Session 01

The southern Senegal upwelling center: state and functioning during the UPSEN2/ECOAO field experiments (Feb.-Mar. 2013)

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Reçu le 09/12/2014; publié le 15/05/2015
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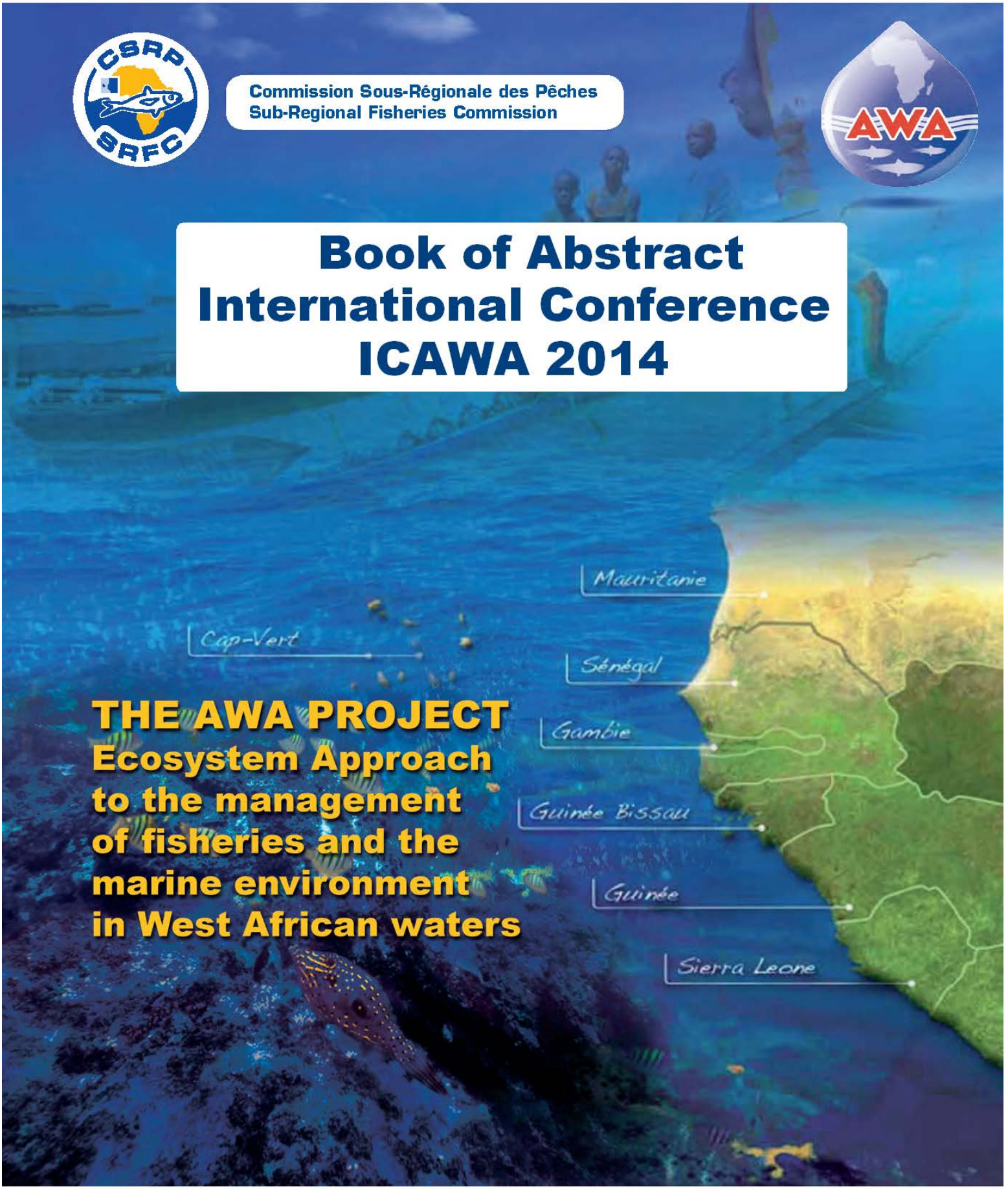
Abstract

Upwelling off southern Senegal and Gambia takes place over a wide shelf with a large area where depth is shallower than 20 m. This results in typical upwelling patterns that are distinct from those of other better known systems, including Oregon and Peru where shelves are comparatively narrower. 4 weeks intensive measurement period sheds light on the synoptic and superinertial variability of this upwelling sector. The influence of mesoscale activity extends across the shelf break into the shelf where it impacts the mid-shelf upwelling. Internal tide and solitary waves of large amplitude are ubiquitous over the shelf. Our observations suggest that they play a fundamental role in the overall system functioning, including biogeochemical.

Keywords: upwelling patterns, mesoscale, mid-shelf upwelling, Internal tide, solitary waves ECOAO.

Commission Sous-Régionale des Pêches
Sub-Regional Fisheries Commission

Book of Abstract International Conference ICAWA 2014



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Ecosystem Approach to the management of fisheries and the marine environment in West African waters

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Trilateral German-French-African research initiative

ISBN :978-2-9553602-0-1

Edited by:

Patrice Brehmer (IRD) & Hamady Diop (SRFC/CSRP)

With the collaboration of:

Marie Madeleine Gomez, Ndague Diogoul, Viviane Koutob, Peter Brandt, Bamol Ali Sow, Alban Lazar, Xavier Capet, Heino Fock, Carlos F. Santos, Eric Machu, Hamet Diadihou, Didier Jouffre, Ibrahima Diallo, Joern Schmidt, Amadou Gaye, Mahfoudh ould Taleb Sidi, Yves Gouriou, Rafael Almar, Moussa Sall, Dominique Duval Diop, Modou Thiow, Ross Wanless, Jacob Gonzales-Solis Bou, Ibrahima Ly, Dienaba Beye Traoré, Marie Bonnin, Werner Ekau.

ISBN: 978-2-9553602-0-0

Cover design: AWA (BMBF – IRD) project

Logo and flyers: Laurent Corsini (IRD)

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