

RE: SC paper

Nick Davies <nd200806@gmail.com>

Thu 1 Aug 2024 10:37

To: Arni Magnusson <arnim@spc.int>; Graham Pilling <grahamp@spc.int>; Paul Hamer <paulh@spc.int>

Hi Arni,

Just a couple of minor suggestions...

2.3

Would it be useful in this section to indicate the structural configuration of each software, as done by Punt et al. 2020?

bullet Gadget3

- This is a good point to mention it is an integrated age-length structured modelling framework, being the only one that fits Punt's main recommendation in respect of structure for a future model?

4.1.3 Outcomes

6. First sentence could be misleading, as both MFCL and SS3 fit to size comps from multiple fisheries. Perhaps restructure to: "For undertaking tuna assessments that fit to length composition data from multiple fisheries, SPC uses MFCL, while other tuna RFMOs use primarily Stock Synthesis."

5.2 SPC staff positions, consultants

In respect of task 10 and any expansion to a project to fully develop new software, here it is worth citing Simon Hoyle's report of CAPAM 2019 because he offers excellent advice on the structure of such a software development project.

I think it is important for me to invest time in familiarising myself with RTMB prior to our workshop later this month. I have found the following:

<https://cloud.r-project.org/web/packages/RTMB/vignettes/RTMB-introduction.html>

But if you know of any other references of help that would be good.

Cheers,
Nick

From: Arni Magnusson <arnim@spc.int>

Sent: Thursday, August 1, 2024 7:51 AM

To: Graham Pilling <grahamp@spc.int>; Paul Hamer <paulh@spc.int>; nd200806 <nd200806@gmail.com>

Subject: Re: SC paper

Hi Graham and Paul,

The project 123 progress report is essentially ready (see attachment). I can put together the executive summary tomorrow and circulate for a final review before submitting.

There is one part in particular, though, where I would appreciate a quick read by you. Sections 4.3, 5.1, and 5.2 cover the topic of asking for more resources. It's only around one page long but obviously quite important. Can you see if any improvements can be made in these sections? You are more familiar with the jargon and how RFMO resources can be raised and allocated.

Thanks so much,
Arni

P.S. Nick, if you have any suggestions for any sections, I'm happy to incorporate those via email.

From: Arni Magnusson <arnim@spc.int>

Sent: Wednesday, 31 July 2024 23:20

To: Paul Hamer <paulh@spc.int>; nd200806 <nd200806@gmail.com>

Subject: Re: SC paper

We should probably expand the author list on the front page a bit - any suggestions, Paul?

From: Nick Davies <nd200806@gmail.com>

Sent: Wednesday, 31 July 2024 08:09

To: Arni Magnusson <arnim@spc.int>; Paul Hamer <paulh@spc.int>

Subject: RE: SC paper

Thanks Arni. I should be finished the first draft of the MFCL_update IP by today, so I will take a look tomorrow.

Cheers
Nick

From: Arni Magnusson <arnim@spc.int>

Sent: Tuesday, July 30, 2024 6:09 PM

To: Paul Hamer <paulh@spc.int>; nd200806 <nd200806@gmail.com>

Subject: Re: SC paper

Hi Paul and Nick,

As I'm completing section by section of the draft report for Project 123, please feel free to follow the progress on

https://github.com/PacificCommunity/ofp-sam-transition-plan/tree/main/documents/2024_08_14_wcpfc_manila

I push text to this repository shortly after typing, so it is up-to-date. If you see anything that could be changed or clarified, we can do that via email.

All the best,
Arni

From: Arni Magnusson <arnim@spc.int>

Sent: Sunday, 28 July 2024 20:54

To: Paul Hamer <paulh@spc.int>

Subject: Re: SC paper

Will do, thanks!
Arni

From: Paul Hamer <paulh@spc.int>

Sent: Sunday, July 28, 2024 1:42:51 PM

To: Arni Magnusson <arnim@spc.int>

Subject: RE: SC paper

Thanks – I will have a look – however, I have to prioritise the assessments, and still have a paper I am writing to try finish in the next day, it's usually easier to write the exec summary after the other sections are done – often you can cut and paste some things from discussion and then stitch it together into an exec summary. See how you go – but I don't really have much spare time. Good luck.

From: Arni Magnusson <arnim@spc.int>

Sent: Sunday, July 28, 2024 6:28 PM

To: Paul Hamer <paulh@spc.int>

Subject: Re: SC paper

Hi Paul,

Thanks for checking in, sorry it's taking longer than I hoped. The current status of the manuscript is at

https://github.com/PacificCommunity/ofp-sam-transition-plan/blob/main/documents/2024_08_14_wcpfc_manila/p123_progress_report_sc20.pdf

(Also attached.)

As you can see, I've been filling in the sections, one after another. I thought I might write up the executive summary after completing the body sections, copying some of the sentences, etc.

However, if you're available, it might be good if you draft an executive summary that I can then work from. The executive summary is an important part that we might coordinate and revise together before submitting. Alternatively, I can work on the executive summary now and have you take a look at it.

Cheers,
Arni

From: Paul Hamer <paulh@spc.int>

Sent: Saturday, 27 July 2024 15:33

To: Arni Magnusson <arnim@spc.int>

Subject: RE: SC paper

Hi Arni – how's things on the road? Do you have an ETA on the project 123 working paper. The official submission is this weekend – but I will communicate to WCPFC which papers will be late and their expected submission time – we have a few that will miss the deadline. Would be good to get all the papers beside the Stock assessments and the MSE papers in by early/mid next week at latest.

Thanks
Paul

From: Arni Magnusson <arnim@spc.int>

Sent: Friday, July 26, 2024 10:15 PM

To: nd200806 <nd200806@gmail.com>

Cc: Paul Hamer <paulh@spc.int>

Subject: Re: Meeting with Jeremy McKenzie, NIWA

Thanks for that, Nick. Relevant indeed. I look forward to chatting with Jeremy when we get together in NZ.

All the best,
Arni

From: Nick Davies <nd200806@gmail.com>

Sent: Tuesday, 23 July 2024 10:48

To: Arni Magnusson <arnim@spc.int>

Cc: Paul Hamer <paulh@spc.int>

Subject: Meeting with Jeremy McKenzie, NIWA

Hi Arni,

I hope you are very well, and your family is safe and sound.

I have just had a meeting (MS Teams) with Jeremy McKenzie (NIWA, Auckland) on another subject, but the topic of the next-gen-model came up. He has been directly involved with the development and implementation of the various simulation models used at NIWA in recent years, including the Operating Model used for the NIWA-NOAA spatial modelling simulation study in 2022-23 of which MULTIFAN-CL was a part.

He outlined to me a very interesting development recently completed by Craig Marsh (previously NIWA), being an individual-based model having an integrated age-length-structure, and spatial partitioning for all length-based processes. It was built as an extension of SPM (that used for the NIWA-NOAA study Operating Model), but is more advanced in terms of the age-length integrated processes. This would be an excellent candidate for an operating model in any simulation study to explore this level of complexity in biological and fisheries processes. Apparently it is not computationally prohibitive, and is extremely flexible in terms of the alternative realities possible.

What I suggest, is that you might like to have an on-line meeting with Jeremy when you are here in Whangarei for our workshop, so that he could describe in more detail this particular model, and also the current custodial status of CASAL2 (another story). Jeremy said he would be available in the early part of that week (say 26-27 August) to have a meeting. Just something to fit into the workshop if you think you have time. I believe you would find this really interesting and worthwhile.

Cheers,
Nick