## What is the IOCCG? (www.IOCCG.org)

The International Ocean-Colour Coordinating Group (IOCCG) was established in 1996 following a resolution endorsed by the Committee on Earth Observation Satellites (CEOS). The group is made up of an international Committee of experts comprising representatives from both the provider (Space Agencies) and user communities (scientists, managers). The main objectives of the IOCCG are to develop consensus and synthesis at the world scale in the subject area of satellite ocean colour. Specialised scientific working groups are established by the IOCCG to investigate various aspects of ocean-colour technology and its applications, and to publish IOCCG Monographs on their findings. The IOCCG also has a strong interest in capacity building, and conducts and sponsors advanced training courses on applications of ocean-colour data in various developing countries.

The IOCCG is an Affiliated Programme of the Scientific Committee on Oceanic Research (SCOR), and an Associate Member of CEOS. The activities of the IOCCG are supported by financial contributions from national Space Agencies and other organisations, and upon infrastructure support from SCOR

## **Objectives of the IOCCG**

- To foster expertise in using ocean-colour data (training)
  Broaden the user community for ocean color data, particularly in developing countries, through training courses, workshops and international symposia as well as exchange of *in situ* data and software tools for data access and processing.
- To provide a common voice for the user community

  Develop a consensus among users on key issues related to satelliteocean-colour science and technology, and communicate the collective
  view to the appropriate international bodies and space agencies. Evaluate
  proposals from CEOS members for new sponsors, data products and
  applications related to ocean-colour measurements
- To advocate the importance of ocean-colour data to the global community

Promote the importance of ocean colour data to the global community through workshops, conferences and other appropriate information systems such as a home page and data access networks.

- Optimize quality of data for calibration and validation

  Encourage the formation of an international calibration and validation
  network for ocean colour and ensure that sea-truth measurements
  conform to accepted international protocols. Facilitate the formation of a
  distributed calibration and validation archive and database network.
- Advocate the collection of essential ocean and atmosphere data. Identify key variables relevant to the application of ocean-colour data and promote data-collecting strategies to fill existing gaps in time and space.
- Facilitate merging and access to ocean-colour data
  Encourage agencies to agree on common data products and algorithms

and conform to common formats for accessing and exchanging data. Encourage provision of in situ data by relevant agencies and recommend that both satellite and in situ data are available and accessible in common data-exchange formats from the same source.

#### **Terms of Reference**

The IOCCG adopted the following set of Terms of Reference, which were finalised at the <u>second meeting of the group in Tokyo</u>, <u>Japan</u>, <u>17-18 March</u>, <u>1997</u>.

- To serve as a communication and coordination channel between data providers and the global, user community of satellite-ocean-colour data, and so to maximize the benefits that accumulate from international investments in ocean-colour science and technology.
- To construct a partnership, at the international level, between the space agencies and the users of satellite-ocean-colour data to develop and coordinate data utilization.
- To work closely with the appropriate international bodies (including CEOS, IOC and SCOR), international scientific programs (such as IGBP and GOOS), satellite-ocean-colour-mission offices and other agencies (such as environmental and fishing agencies) to harmonize the international effort and advance ocean-colour science and its applications.
- To develop a collective voice for the community of users of ocean-colour data and to articulate this voice to the appropriate international bodies, international scientific programs and space agencies.
- To promote the long-term continuity of satellite ocean-colour data sets; the development of operational, ocean-colour data services and new generations of ocean-colour sensors; and the integration of data from complementary ocean sensors.

#### **Points of Contact**

The IOCCG Project Office is located at the Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada, and is staffed by Executive Scientist, <u>Dr. Venetia Stuart</u>. The current Chair of the IOCCG is <u>Prof. James Yoder</u>, Woods Hole Oceanographic Institution, USA (Tel: 508-289-2200).

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## **IOCCG Reports**

A major focus of the IOCCG has been the formation of specialised scientific working groups to investigate various aspects of ocean-colour technology and its applications. The end product of these working groups is usually the publication of a scientific report in the IOCCG report series. These reports have an ISSN assignment and are in wide demand throughout the world. They have been used to provide appropriate advice to Space Agencies, scientists and managers as well as serving as a useful teaching aid for students.

PDF copies of the IOCCG reports (with low resolution images to reduce file size) can be downloaded below. To request a hardcopy of a report, please email <a href="Venetia Stuart">Venetia Stuart</a>, giving your full name and mailing address. Copies will be mailed free of charge via surface mail.

**IOCCG Report Number 1 (1998):** *Minimum Requirements for an Operational Ocean-Colour Sensor for the Open Ocean.* Edited by André Morel, pp.46. (Download PDF File) File size 0.24 MB

**IOCCG Report Number 2 (1999):** *Status and Plans for Satellite Ocean-Colour Missions: Considerations for Complementary Missions.* Edited by James A. Yoder, pp. 43. (Download PDF File). File size 0.2 MB

**IOCCG Report Number 3 (2000):** *Remote Sensing of Ocean Colour in Coastal, and Other Optically-Complex, Waters.* Edited by Shubha Sathyendranath, pp. 140. (Download PDF File). File size 1.2 MB

**IOCCG Report Number 4 (2004):** *Guide to the creation and use of ocean-colour, Level-3, binned data products.* Edited by David Antoine, pp. 88. (Download PDF File). File size 2.6 MB

**IOCCG Report Number 5 (2006):** Remote Sensing of Inherent Optical Properties: Fundamentals, Tests of Algorithms, and Applications. Edited by ZhongPing Lee, pp. 126. (Download PDF File). File size 6.2 MB - this may take a few minutes to download.

**IOCCG Report Number 6 (2007):** *Ocean-Colour Data Merging.* Edited by Watson W. Gregg, pp. 68. (Download PDF File). File size 3.7 MB.

#### **IOCCG WORKING GROUPS**

A major focus of the IOCCG has been the formation of specialized working groups investigating various aspects of ocean-colour technology and its applications. The end product of these working groups is usually the publication of an <a href="IOCCG report">IOCCG report</a>. A recommendation was also implemented by the working group on <a href="Standardizing the Extraterrestrial Solar Flux Spectrum">Standardizing the Extraterrestrial Solar Flux Spectrum</a>, chaired by Prof. André Morel. See the list of current and past IOCCG working groups below.

# **Current Working Groups**

- Calibration of Ocean-Colour Sensors
- Comparison of Atmospheric Correction Algorithms
- Operational Ocean Colour
- Global Ecological Provinces
- Phytoplankton Functional Types
- Bio-optical Instrumentation of ARGO Floats

Reports from each of these groups will be published by the IOCCG and distributed in a timely manner (free of charge), as and when they become available.