**Editor's Comments**:

Dear authors,

Thank you for sending through your revised manuscript. I have one final comment as follows.

L162-165: used to delineate each catchment into sub-catchments and finer sub-areas to represent a semi-distributed model structure. A collection of upstream sub-areas makes a sub-catchment where a streamflow gauge exists at the outlet. Sub-areas are useful for representing the spatial rainfall distribution within a sub-catchment and enable stable channel routing.

It is still unclear to me how these sub-areas are defined. From your subsequent text, it seems the sub-areas are not delineated based on flow direction but divided based on the spatial rainfall distribution. Please clarify this. It might be more appropriate to say 'used to delineate each catchment into sub-catchments which was then further divided into sub-areas based on xxxxx. It therefore represents a semi-distributed model structure.'

Sincerely,

Yi He, HESS Editor

**Author response**

Dear Editor,

Thanks for your comments. We have revised the relevant section of the manuscript accordingly. Please see line numbers 161 to 164 of the track change version of the manuscript.

> A nationally consistent flow direction map from the Australian Hydrological Geospatial Fabric (Geofabric) (Atkinson et al., 2008) is used to delineate each catchment into sub-catchments which is then further divided into and finer sub-areas. It therefore represents a semi-distributed model structure. A collection of upstream sub-areas makes a sub-catchment where a streamflow gauge exists at the outlet. Sub-areas are also useful for representing the spatial rainfall distribution within a sub-catchment and enable stable channel routing. The number of sub-areas varies for each catchment, depending on catchment size
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> 165

Kind Regards,

Mohammed Bari