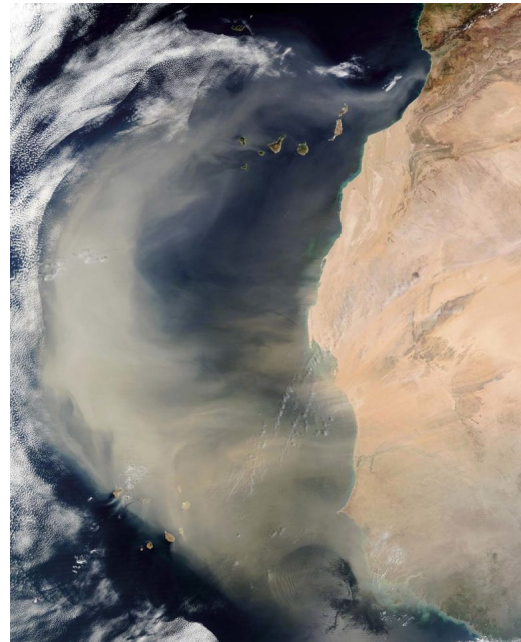


The effect of dust events in subtropical waters

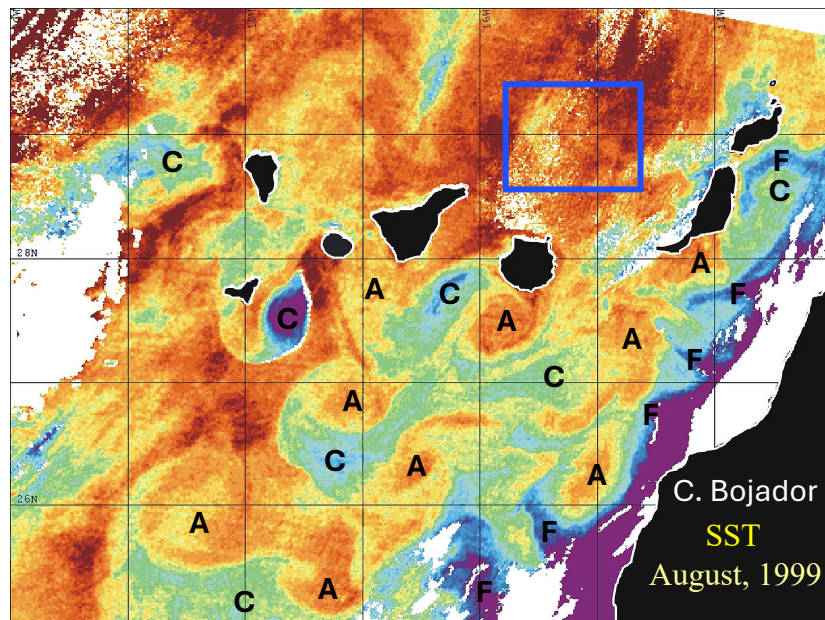
Santiago Hernández-León

Instituto de Oceanografía y Cambio Global (IOCAG)

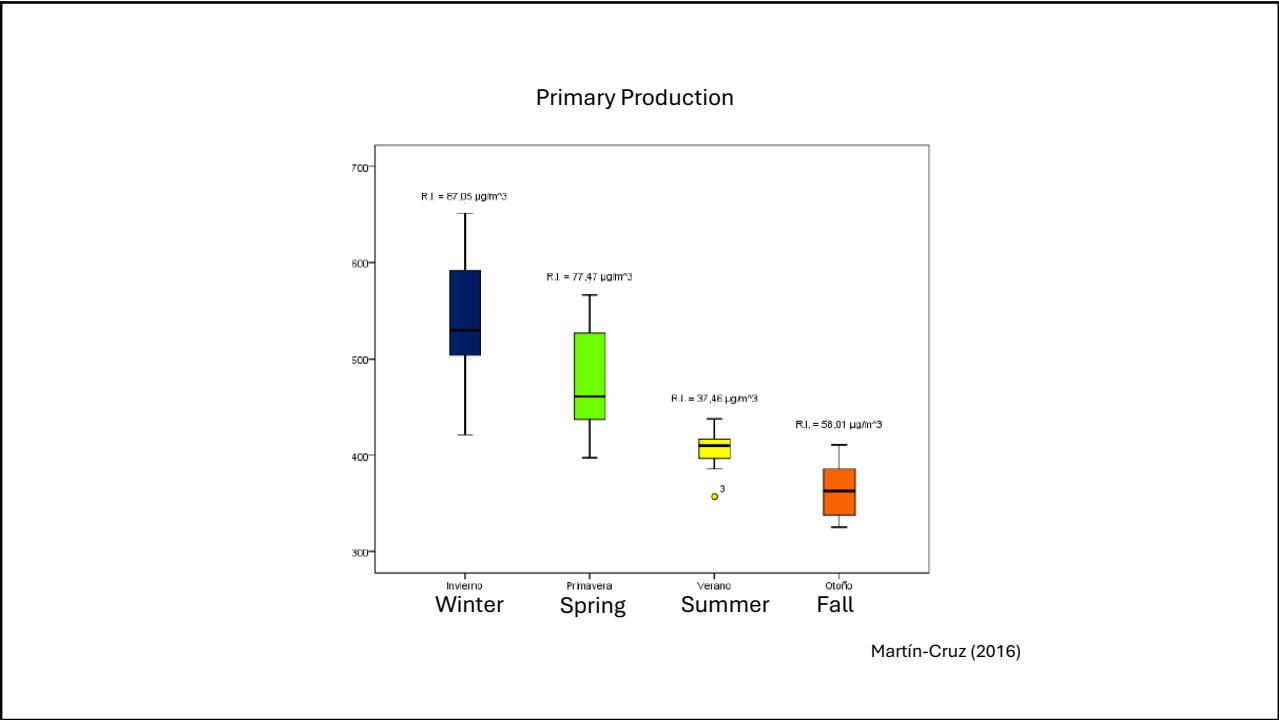
Universidad de Las Palmas de Gran Canaria (ULPGC)



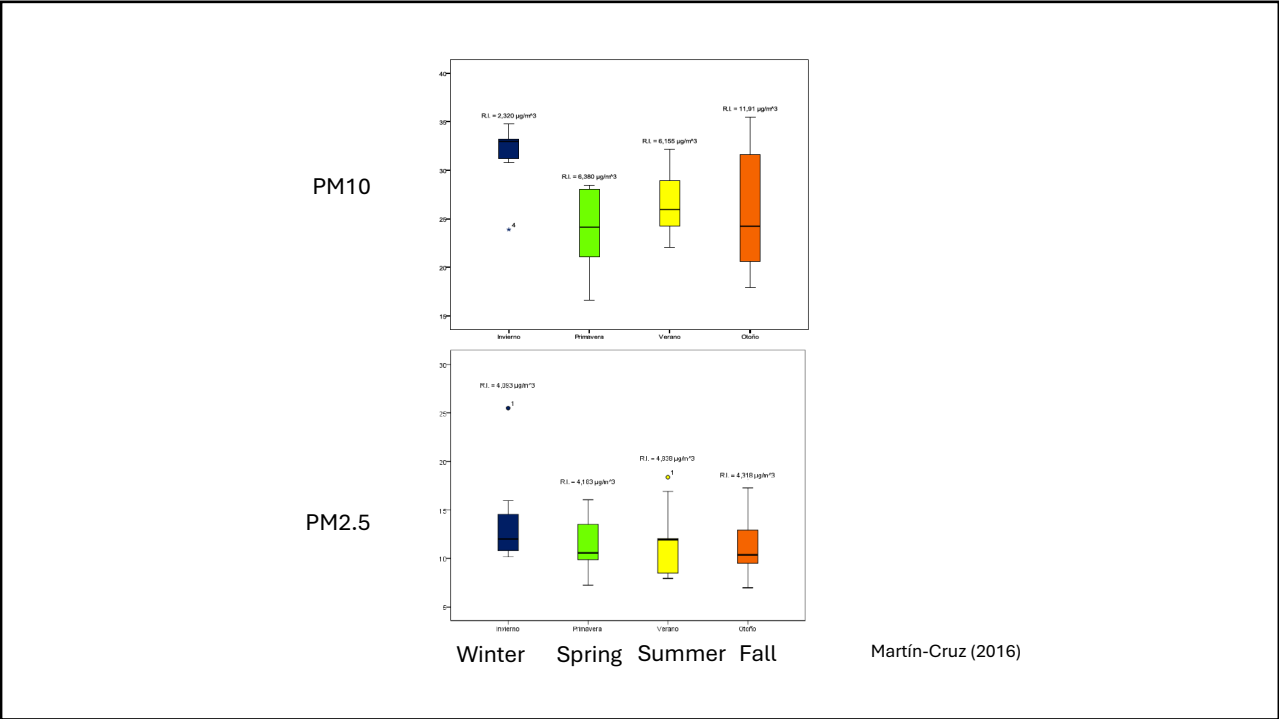
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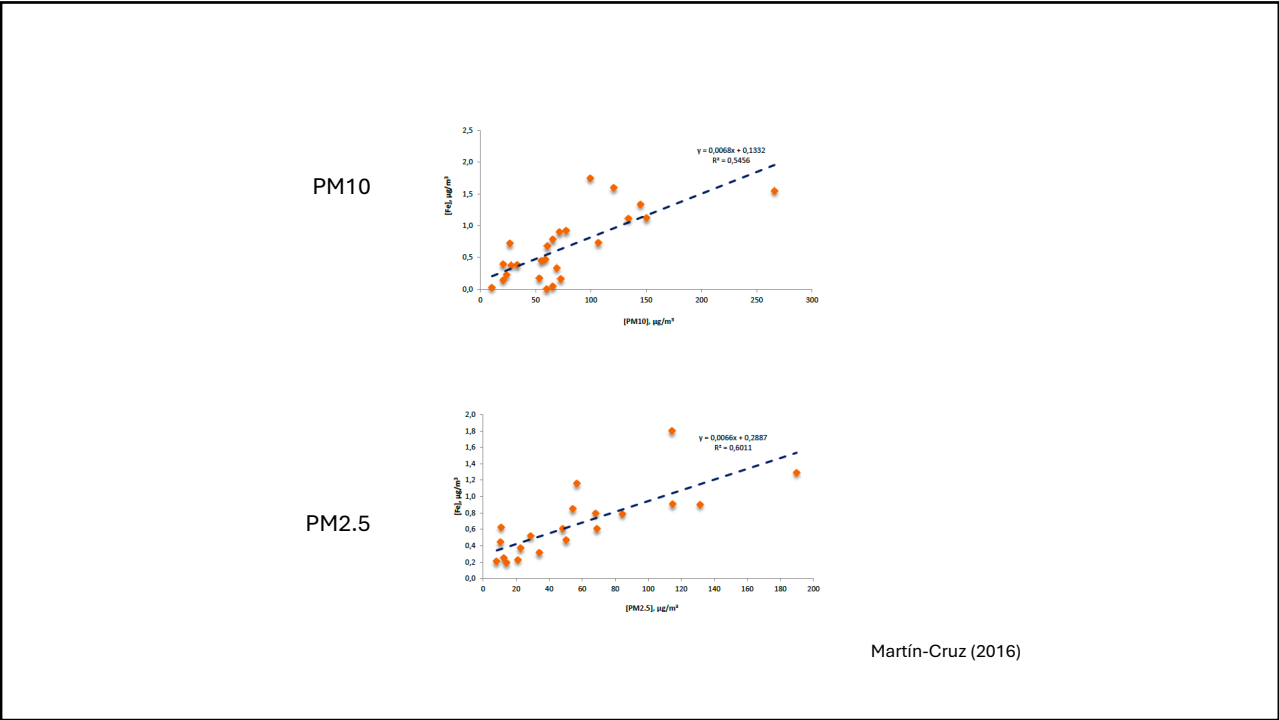
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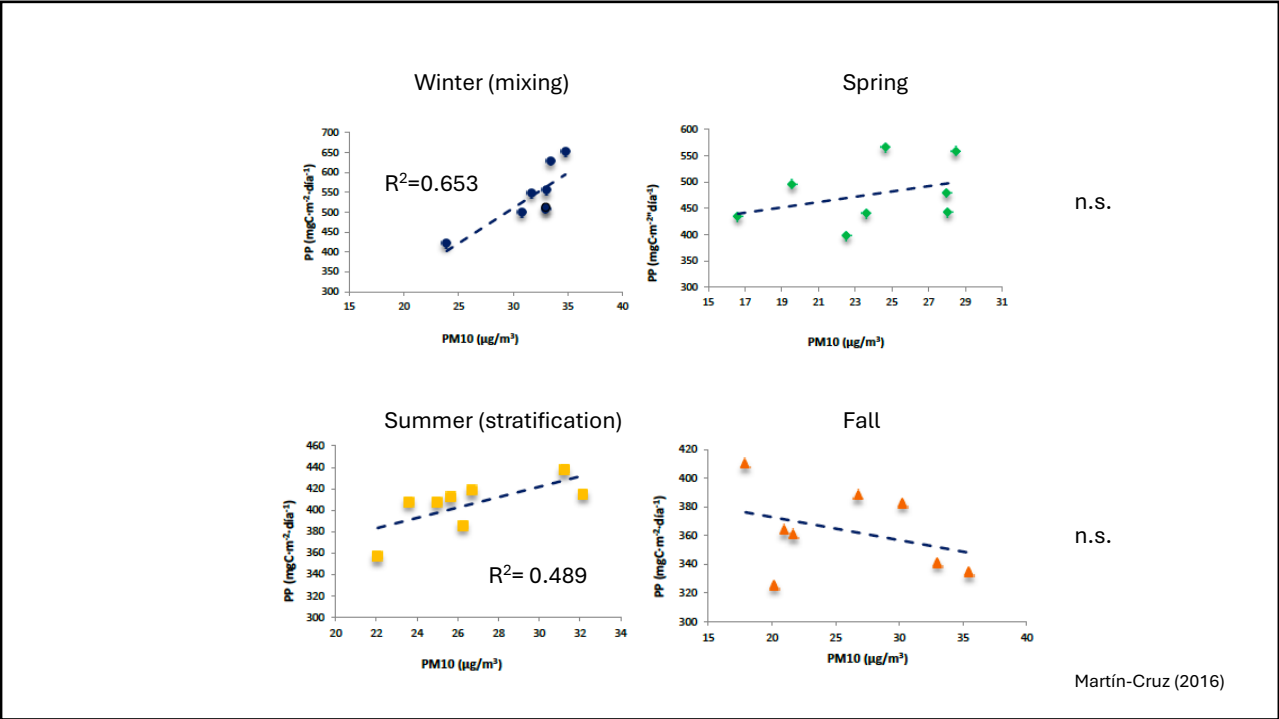
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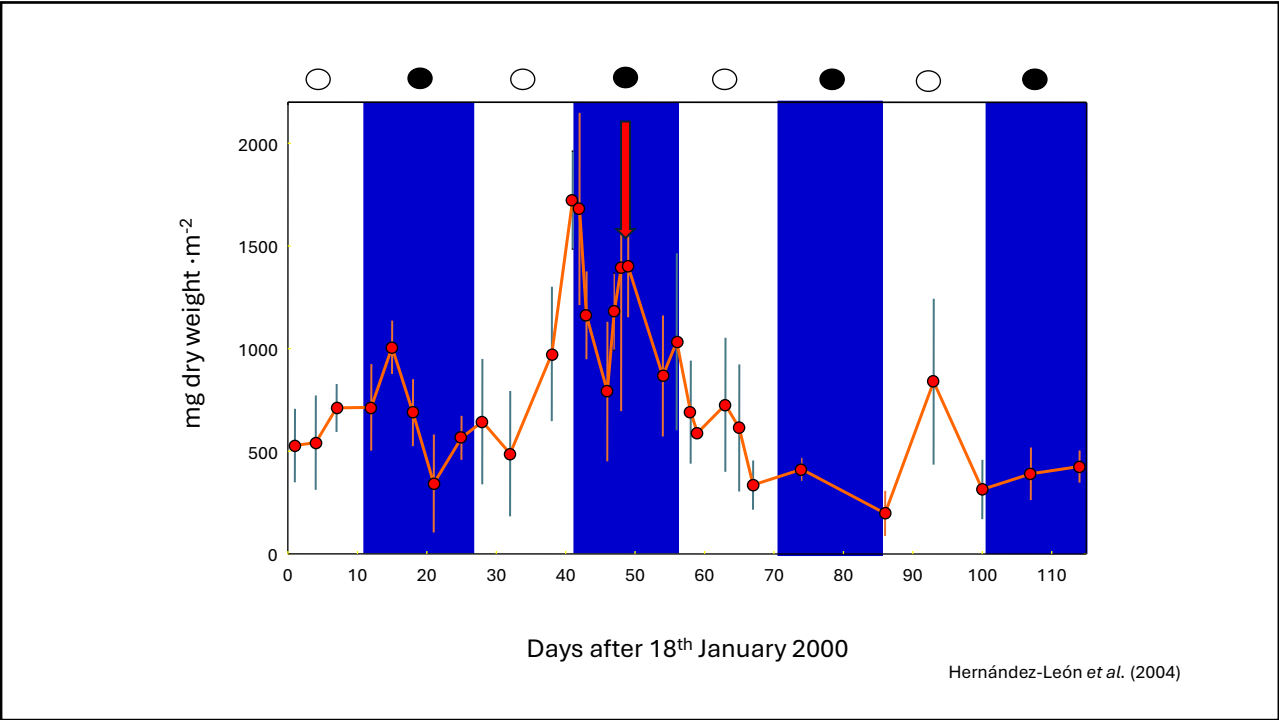
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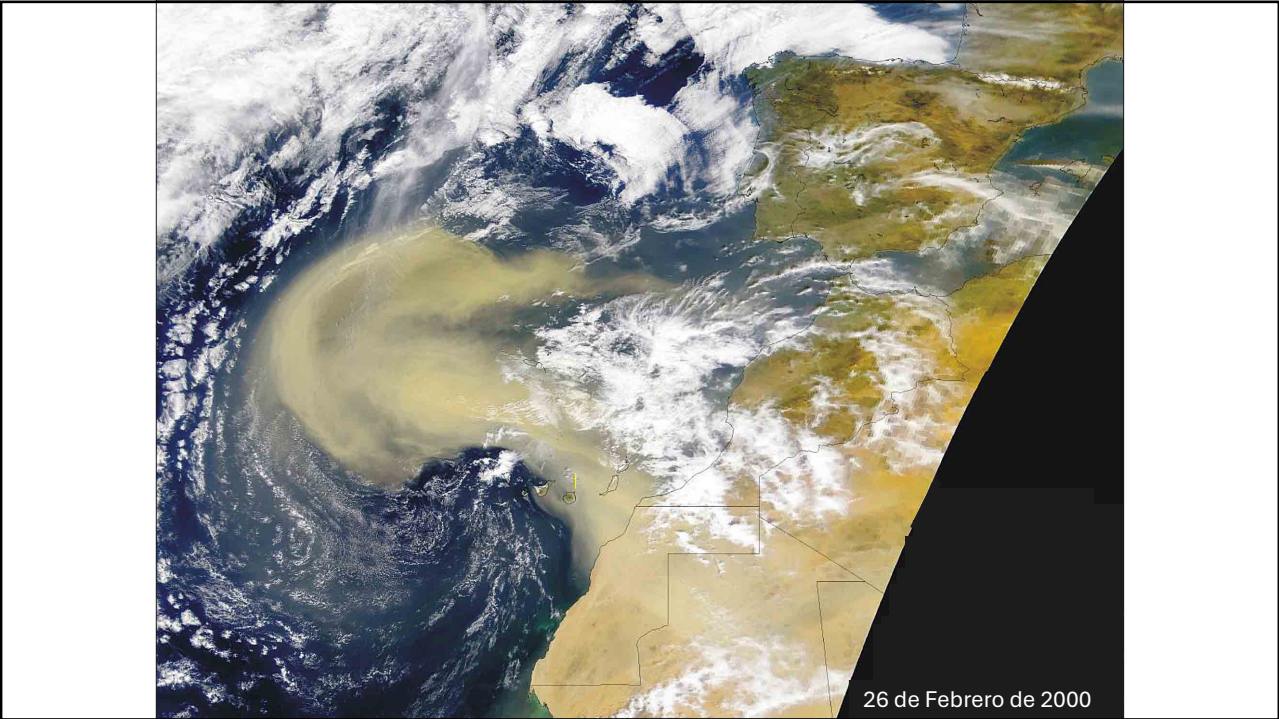
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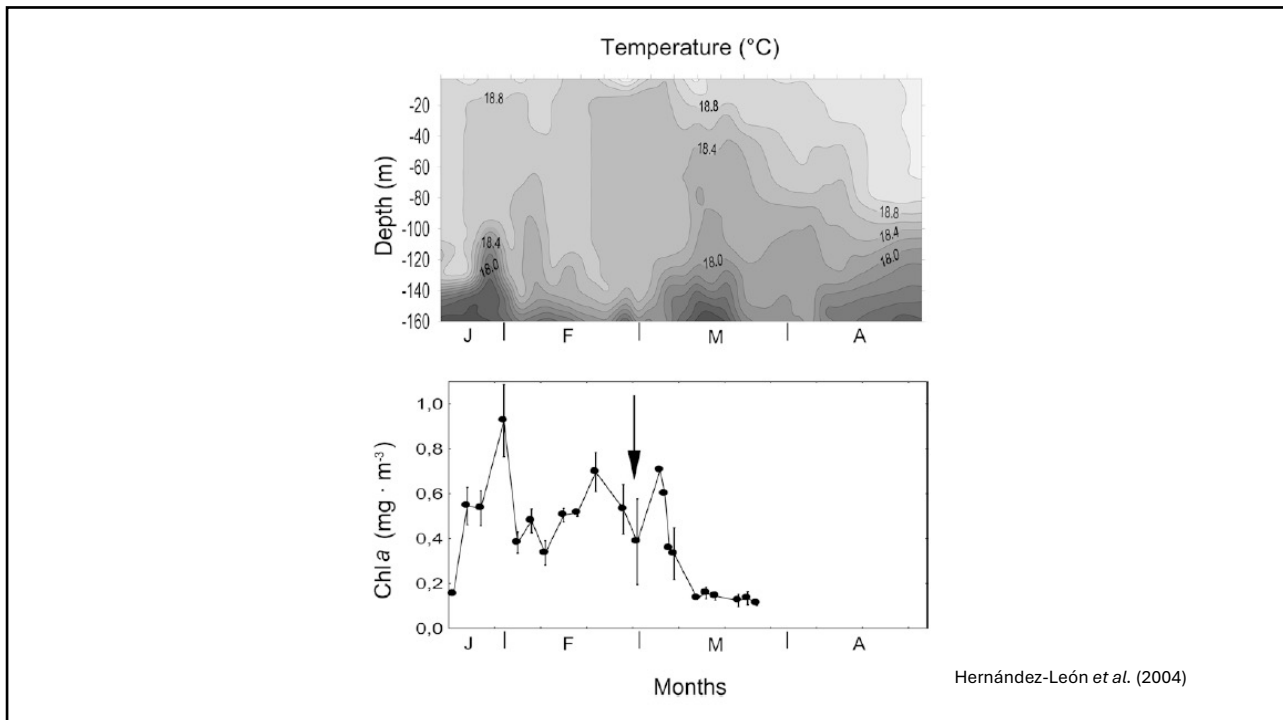
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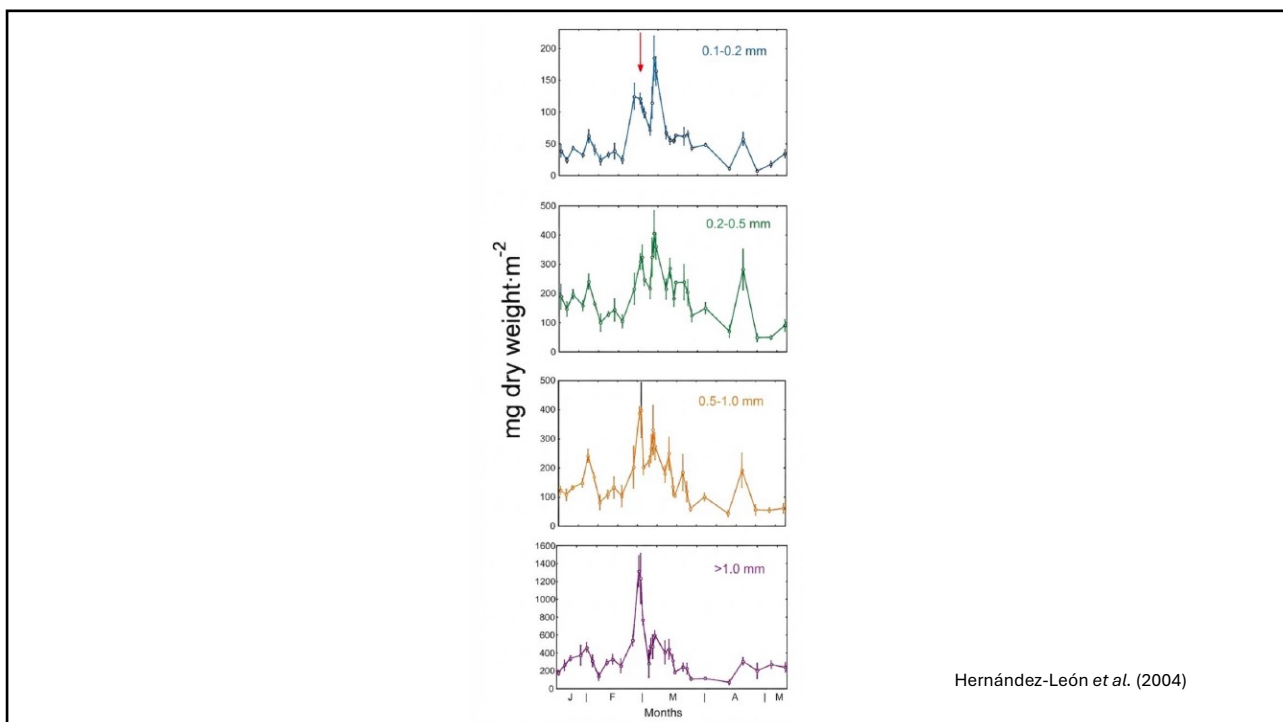
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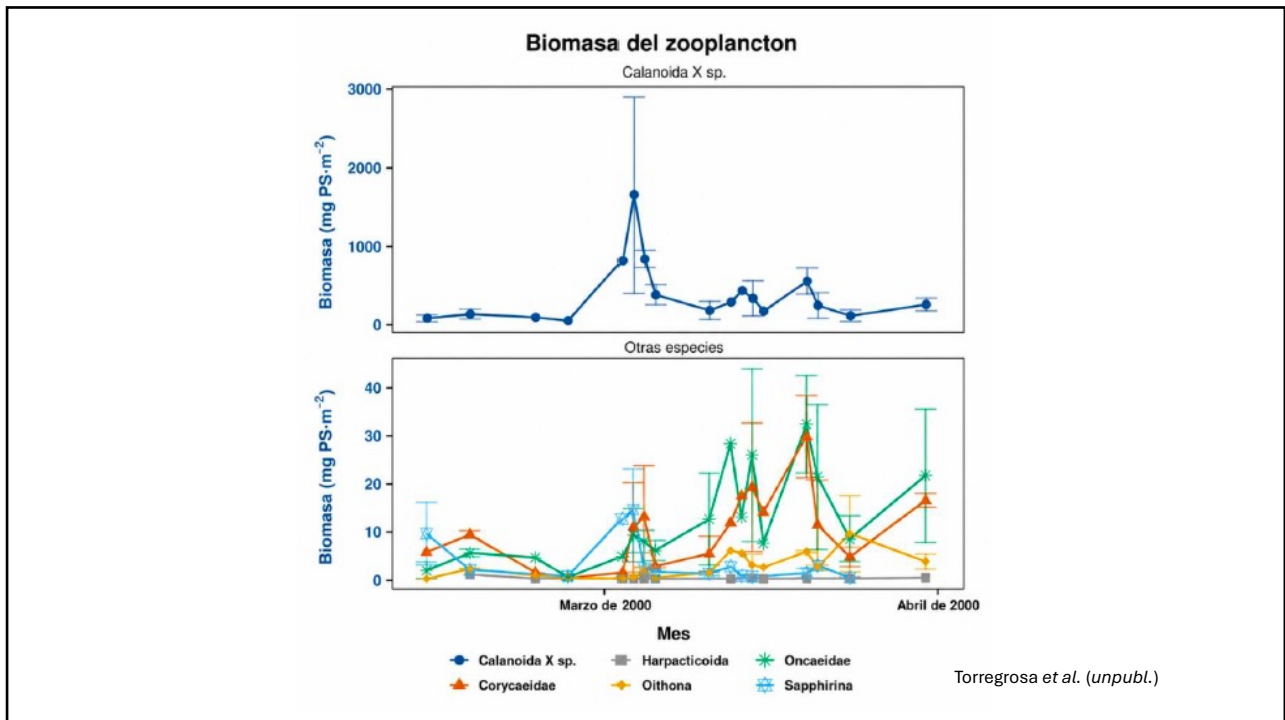
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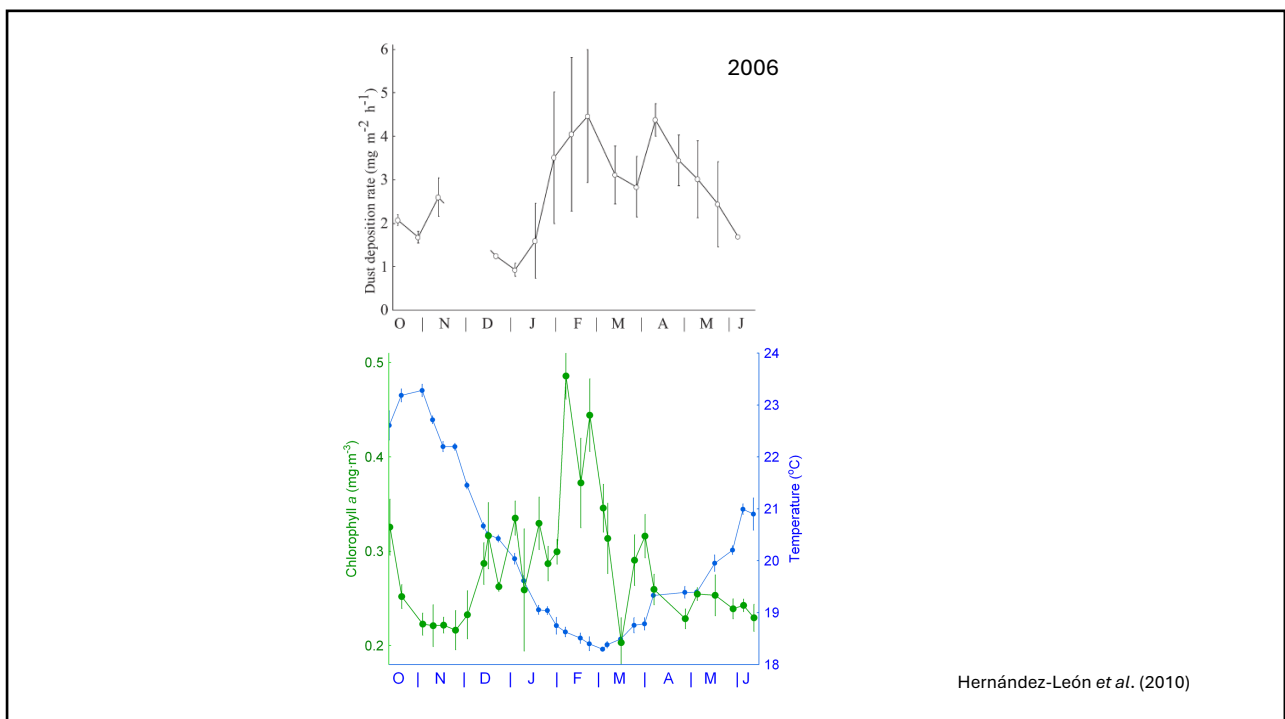
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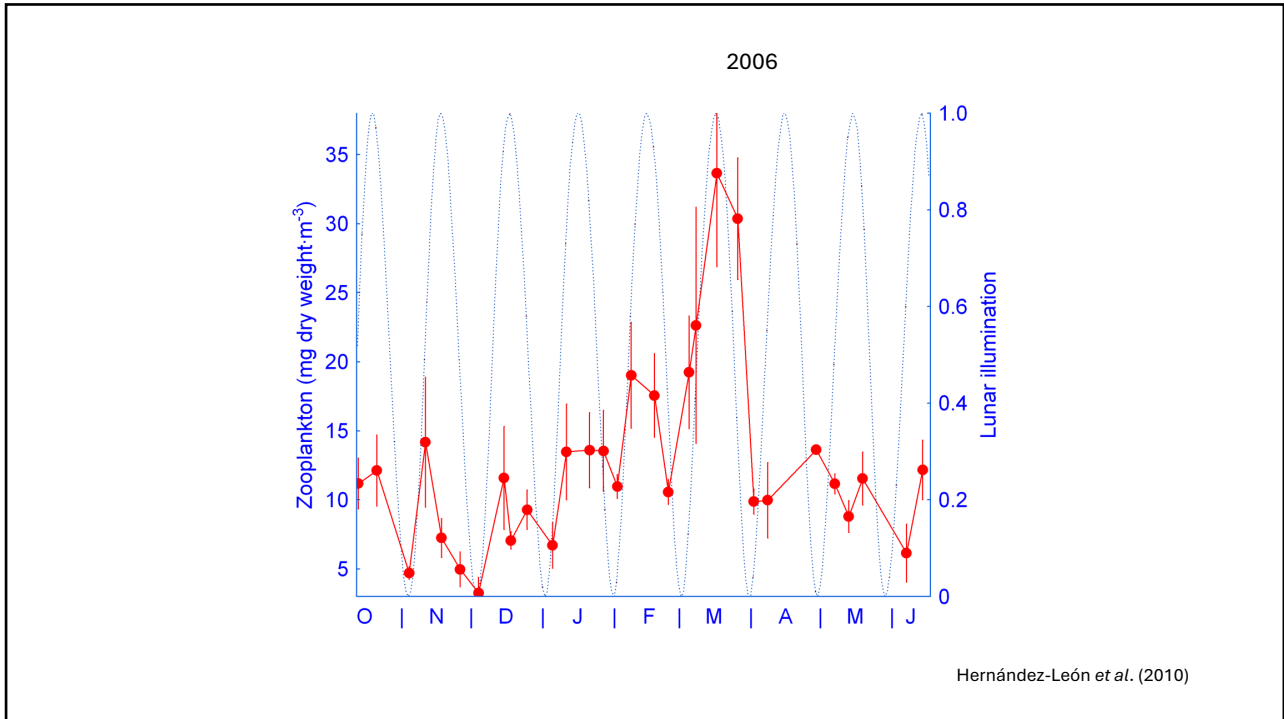
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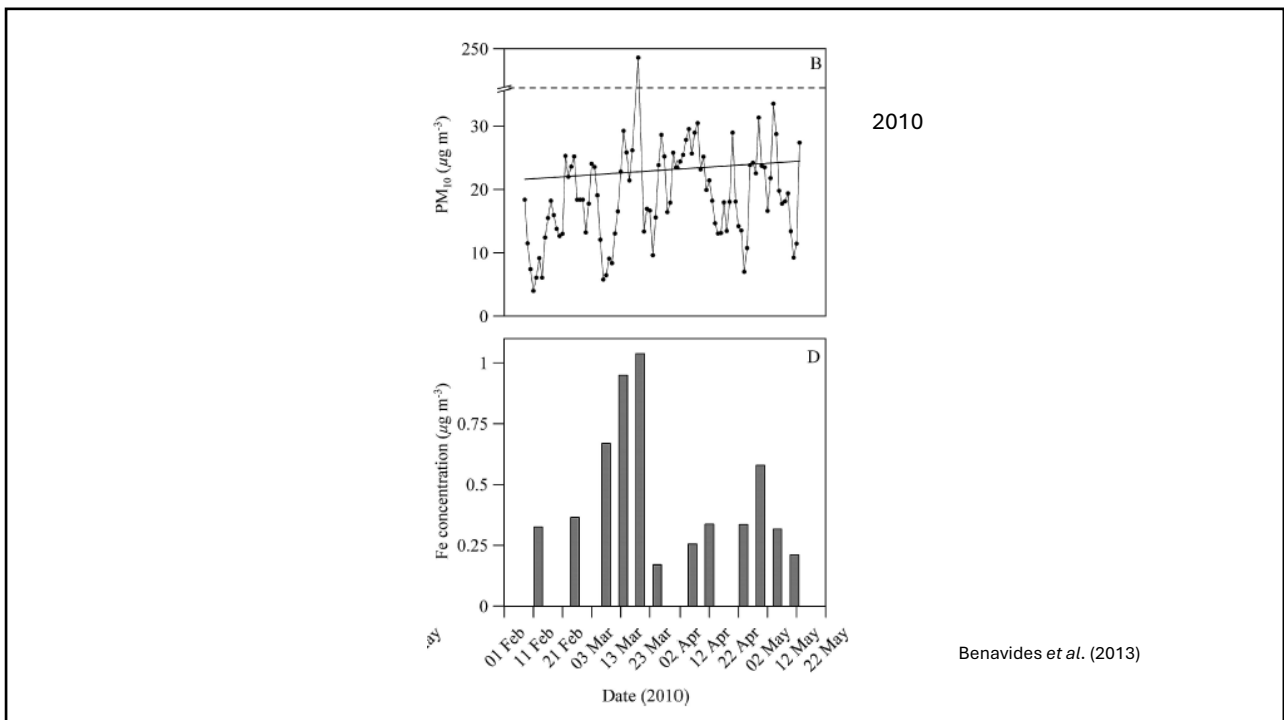
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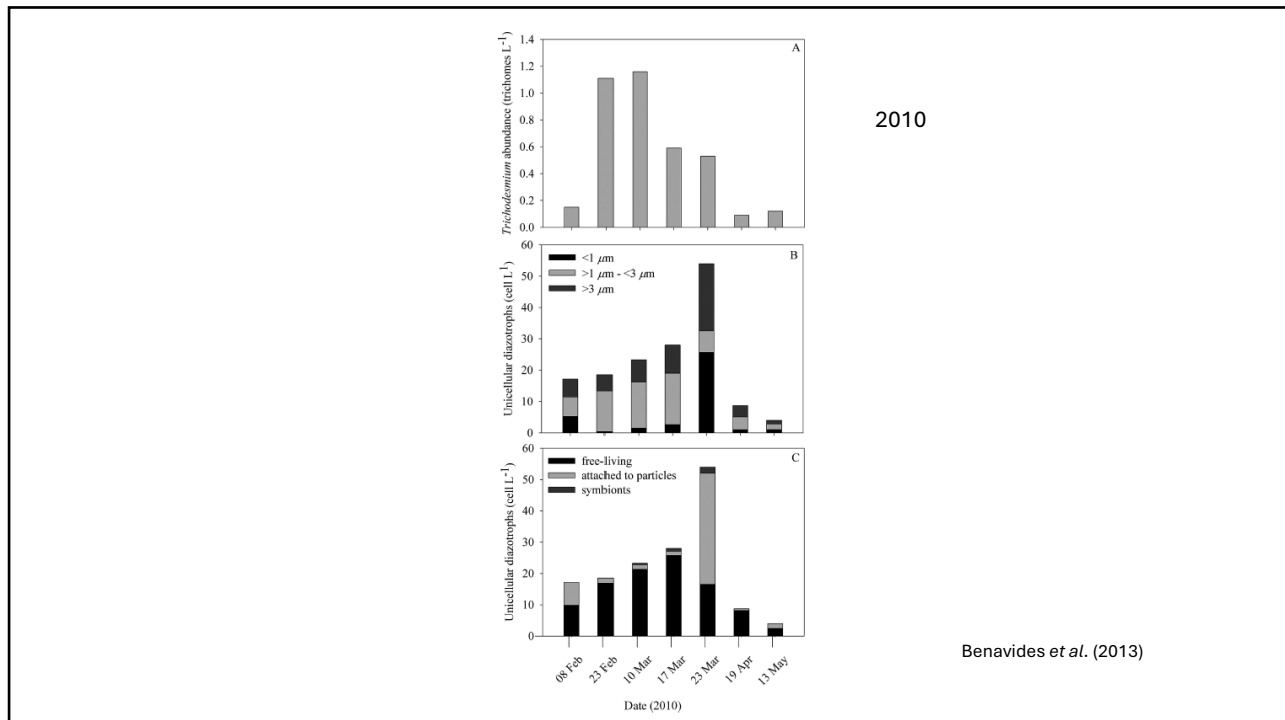
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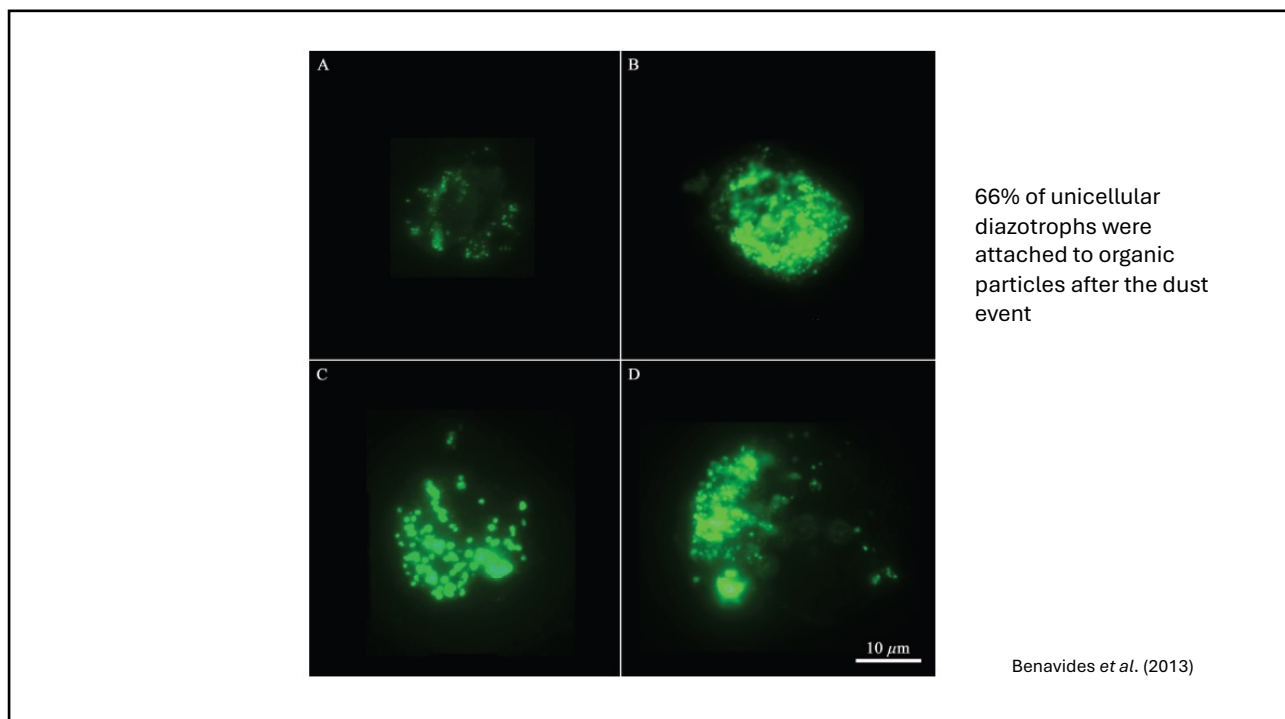
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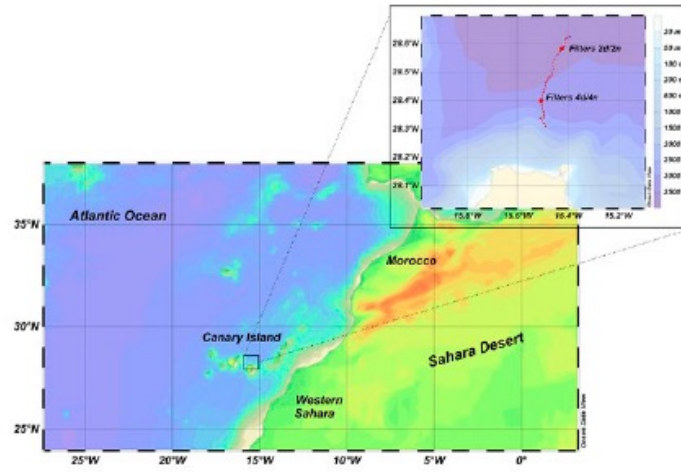


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16

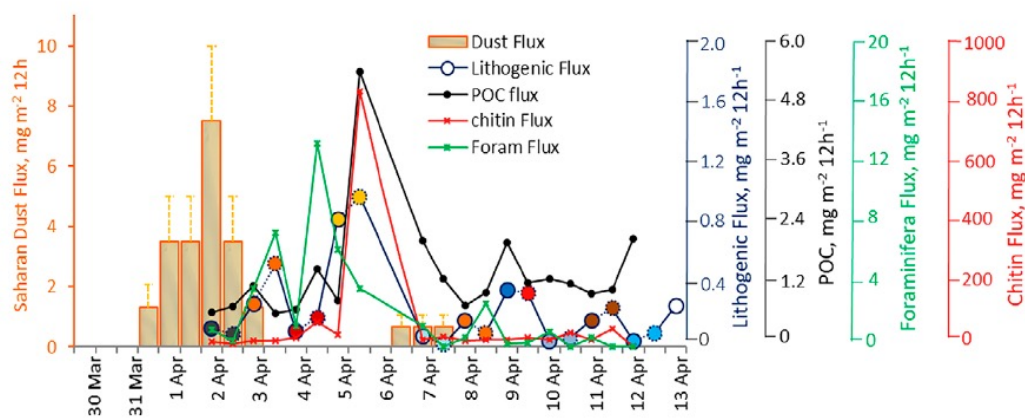
Drifting sediment trap



Báez-Hernández et al. (2019)

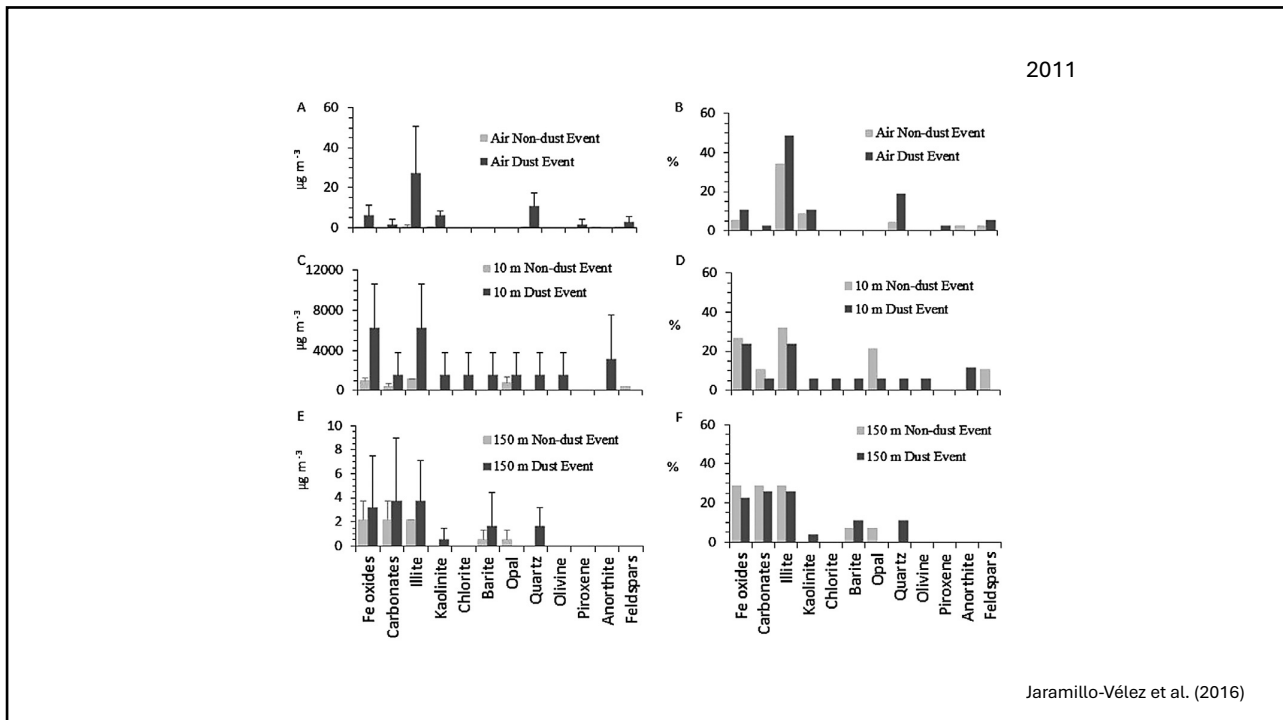
17

2011



Báez-Hernández et al. (2019)

18

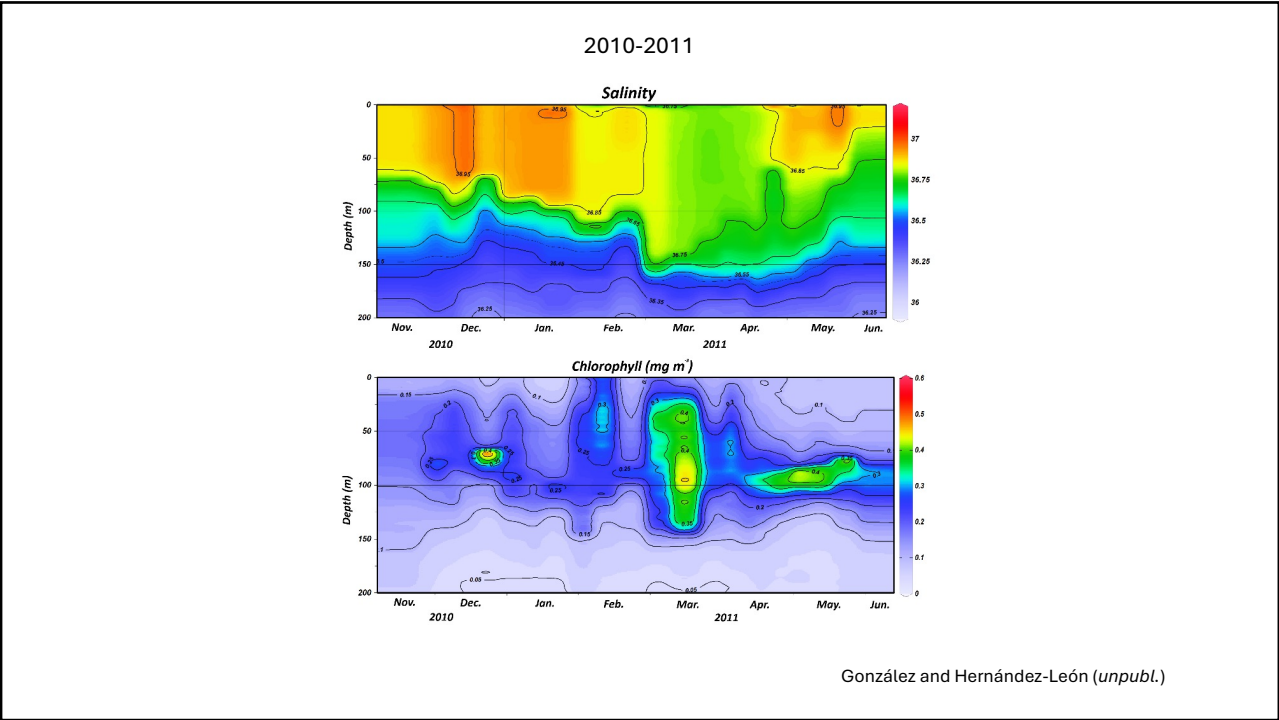


19

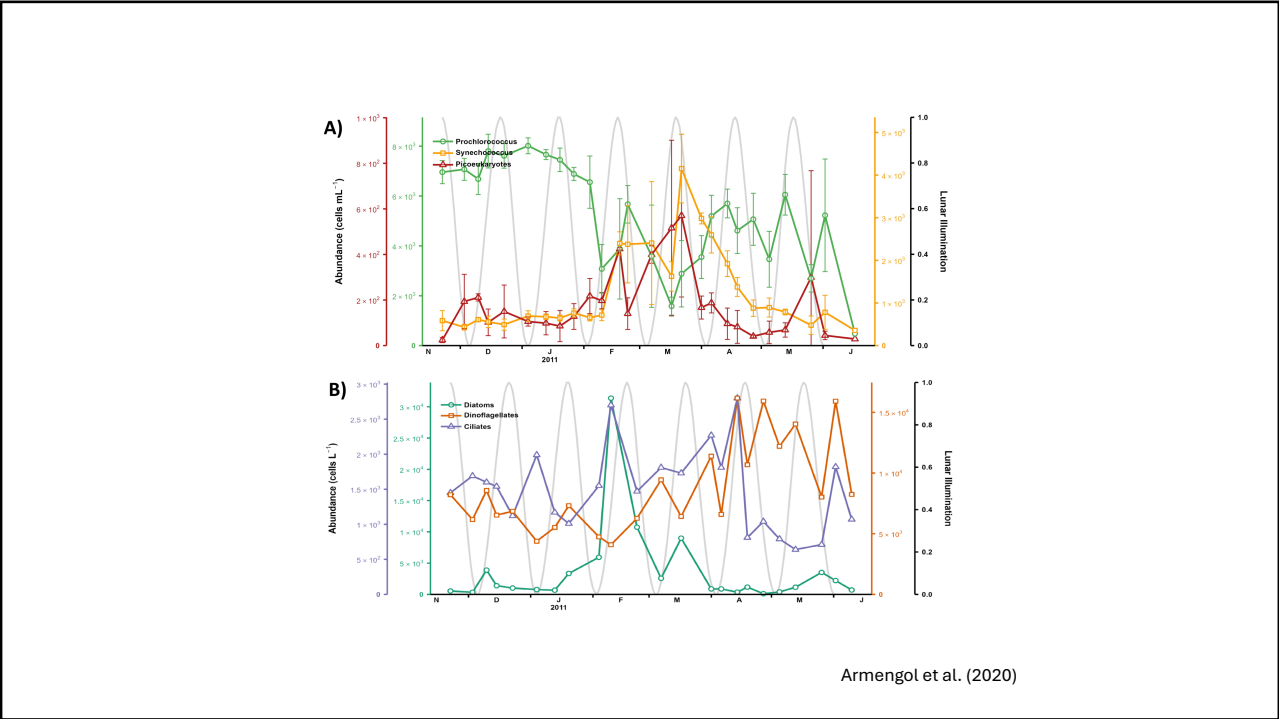
Iron particles remain at the shallower layers

- Mineral particles, however, sink down to the sediment trap
- Trichodesmium strategy to trap particles
- Unicellular diazotrophs attached to particles
- Ingestion of iron particles by protists
- Important role of zooplankton

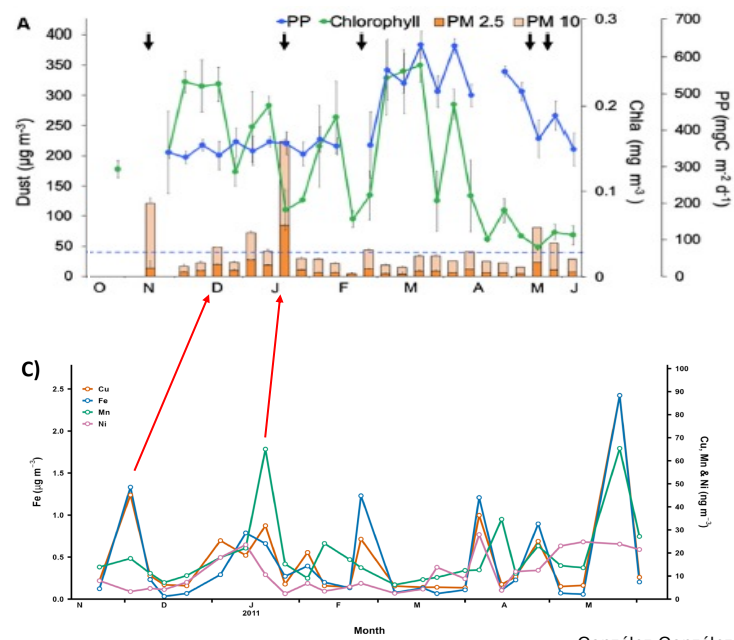
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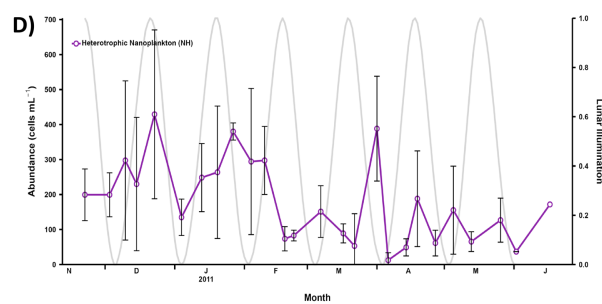
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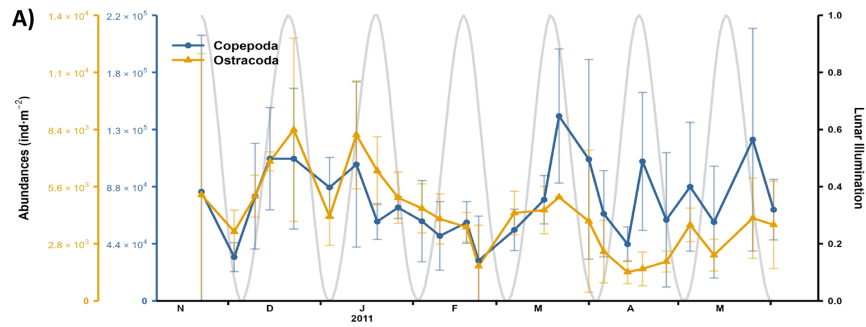
22



Armengol et al. (2020)

González-González and Hernández-León (*unpubl.*)

Armengol et al. (2020)



González-González and Hernández-León (*unpubl.*)

25

In summary

- Dust events promote:
 - Small increases in chlorophyll
 - Sharp increases in diazotrophs
 - Retention of iron in shallower layers
 - Increases in nanoflagellates
 - Increases in zooplankton
- Alternative pathway? Phosphate? Prokaryotes?

26

Thank you

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