Small group meeting to present ‘TUMAS’ (Tuna Management Simulator)
Tuesday, Dec. 14, 2010, 9:00 am HST
UH Manoa Campus, Marine Science Bldg room 306
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We have developed this software for WCPO managers, advisers, and other stakeholders. It lets you see how different management options affect tuna catches and tuna stocks in the WCPO, and interact directly with the stock assessment model MULTIFAN-CL. It uses the methods currently used to provide management advice, but lets the user choose the options directly. Bring a laptop so you can install the software and try it out. We invite feedback on ways to improve the software and make it more intuitive, relevant, and easier to use. The meeting is open to anyone interested, but particularly those who might use it in future. The software is being developed by SPC, with PFRP funding. The meeting will be led by Simon Hoyle and Fabrice Bouye of SPC.

Background
Regional fishery management organizations (RFMOs) provide a forum for members to negotiate. Negotiations require good information, and scientists provide some of this information. Fisheries decision makers often express a desire for better information to help them make defensible decisions. Their attention is often captured by perceived short-term costs of actions, which seem more clear and ‘real’ than long-term outcomes. Lack of easily available information about individual costs and benefits also makes it difficult for countries to negotiate with one another. Many incorrectly assume that lack of action will impact everybody equally and is therefore a satisfactory fall-back position.

This problem could be reduced by improving decision-makers’ access to the stock assessment models and results. In the WCPO both the stock assessment software (MULTIFAN-CL) and all model files are available to Commission members, but few have the capacity to run the models for alternative options. Currently for the stock assessments undertaken for the WCPFC, results are provided for a limited range of management options (e.g. Hampton and Harley 2010). Further, the results are typically for the current and projected stock status of the stock as a whole – not the finer scale implications for individual members or their industries.

We are developing a software tool (TUMAS) that will allow decision makers to interact directly with the stock assessment, and observe how alternative management strategies may affect both them and other interested parties. The main advantages of such an application are a) it will allow decision makers to become familiar and comfortable with the stock assessment’s predictions, b) it will allow decision-makers to explore a greater range of management options, including those they see as more relevant to them, c) it will allow decision makers to discuss potential outcomes, and compare alternative strategies, with their industry representatives, and d) it will allow each group to see how the various options they are considering may affect them and the parties they negotiate with, by providing a greater and more relevant range of outputs.

We will present a pre-release version of the software, using the latest (2009 and 2010) yellowfin and bigeye tuna stock assessments.