Theme Session C
Modelling human behaviour in models of marine ecosystems

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Considering ecosystem functioning in managing the use of marine resources has gained much importance in recent years. Such an "ecosystem approach" strives to balance societal objectives, by taking into account the biotic, abiotic, and human components of ecosystems and their interactions. Consequently, there has been a growing call for the development of integrated assessment tools, including those that can be used to identify possible futures and evaluate alternative management strategies. This integrated approach has been promoted by both the WGIPEM and SGIMM in improving both tactical and strategic fisheries management advice. In evaluating the state of the art in integrated models these ICES groups have increasingly recognized that understanding human response to economic, ecological, and regulatory changes is a key factor. Hence, integrated assessment tools should include explicit representations of human behaviour and its drivers.

This session is supported by both the WGIPEM and SGIMM with the aim to review the current state of the art and open research questions on the modelling of human behaviour in natural resource use, with particular focus on marine and coastal ecosystems. We are particularly interested in presentations of recent work on representing decisions of individual resource users in marine fisheries and other uses, as part of applied bio-economic models, in both developed and developing countries. We are also interested in conceptual models of human use of natural resources, and how these may assist in developing quantitative representations of the economic and social behaviour of resource use in integrated modelling approaches.

In order to explore these issues we invite contributions which respond to the following questions:

What economic and social drivers of resource use can be captured in integrated modelling approaches?

What tools are available for representing decisions of individual resource users in models of marine fisheries and other ocean and coastal use?

What determines the required spatial and temporal resolution in integrated modelling approaches of natural resource use?