

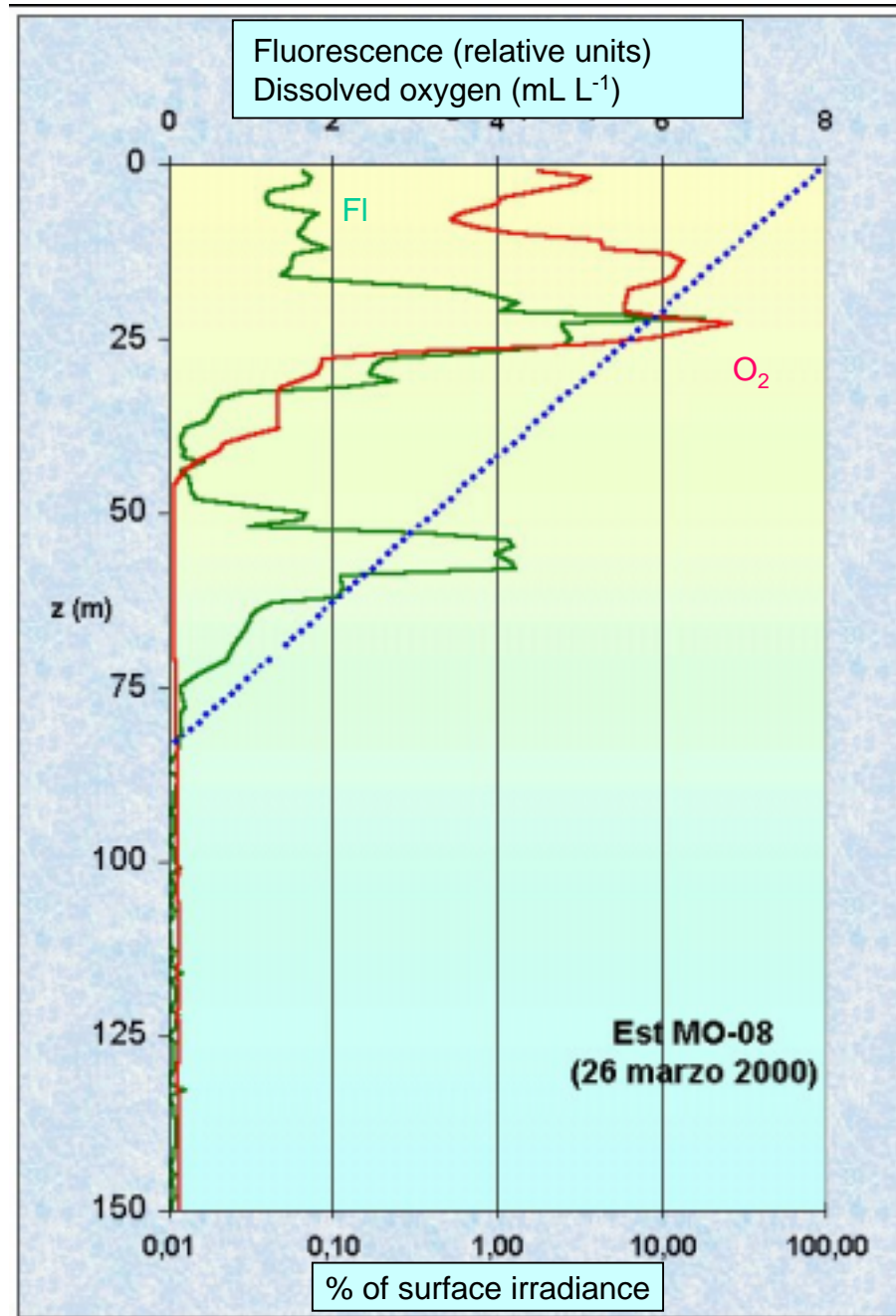
# **Picophytoplankton in the Oxygen Minimum Zone of the eastern South Pacific**

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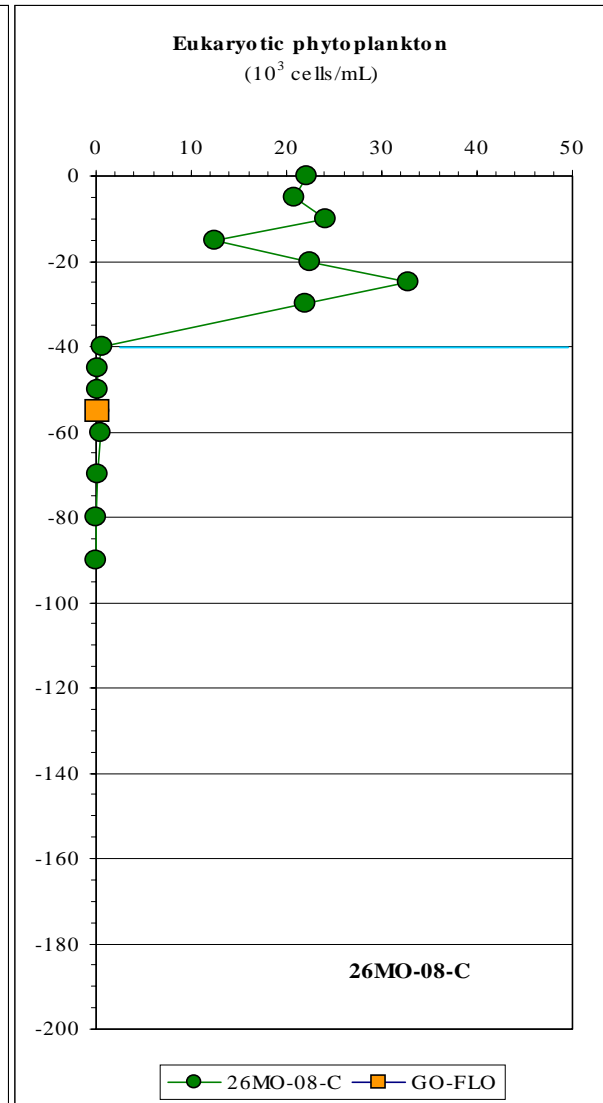
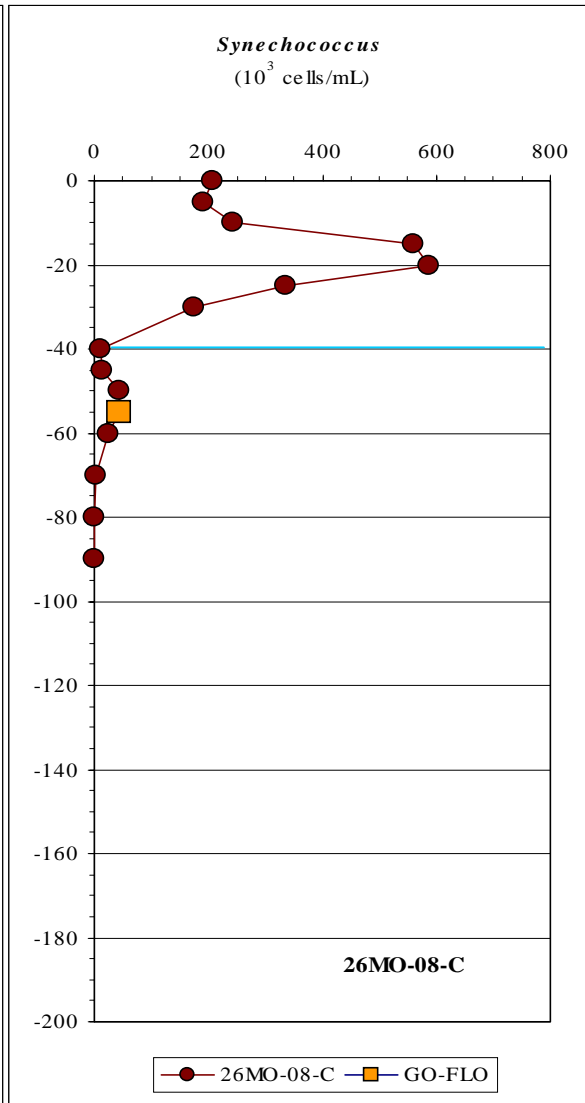
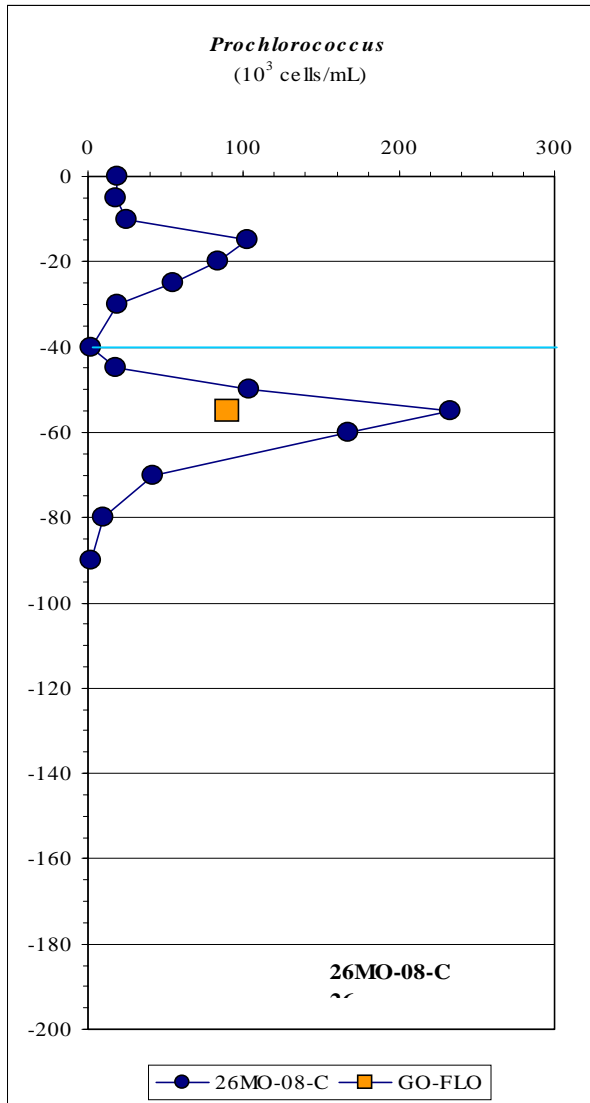
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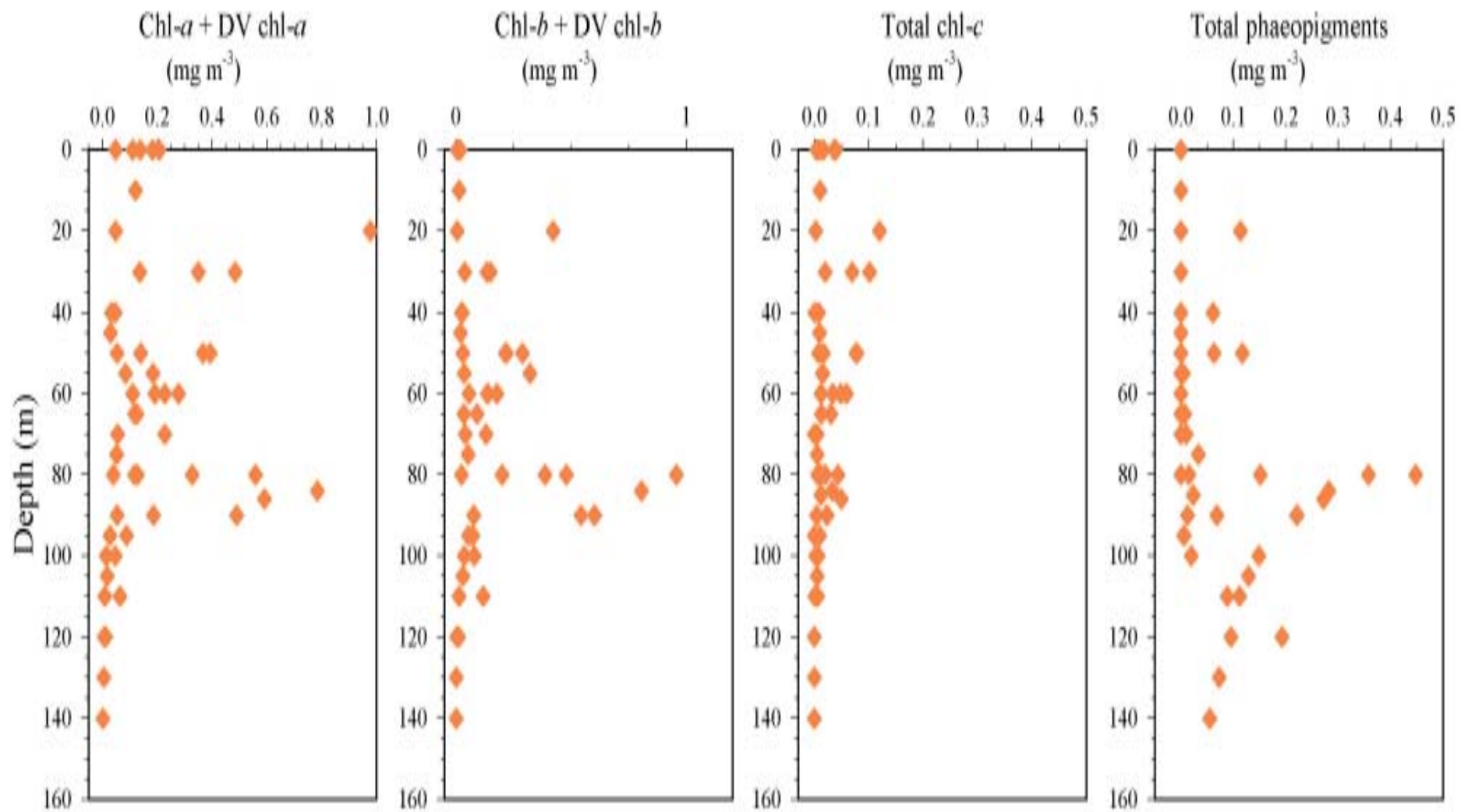
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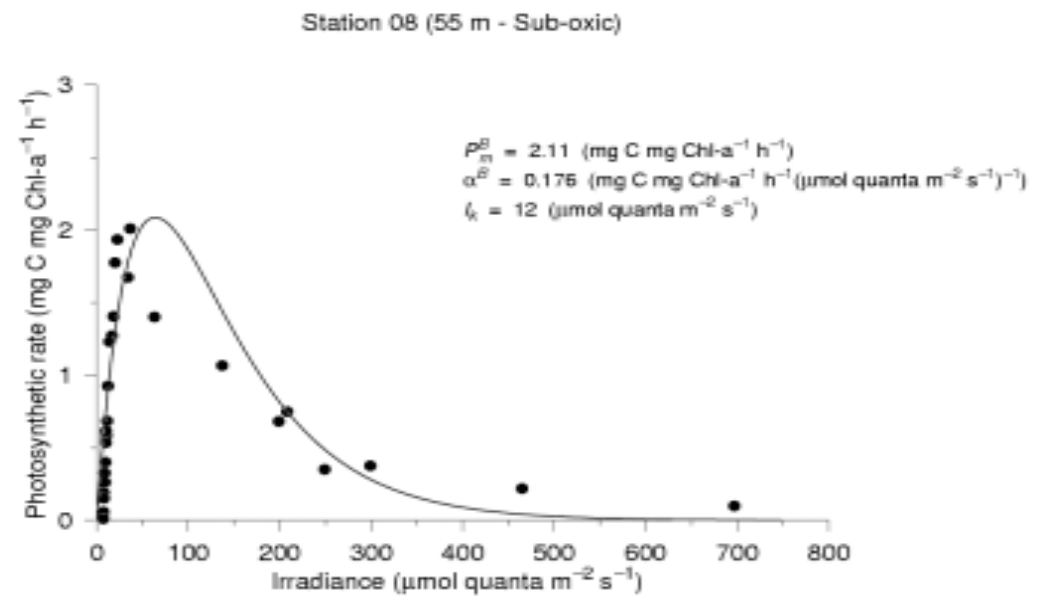
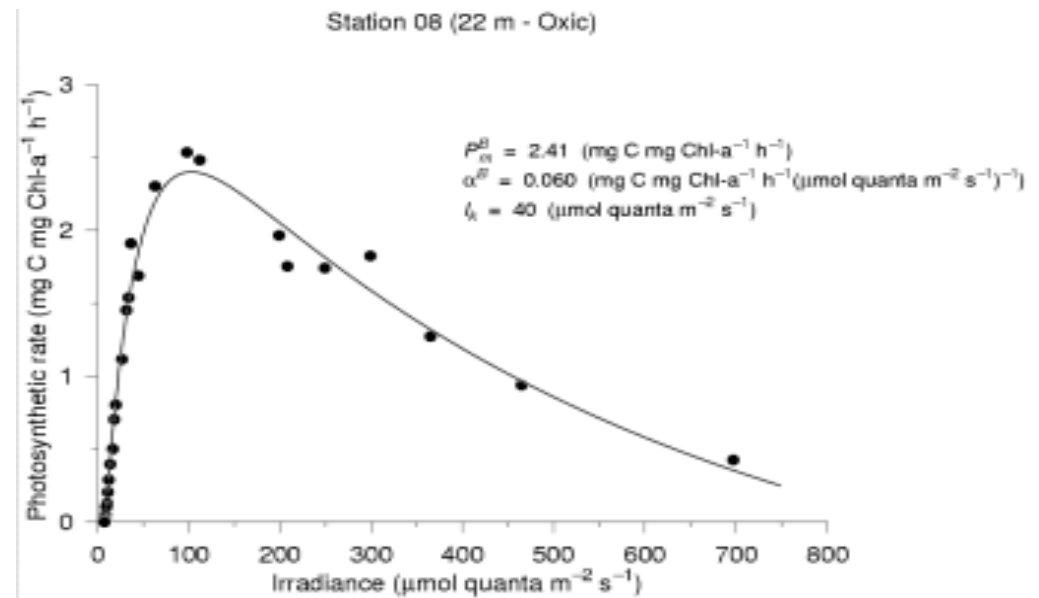


## OBJECTIVES

- To establish the origin/composition of the sub-surface fluorescence peak under sub-oxic conditions. We hypothesized that this peak is due to a picophytoplanktonic community living in the the OMZ.
- To evaluate experimentally -under controlled light and oxygen conditions- if photosynthesis takes place under in the sub-oxic subsurface layer.







## CONCLUSION

In the Oxygen Minimum Zone of the eastern South Pacific there is a photosynthetically active picophytoplanktonic community, composed mainly of cyanobacteria of the genus *Prochlorococcus*. They appear well adapted to the sub-oxic and low-light conditions existent, the latter due principally to their observed high light absorption characteristics resulting from very high intracellular concentrations of divinyl chl-a and -b.