

# Ecological Provinces WG

## *Progress Report*

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# Introduction

With the advent of the first global images of chlorophyll distribution for the CZCS sensor at the beginning of the 1980s marine biogeographers and ecologists had a new and formidable tool to identify basin scale boundaries in different marine biomes. Over the last 15-20 years much work has been undertaken to define appropriate methods to best use this dataset in the context of marine ecological province studies.

# Terms of Reference

1. To review the utility of ocean partitions as a tool for interpretation and application of ocean colour data.
2. To review the use of ocean colour as a tool for delineation of dynamic boundaries in the partition.
3. To review the application of ocean colour partitions to oceanographic problems such as the ocean carbon cycle, climate change and resource management.
4. To write a monograph for the IOCCG series covering the material referred to above.

# Participants

- M. Dowell, N. Hoepffner, F. Melin (JRC)
- T. Platt, S. Sathyendranath, E. Devred, V. Stuart (BIO)
- S. Dutkewicz, M. Follow (MIT)
- T. Moore, J. Campbell (UNH)
- G. Beaugrand (Uni. Lille)
- A. Longhurst
- D. Broomhead (UMIST)
- J. Morales (CICEM/Huelva)
- D. Kamykowski (NCSU)
- J. Polovina (NOAA/NMFS)
- R. Froese (Uni. Kiel)
- C. Lequere (Max Planck) and L. Legendre (LOV) agreed to comment.

# WG Meetings

- Villefranche 10/2003
  - Topics
  - Participants: Dowell, Platt, Longhurst, Sathyendranath, Hoepffner
- Ispra 09/2004
  - Topics
  - Participants: Dowell, Platt, Beaugrand, Broomhead, Devred, Dutkeweiz, Hoepffner, Melin, Moore, Morales, Sathyendranath



# Report title

**Using ocean colour to elucidate the functional structure of marine ecosystems.**

or

**Role of Ocean Colour in Ecological Partitioning of the Sea: Development and Applications**

# Outline of Main Chapters

1. Introduction
2. Conceptual Bases
3. Implementation Issues
4. Regional Considerations
5. Retrieval of phytoplankton biomass and primary productivity
6. Biogeochemistry and Climate Change
7. Marine Resources and Biodiversity
8. Recommendations & Conclusions

# Timeline

1. WG to submit joint abstract for ASLO Spain
2. Spring 2005 first draft of contributions for individual Chapters.
3. End of June 2005 final draft of individual Chapters - some of WG meet at ASLO
4. September-October 2005 edited version of report to submit to submit for comment to IOCCG Executive Committee
5. End of December 2005 comments due
6. Revised final report ready for next IOCCG meeting.



# Harmonizing Flow Chart

