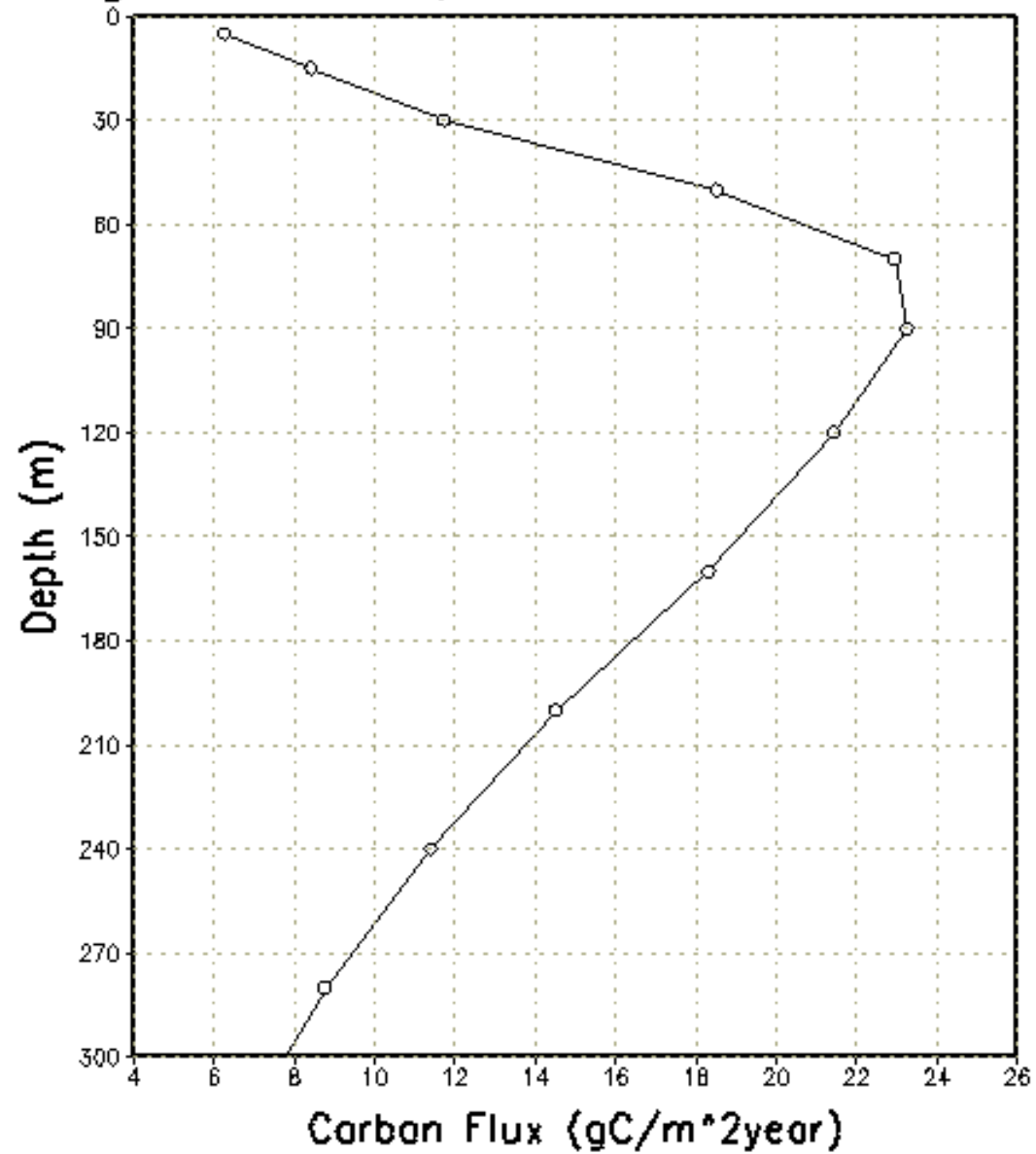
## Average Carbon Export in Western Mediterranean



## Eastern Basin Productions



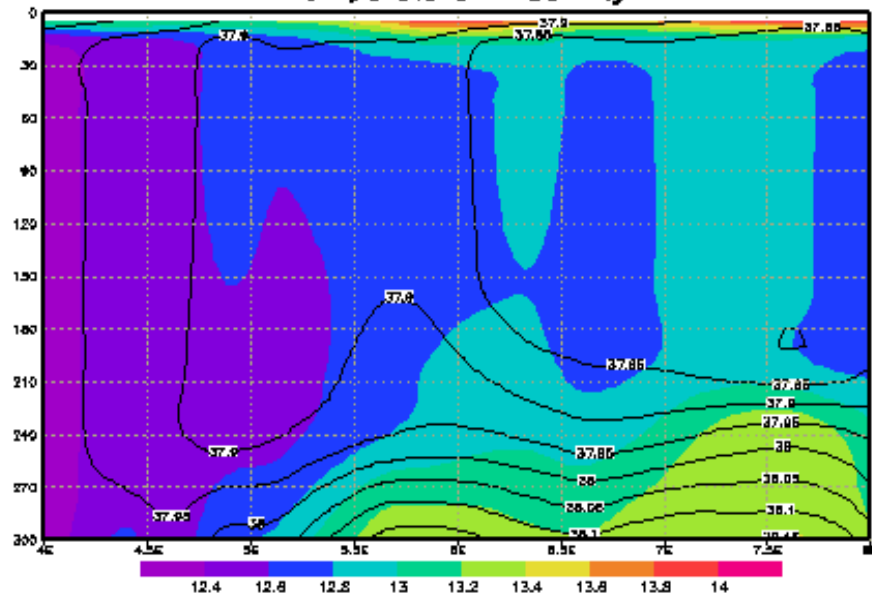
## Average Carbon Export in Eastern Mediterranean



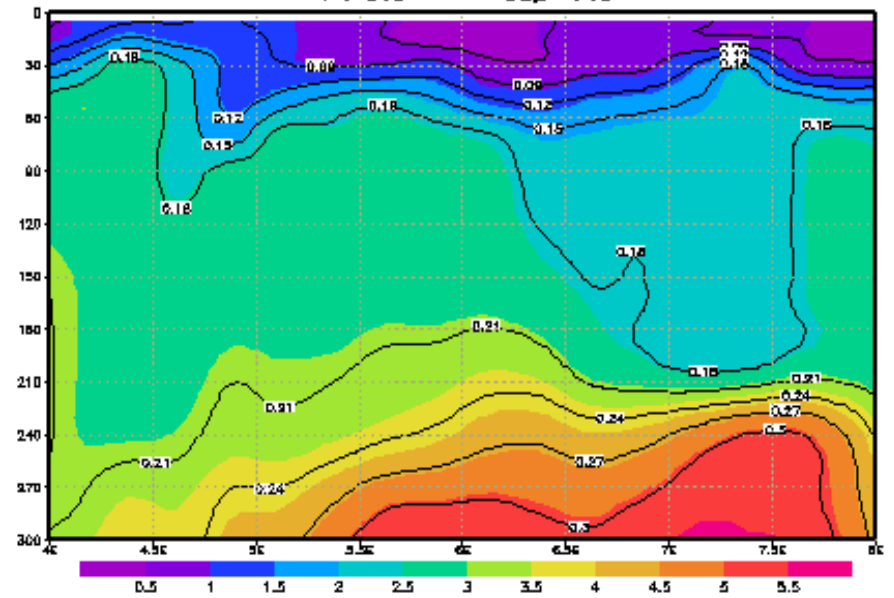


# No Flux in April at 42.5N

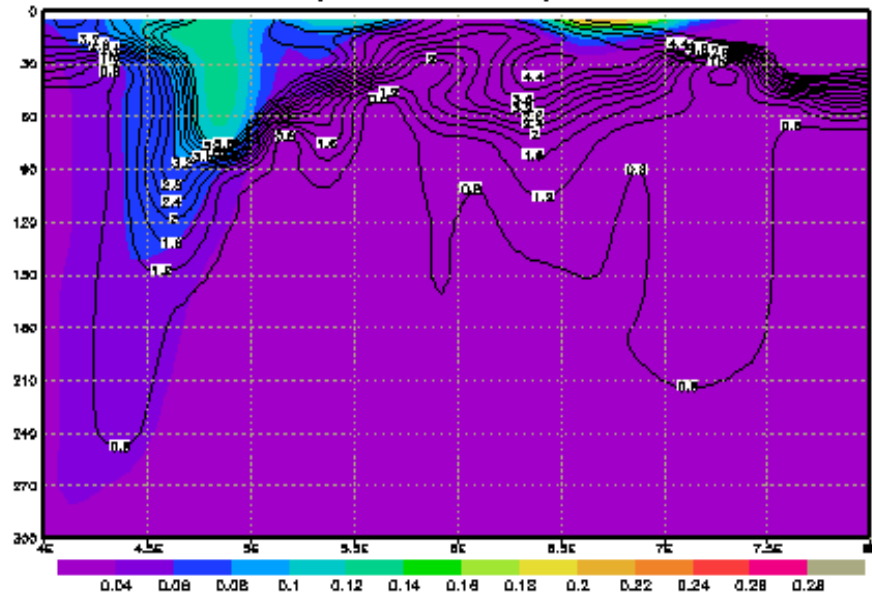
### Temperature - Salinity



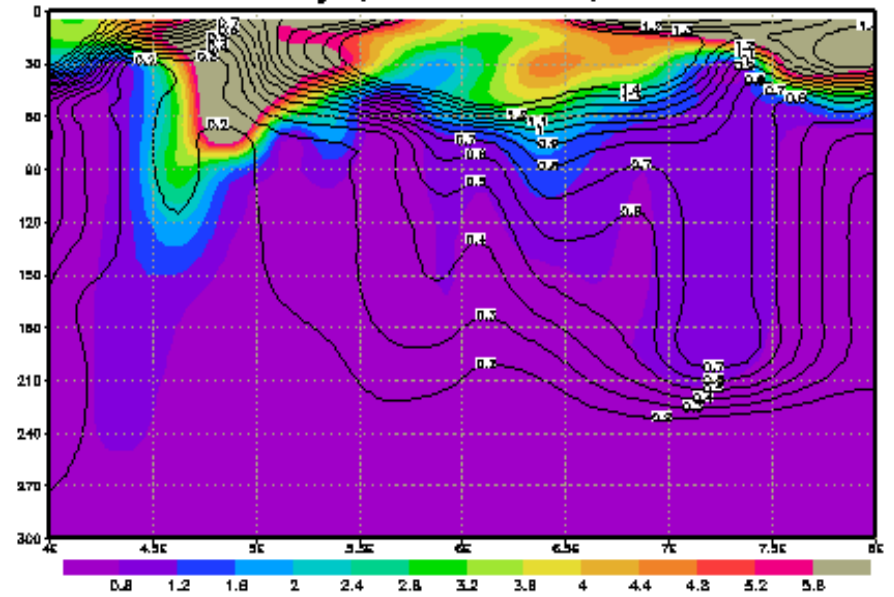
### Nitrate - Phosphate



### Ultraplankton - Netplankton

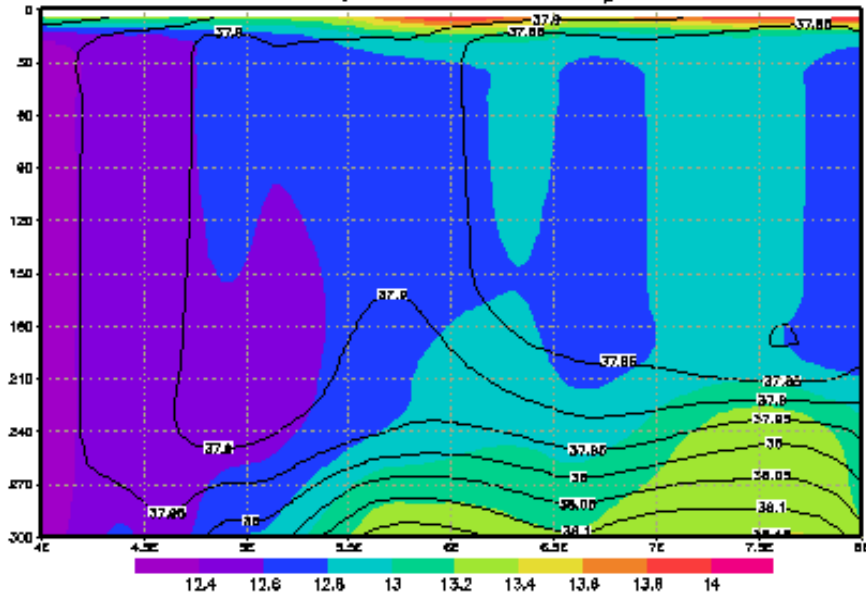


### Total Phytoplankton - Zooplankton

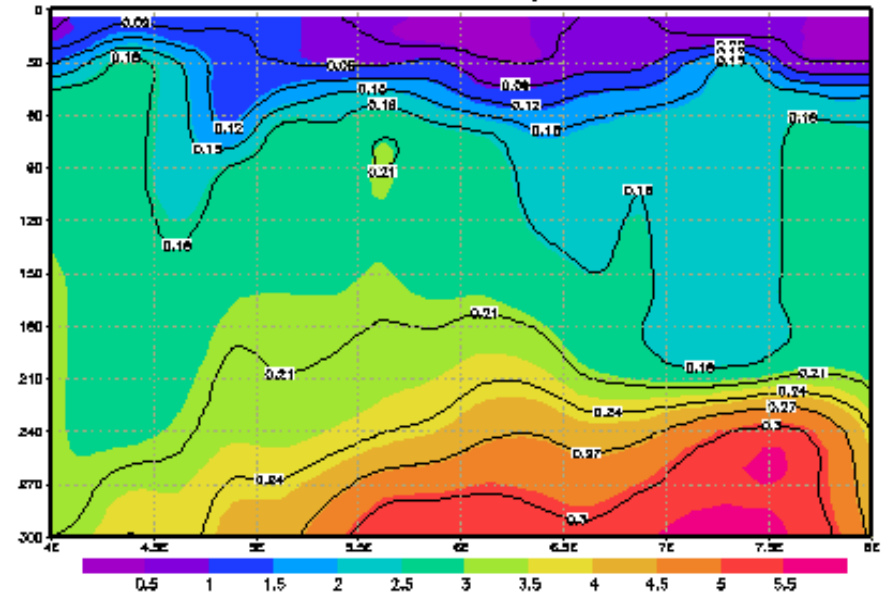


# Low Flux in April at 42.5N

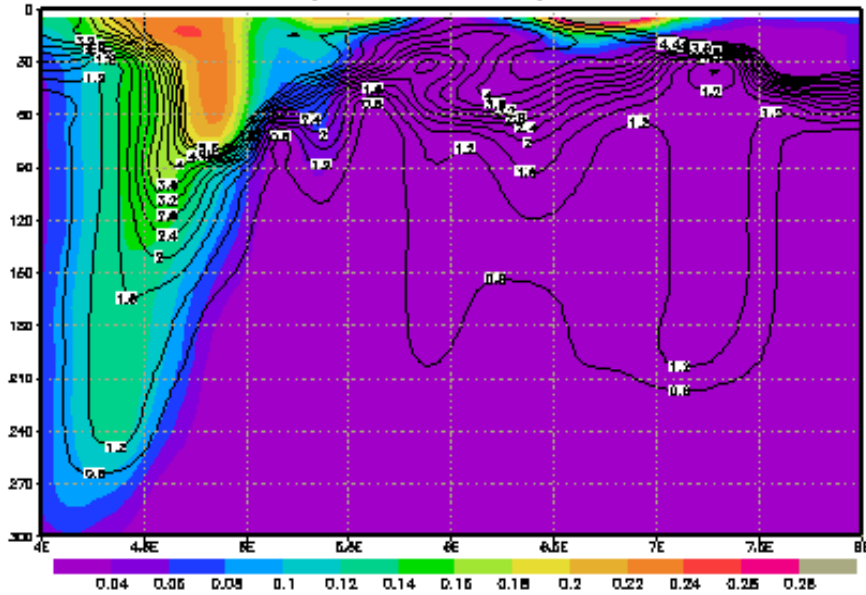
### Temperature - Salinity



### Nitrate - Phosphate



### Ultraplankton - Netplankton



### Total Phytoplankton - Zooplankton

