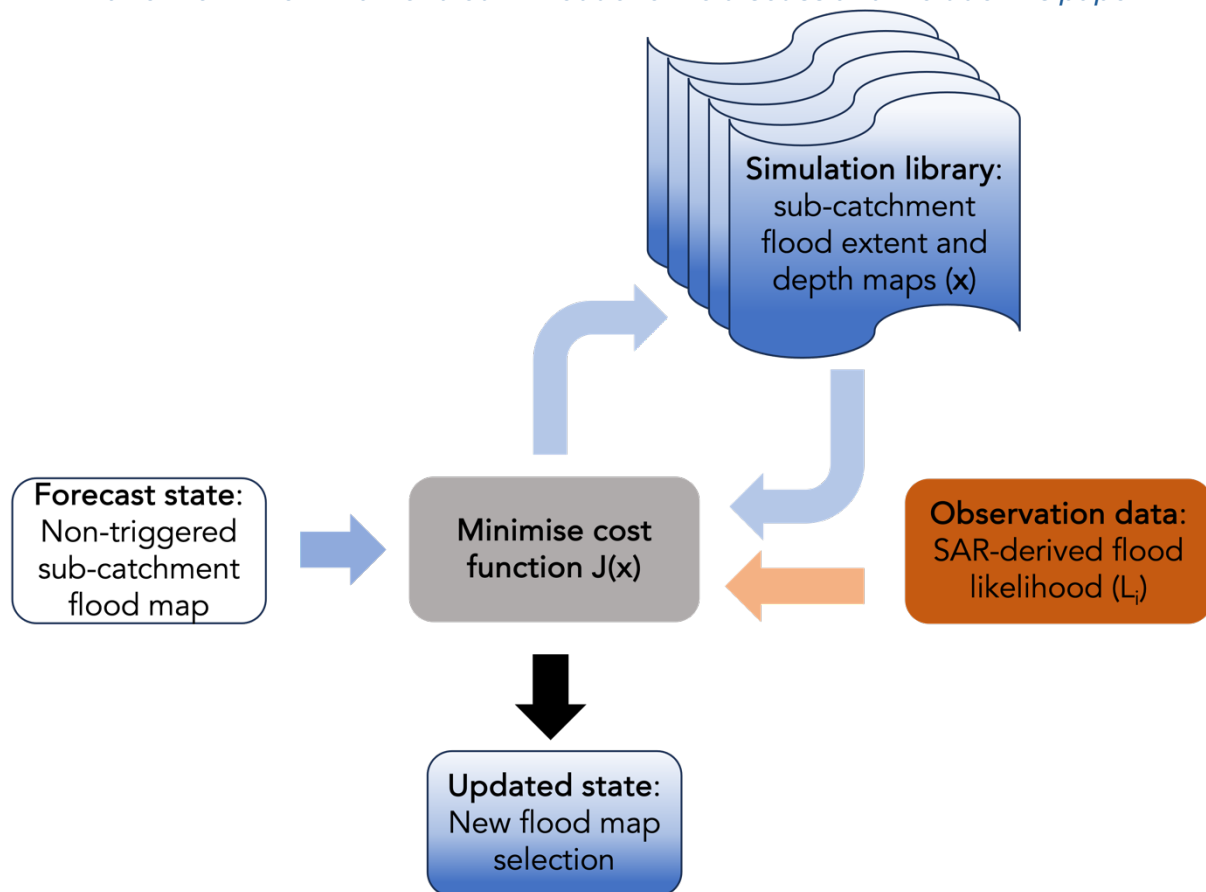*Many thanks for taking the time to read and review our manuscript. Your feedback is appreciated and extremely constructive.*

1) *Thank you, we agree. We propose adding a new diagram to the manuscript illustrating our methodology. Thank you for bringing an additional reference to our attention – we will amend our introduction to discuss and include this paper.*



2) *We agree that the EO data captured the flooding from the Pakistan 2022 event generally very well. For a first demonstration of the method, we wanted a case where there was plenty of observed flooding in contrast to the non-triggered flood maps. However, we also evaluated some sub-catchments where dense urban areas were present such as the Sukkur region and Larkana North and South. The Sukkur sub-catchment has significant proportion masked as unsuitable for SAR-derived flood detection. Whilst the Sukkur sub-catchment didn't trigger a new flood map, this was due to the simulation library accuracy, rather than the size of the masked area. Larkana North and South also contained masked urban areas but in both sub-catchments a flood map was still triggered.*

3) *This is an interesting question and could explain the under-estimation seen in the analysis flood map. A possible approach would be to divide the SAR-derived flood map into two flood maps, fluvial and pluvial, perhaps using a recent detailed DTM. Future work could attempt this and use only the SAR-derived fluvial maps to select from the flood map library.*

*For FbF applications the analysis flood map should include all types of flooding that may cause impacts. A surface water flood map library is available for the UK, Europe and the US but unfortunately, we are not aware of one presently available for Pakistan owing to a lack of a recent detailed DTM. Were this available, a combined system merging fluvial and pluvial flood maps would be ideal to inform insurance payments. On revision we will amend our discussion to reflect this insightful question and our response.*