

I think what you have is a really impressive start at a clear discussion of an immensely complex subject - congrats! Some of my comments below include substantive feedback on bits of it, but I don't have any major overall concerns about the structure and style.

- Section 6 / figures 7-11: I really like the homogenized figure style (same point style/line color for a given metric across all figures).
  - Totally minor point, some of these figures have dimensionful x axes but the label doesn't give units.
  - Another minor point on figure 7: perhaps expand the y axis range, and move the legend to the bottom or top right? Currently the legend obscures key parts of two curves.
- Section 6.1: I feel the discussion doesn't really touch on the fact that there are two WL-driven metrics (3x2pt FoM and WL systematics metric) that have opposing preferences, which is something we should address carefully to avoid somebody outside of DESC trying to come to conclusions for us. :)
- Section 6.1: the transient metric discussion is complicated by the sims going into figure 7 varying in ways other than a simple area/depth tradeoff (e.g., time spent in the WFD area vs the Galactic bulge). I was wondering if you've considered omitting those complex ones, so make the narrative regarding the figure simpler, and then have a separate discussion of the fact that other choices about how observing time is used can be similar in importance?
- Section 6.1: I was wondering if there is a simple thing one could do to figures 7 and 8 to support statements in the text regarding area-depth tradeoff? I mean, for example, perhaps two additional vertical dashed lines in each figure, showing for example a simulation with one of the higher and lower values of area (so you can see what it means in terms of depth). The discussion at the end of 6.1 re: area-depth tradeoff could then refer to these for a little more quantitative statement about the tradeoff.
- Section 6.2: Is figure 9 using strategies at roughly fixed area and depth, or is that an additional (hidden) complicating factor?
  - I was wondering if there is some way to divide out or at least indicate (e.g., with point size) those complicating factors that we already know matter.
  - And when summarizing the results, I was wondering if it might be worth connecting to the previous section, with a statement like "decreasing the median inter-night gap by X% is functionally equivalent for transient metrics to a Y magnitude increase in survey depth".
  - I also think it's worth noting that the baseline is towards the left side on figure 9, i.e., changing from the baseline gives a lot of room for harm but not much room for improvement? (i.e., "please don't hurt us!")

- Section 6.4: I found myself wondering why the extended season length is bad for the other probes (what tradeoff are they making to enable long season lengths?).
- Section 6.5: Text discussion is missing a good takeaway from figure 11 caption - that the figure highlights the importance of a realistic weather model in sims used for evaluating transient science metrics. (I actually feel like this could even go in the conclusions - it's an important note about process, not only for DESC?)
- Section 7: The survey uniformity discussion stands out as more hand-wavy, and I think it's worth emphasizing that the "1, 3, 6, and 10" was not meant as precise guidance (and was not broadly discussed at any great depth).
- Section 7: Is there something constructive we can say regarding features that would make a rolling cadence strategy more promising from our perspective?
- Section 7: Are there any major things that were proposed by other SCs and included in the simulations that have a major impact on our science? I think that would be valuable to discuss, instead of focusing only on what we recommended in our white papers. [Note from Rachel, after the fact: this is the only comment that goes beyond recommending improvements to the existing text, but I think these changes might be helpful in the context of SCOC discussion.]