

Question Details

#	Question	Answer	Answer Name
1	Will today's webinar recording be available after the event?	The recording will be available within the next 5 business days. The link will be shared with your Certificate of Participation. Thank you	Anushree Mistry
2	If we already have an existing TUFLOW model based on older ARR Data Hub inputs, when should we consider updating the hydrology using the new Data Hub information?	In QLD, the development and management of flood studies and flood mapping is deemed a responsibility of Local Government according to the State Planning Policy and Queensland Flood Risk Management Framework. Therefore, good to check the relevant local guidance in QLD.	Giancarlo Bonotto
3	Given the availability of the Full ARR IFD Grid, accounting for the spatial variability across entire catchments, how does the ARF process impact the rainfall being applied? (That is Applying a Grid of temporal Rain across the entire Catchment rather than a single centroid or several POINT gauges only ??)	The ifd accounts for the spatial variability but not the reduction in depth if the rainfall is applied over a large catchment so you need both.	Mark Babister
4	How would you recommend documenting which version or settings of the ARR Data Hub were used for a flood model, particularly if the model needs to be reviewed several years later?	The report should document the date the datahub was accessed the same way as when you reference a webpage, but it is good practice to save the datahub results.	Mark Babister
5	For NSW, when should we apply the 0.4 multiplier to the ARR Data Hub continuing loss, and where does this sit in the hierarchy compared with calibrated and FFA reconciled losses?	No the 0.4 CL is no longer recommended	Monique Retallick
		The data hub hasn't been updated yet. The new inputs presented will go live on the Development Data hub shortly and move to the main data hub in about 1 mth. Along with this is a new hierarchy	
6	Possibly out of scope for this session but would be great if anyone can shed light on how/whether these updates have been carried through to the TUFLOW Q' plugin?	Software suppliers will be adapting their software for the new inputs over the coming month	Monique Retallick
7	The pre-burst rainfall is large compared to the storm initial loss which means the burst initial loss will be very low or even negative. what if pre-burst IL is larger than the storm IL, is it sensible to assume burst IL as zero?		
8	is the FFA visualiser part of the RFFE tool planned to come back	I will investigate. It should be available at Ffa.wmawater.com.au	Monique

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9	Would the data hub ever expose the raw IFD raster maps which are apparently hosted on the new data hub (e.g., to enable easier calculation of spatial factors, etc)?	To add to the above, would the ARR data hub design loss value rasters ever be exposed / accessible?	
		Mark babister - They are not actually stored as rasters, but in a SQL database as rasters are too slow and memory intensive to sample. But such a feature could be implemented	
10	Is recommended IFD sets are available all across Australia??	Yes, most of Australia is the 2016 BoM IFD	
11	What SSPs are available for the climate change adjusted datasets?	SSP1,2,3,5 but we would not recommend SSP5	Mark
12	For default 2030 baseline, is it adjusted to a particular SSP scenario?	all ssp are essentially the same at 2030	Monique
		Monique, SSP5-8.5 has a slightly higher temperature increase at 2030 compared to the other three.	Johan Visser
		SSP5-8.5 at 2030 is not realistic on current climate trends.	David Whyte
		Most recommendations from authorities are for SSP2 and SSP3 not SSP5	Monique
13	Some clients look at the Bureau IFDs and then are surprised / upset when we tell them about current IFDs. Eg a client claiming Forece Majeur because of a '1 in 200 year' rainfall at their site using the old IFD. If DataHub has them all, can we ask Bureau to	Thank you, question taken on notice. At the same time, the ARR DataHub does not necessarily contain all available IFDs or the latest recommended IFD for all LGAs in QLD. Therefore, please, double-check with the relevant Council in QLD.	Giancarlo Bonotto
14	For councils with established TUFLOW models, what would you consider a sufficient change in ARR Data Hub inputs to justify revisiting or rerunning an existing flood study?	In QLD, relevant Policy and Guidelines, particularly, the State Planning Policy (SPP) and the Guide for Flood Studies and Mapping do not provide definitive advice on how new and evolving IFD data should be consistently managed in a Queensland context. However, these documents are currently under review.	Giancarlo Bonotto
15	With 2030 being the default for IFDs, have the losses also been adjusted?	For the ARR to TUFLOW QGIS plugin tool, if 2030 is now the default for IFD rainfall, will the tool also adjust the initial and continuing losses to match? Or will users need to apply those loss adjustments separately?	
16	Could the new automatic climate adjusted rainfall functionality create inconsistencies with existing TUFLOW models that already apply climate change adjustments elsewhere in the workflow?	The reason for providing climate adjusted IFD is so everyone does the adjustment the same.	Monique Retallick

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17	If a catchment crosses two different regions, how does the ARR Data Hub decide which region's rainfall and climate rules to use?	The outlet feature forces the rules, otherwise it is usually the centroid. The maps are implemented to let you check this	Mark Babister
18	Is it possible to download the preburst grids used in the ARR Data Hub? Would make it a bit easier to integrate with other batch-processing of design flood inputs that we do in R etc.	No. As discussed the data hub provides a single point of truth to avoid have to provide updates to secondary uses.	Monique Retallick
19	Has there been any work in extending the coverage of regional IL/CL losses into regional areas? Northern SA particularly doesn't have	No	
20	Have there been changes to pre-burst rainfall factors?	Only in NSW	
21	Would be nice if the catchment upload could handle gpkg as well? or		
		Catchment upload now uses Shapefile (.shp + .shx + .dbf minimum required), GeoJSON, or KML	Monique Retallick
22	Why are you focussing only on Centroid rainfall for an entire Catchment ? (That seems a very unrealistic approach given we know and can see rainfall variability in the raw IFD grid ?) Why not use the	You would normally sample on subarea centroid or using a shape file for the subarea	Mark Babister
23	With the new IFD data and climate adjusted rainfall in the ARR Data Hub, could the critical storm duration for a catchment change, and should we be testing the full range of durations again when updating an existing TUFLOW model?	The final report for the SEQ IFD will be available in the ARR DataHub, which contains comparisons with previous IFDs that might assist.	Giancarlo Bonotto
24	Could the Datahub offer the use of eastings / northings, rather than Lat / Long ?	think that would make it harder as you'd then have to specify projection.As a side note though, i recommend using qgis 'lat lon tools' plugin for quick copy/pasting of coords to and from platforms.	Dylan Chenoweth
		The BoM uses lat long for the IFD as they use a 40th of a degree. The size of a grid cells does change slightly over the country	
25	It's great that IFD is coming into Data Hub. My question is how are conflicts with the BoM Rainfall IFD being managed? Is there any dialogue with BoM for additional disclaimers on their site to prevent/warn people using BoM IFD data without applying ARR Data	Thank you, question taken on notice. At the same time, the ARR DataHub does not necessarily contain all available IFDs or the latest recommended IFD for all LGAs in QLD. Therefore, please, double-check with the relevant Council in QLD.	Giancarlo Bonotto

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26	With the new rainfall and climate guidance, should we be doing anything differently when developing GSAM (Generalised Southeast Australia Method) PMP (Probable Maximum Precipitation) events for	ARR requires all events including the PMP to be scaled for climate change	Monique Retallick
27	Will the API for the datahub also support these new enhancements?	yes	Monique Retallick
28	Will the formatting of the downloadable CSV be consistent with the previously provided BoM CSV format? This will make sure tools developed to operate on the BoM IFD CSV format works on the new		
29	With climate adjusted rainfall now available directly from the ARR Data Hub, how do DRAINS users avoid applying climate change twice if their existing workflow already includes a climate change adjustment? Note Watercom's own current tool specifically modifies both rainfall	Feel free to flick me a message afterwards if you have any questions about DRAINS specifically, but we will be looking to update DRAINS to support the new format once we get access to the new datahub.	Jonathan Klaric
30	What's the IFD recommendation based on? what are the assumptions and criteria?	In QLD, the development and management of flood studies and flood mapping is deemed a responsibility of Local Government, as per the State Planning Policy and Queensland Flood Risk Management Framework. Therefore, in QLD it follows the guidance from the respective LGA.	Giancarlo Bonotto
		I am aware, thanks. I meant the automatic recommendation when selecting a portion of/entire catchments. What is the selection based on?	Georgina Burgess
31	The BoM IFDs had the option of generating data for minutes/tc other than the default (5min, 10min, etc). Will these recommended IFDs also provide this functionality, or will these values need to be	The data hub is not replacing the functionality of the BoM website.	Monique Retallick
32	Is the LIMB IFD superseded by the QRA IFD?	In QLD, the development and management of flood studies and flood mapping is deemed a responsibility of Local Government according to the State Planning Policy and Queensland Flood Risk Management Framework. Therefore, it depends on the guidance from the relevant LGA in QLD.	Giancarlo Bonotto

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33	The 1960-90 IFD data keeps getting brought up, however e.g. last year, what years of data was being used? I.e. we are not changing from 1960-90 straight to 2030, there was an in-between timescale that we have been using since ARR16 or ARR19, correct?	The Bom IFD has a midpoint in 1960-1990 but includes a lot of data up till 2012. You can uplift for any time in between using the temperatures on the IPCC atlas	Mark Babister
34	Will there be an option to choose a custom horizon?	No but you can adjust using the temperature values the datahub gives. we could doo that if there is demant	Mark Babister
35	When does this update release so we can access the 2030 IFD data	You can already get them eg via the TUFLOW plugin	
		So the ARR data Hub website - still hasn't been updated to include this data?	
		These updates are not live on the data hub yet. They will go onto the development site for testing and for the software suppliers to access then they will move to the data hub in about a month. This will give a consistent way of applying the climate change increases	Monique Retallick
37	When you say it provides the "average values" of the IFD when you upload a shapefile of the catchment, does it take into account already the ARF adjustments, etc?	You still need to apply a ARF	Mark Babister
38	There are major changes to the future climate scenarios with AR7, which particularly result in significant reductions in the extreme scenarios i.e. SSP5-8.5. Is there flexibility to define different future scenarios outside the current AR6 SSP scenarios?	Yes, remember there are two parts to the IFD scaling , the future temperature increase and the method to scale rainfall based on temperature. The method will continue to inprove and change but you could uses alterative temperatures. I would advice against over thinking this as the CC adjustement are broad brush estimates to put you in the ball park	Mark Babister
39	Does this IFD update include a resampling of Gauge Data? If so is there a cutoff date for when the rainfall records were extracted up to?	Information on each data set is available in the jurisdiction tab at the top of the datahub	Monique Retallick

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40	With the new ARR Data Hub rainfall and climate change updates, should MUSIC users be reviewing the rainfall time series they use for water quality modelling? OR Are these changes mainly relevant to design flood modelling rather than long term MUSIC simulations?	They should but it is a bit hard to adjust continuous rainfall sequences in accordance with the current advice. There are methods out there but I would suggest they be used with caution.	Mark Babister
41	When designing sewer systems to WSA02 Appendix C directs the user to IFD data from the BOM 2016. Modification of IFD data based on climate change is not specified. I assume ARR would recommend adopting the 2030 adjusted IFD's at a minimum?	Yes	Mark Babister
42	are the PB temporal patterns just for NSW or all of Australia?	NSW only	Monique
44	Are there plans for a dedicated information session for councils, so council engineers and floodplain managers hear about these ARR Data Hub changes directly rather than first discovering them when they appear in a consultant's flood study or design report? 🤖	Thank you, question taken on notice.	Giancarlo Bonotto
45	I believe in the past, the Datahub doesn't provide the temporal patterns for the pre-burst rainfall. Is it now included in the new	Only in NSW	
48	The absence of data completion and reliability (it not being plainly stated) as well as manual tweaks for events such as 2011 continues to be a problem when applying and having to explain IFD used to stakeholders. The problem with datahub is such assumptions, data homogenisation are not easily accessible unless looking for technical reports. Will the new datahub have these readily accessible?	The final report for the SEQ IFD will be available in the ARR DataHub, which contains multiple analysis and very detailed information.	Giancarlo Bonotto
49	How does the ContLoss climate adjustments work with other infiltration models (eg Horton)?	Not within the scope of this presentation.	Monique Retallick
50	Can the raw data hub files be mirrored on github?	as per the 'one source of truth' discussions, no	

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		No. As discussed one source of truth	Monique Retallick
		That's why I stated mirrored. No one should be able to edit it, the grids are useful for batch processing. How do we get access to the grids? It is government data is it not?	Johan Visser
		I second this. The easiest workaround would be to host data publicly then digitally and cryptographically sign the 'official' datahub outputs.	Jonathan Klaric
		Agreed. Spatial data is also needed/useful for spatial pattern generation for semi-distributed models etc., and also useful for understanding spatial variability. All gridded datasets should be available for extraction, and version controlled to track changes.	
		Strongly agree with the discussion above, particularly regarding availability of spatial dataset	
		I would make the comment regarding the above that if someone is looking for the spatial datasets, they are likely to know enough to make sure they get the right inputs. Just food for thought.	
52	What about spatially varying IFDs?	sample by subcatchment	Mark Babister
53	What is the recommended approach for Council when ARR Data Hub information is updated after a flood study has already been completed and adopted? Should the adopted flood study be reviewed and updated immediately, or should the revised ARR Data Hub data only be incorporated during the next scheduled flood study review?	In QLD, the development and management of flood studies and flood mapping is deemed a responsibility of Local Government, as per the State Planning Policy and Queensland Flood Risk Management Framework. In addition, currently the State Planning Policy (SPP) and the Guide for Flood Studies and Mapping do not provide definitive advice on how new and evolving IFD data should be consistently managed in a Queensland context. Therefore, in QLD it follows the guidance from the respective LGA.	Giancarlo Bonotto
54	Previous version of the ARR datahub allows to download the BoM (2016) IFD grids (in .asc. format). Would this be available for the other sources of IFDs as well. Thanks	The data hub has never provided grids of IFD	

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55	How to log in for the Dev ARR data hub??	https://data-dev.arr-software.org/	Monique Retallick
57	For the latest preburst info - does this mean we now only have to apply the recommended values given that it covers both median and 75th percentile and not check the site location relative to the Loss		
60	Is there any updates for the IFD's for WA region?	No	
63	The IFD update projects eg SEQ are looking at recent data, so have a different baseline to BoM. Did I hear at the start that this is accounted for when climate scaling via DataHub?		
64	Your demonstration of the Warrill uploaded a catchment that spans two local govt jurisdictions. If say this example was a catchment over Qld/NSW border and the DataHub IFD returned is apportioned based on the catchment within the jurisdiction and the application of that governance for the area. I think that is what was explained but I would like to be clear on my understanding of how the IFD with uplift and		
65	where can we find the areal temporal patterns for the pre-burst? is the pre-burst for the 2030 uplifted by same amount as that of the rainfall at that location?		
66	Does the 2030 IFD include as the 2019 IFD events upto 1:2000 Year		
67	Can DataHub include PMP+CC?		
69	how usable are the new datasets with existing software suites? and what is the roadmap for software vendors to build capability to support these changes?		
71	for a project that requires assessment of rainfall over all of the NT how do we obtain the new IFD data ??	There is no new IFD for NT. Just climate change adjusted based on ARR v4.2	

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72	For Giancarlo - does the absence of a council's IFD on the DataHub imply that it is not to be used or there is just a lag in it being published. There are numerous QLD council's commissioning and coming up with IFDs based on QRA funded flood studies.	Thanks for the question. The ARR DataHub does not necessarily contain all available IFDs or the latest recommended IFD for all LGAs in QLD. Therefore, please, double-check with the relevant Council.	Giancarlo Bonotto
73	I was wondering why the QRA IFD has not been listed under the jurisdiction-specific section. Could you please clarify the rationale	It is getting a jurisdiction specific page as part of the update. The update has not yet been pushed live	
75	Will the older Data Hub versions remain accessible at another URL? Occasionally we have needed to access data from the older Data Hub versions (some of them are not available).	yes, this was covered earlier. - when u get the recording link you can rewatch.. think about 10mins in.	Dylan Chenoweth
80	The grapevine has it that the Qld Govt (DRDMW) has undertaken a PMP revision and there is now new depths available and superceding the PMP from early 2000s, when will this dataset be made available?	Thanks for the question. Please reach out directly to DLGWV to confirm this information.	Giancarlo Bonotto
81	are we going to name NSW Guidance Version 2021 or 2026?		
82	The SSP figure is the median of a range of temperature extremes that may be experienced in a single year. Will there be future functionality to look at the extremes of 95% to demonstrate sensitivity within a SSP rather than jumping to a new pathway.		