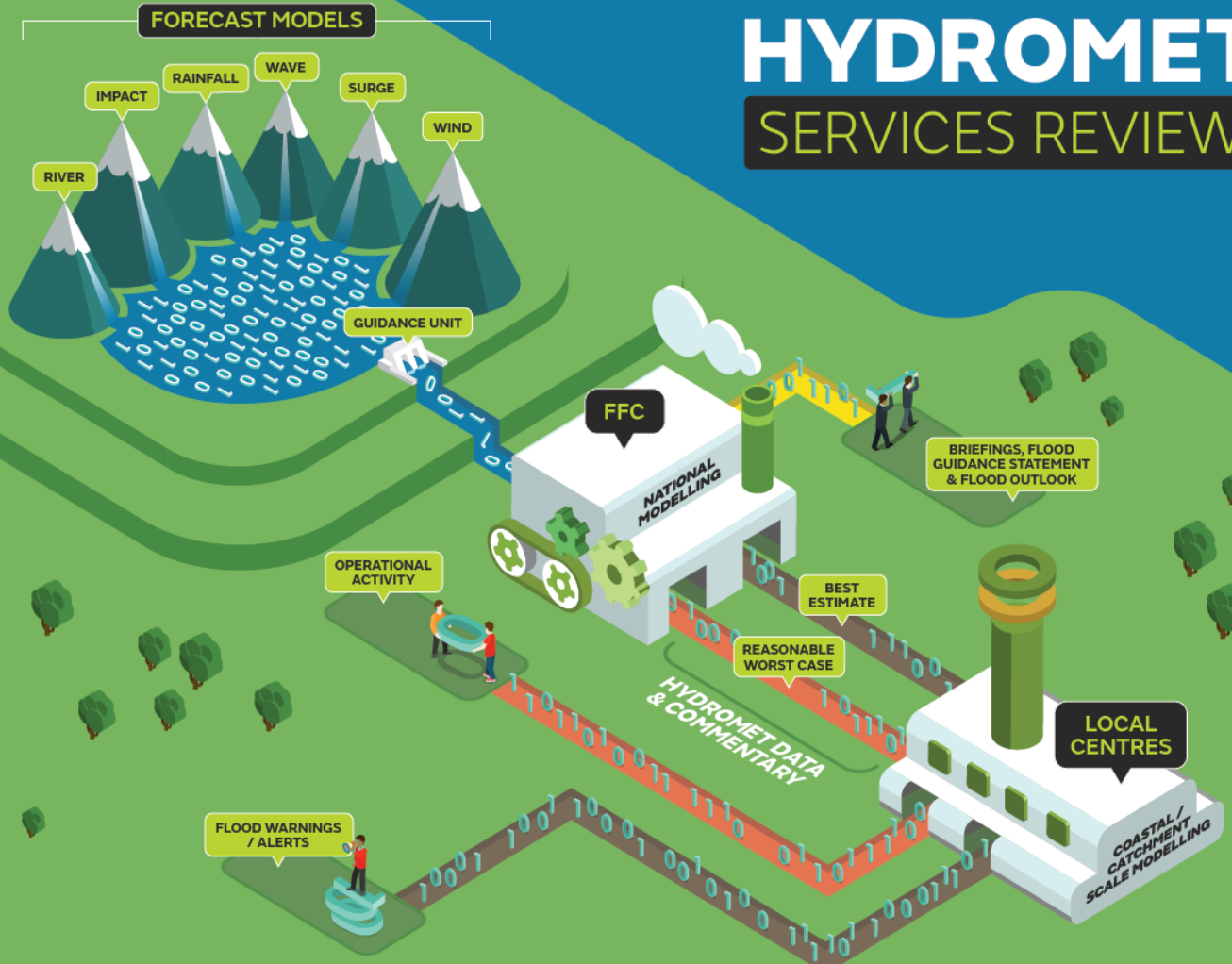


FLOOD FORECASTING CENTRE

a working partnership between



HYDROMET SERVICES REVIEW



Hydromet services functionality in Delft-FEWS

Adrian Wynn

FFC Senior Hydrometeorologist

FLOOD FORECASTING CENTRE

Current forecasting chain

a working partnership between



Good day – data flows through model chain with no interruption

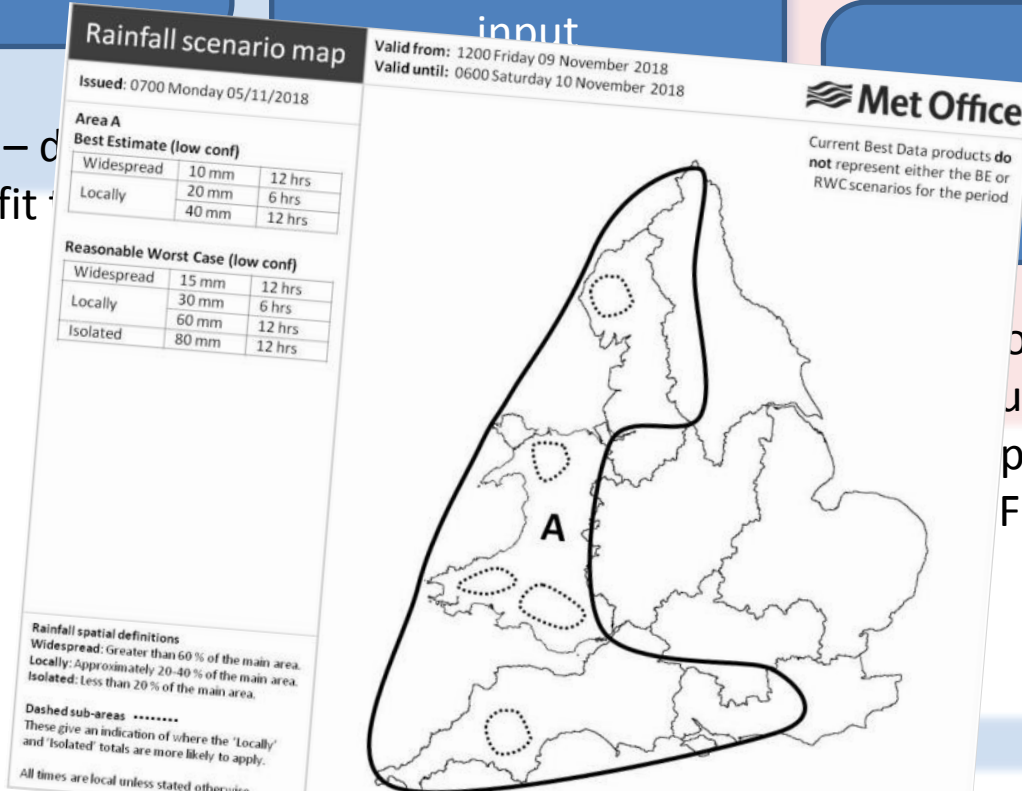
Met Models

Hydrometeorologist input

Hydrological models/
Hydrometeorologist input

Warner/impact assessment

Bad day – data doesn't fit story.

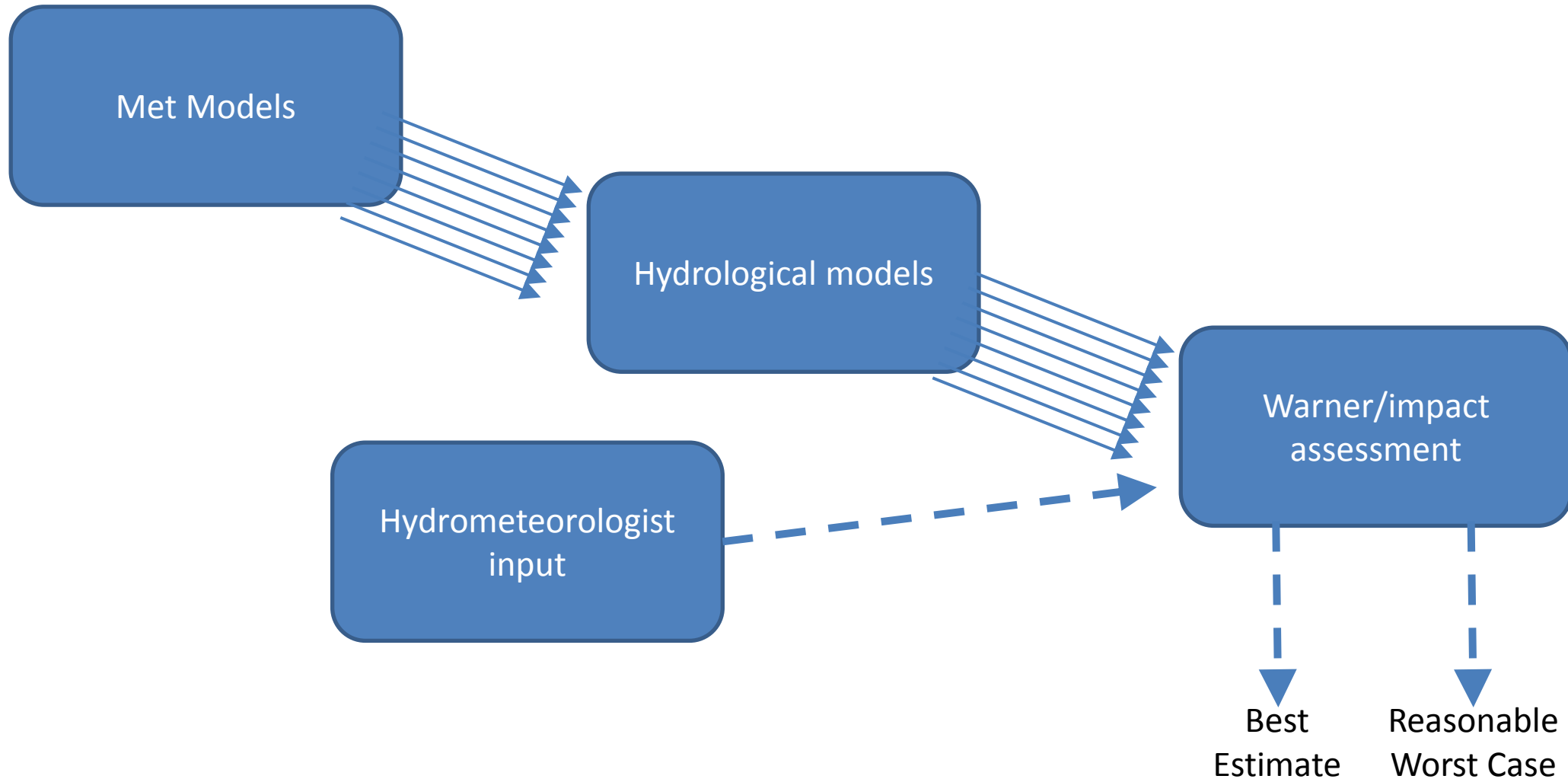


Hydrometeorologist
 locally inputs
 parameters
 FEWS

Met Office

Environment Agency/Natural Resources Wales.

Idealised forecasting chain



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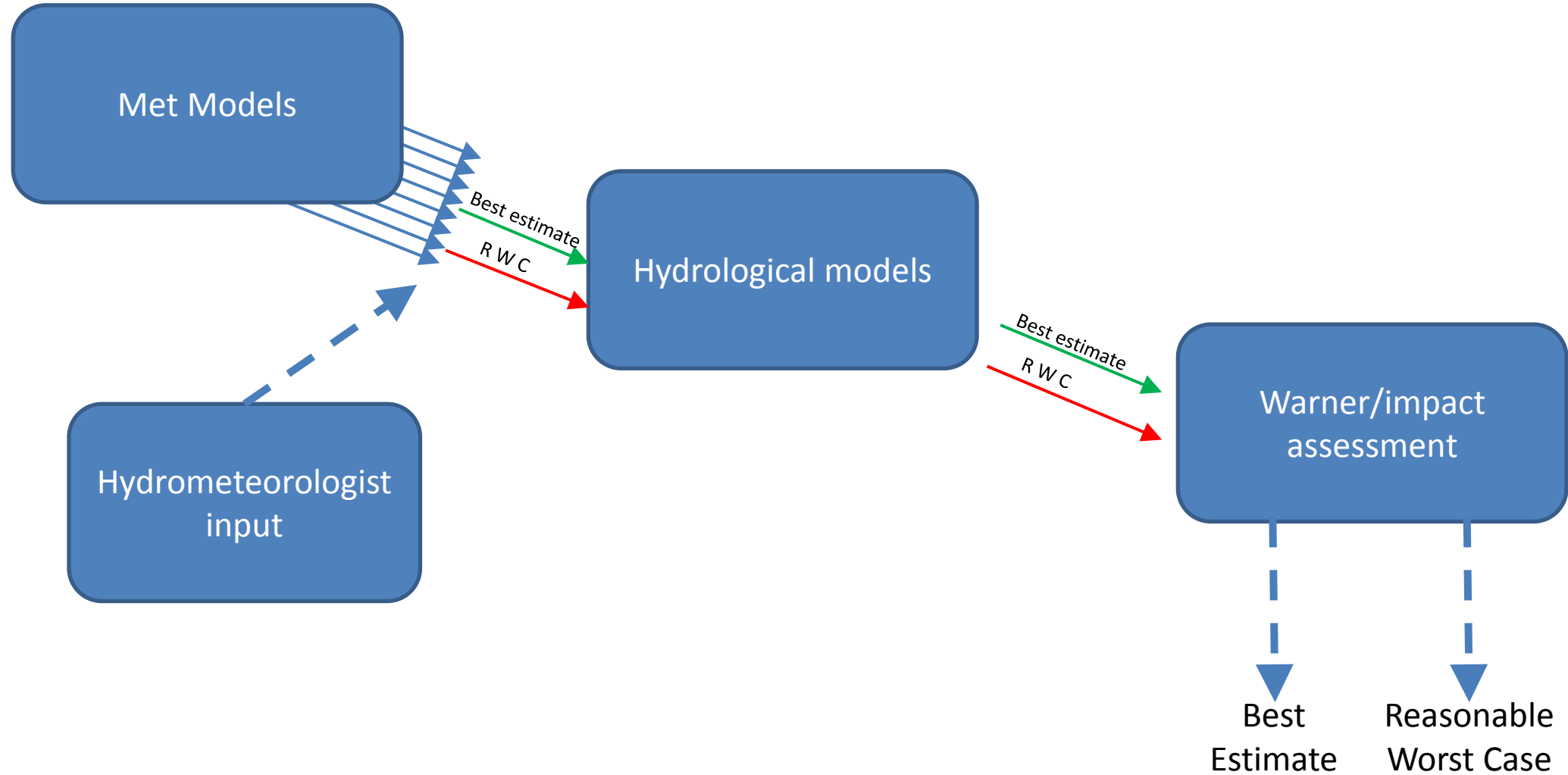
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For Autumn 2019, we need to:

- Run two separate forecast streams – Best Estimate and Reasonable Worst Case.
- Identify Best Estimate and Reasonable Worst Case data feeds from any FEWS input (e.g. ens member, previous model run).
- Trial modification imported forecast data to create new forecast dataset (trial).
- Create text to explain Hydromet actions.

Planned forecasting chain



Hydromet Data Management tool example



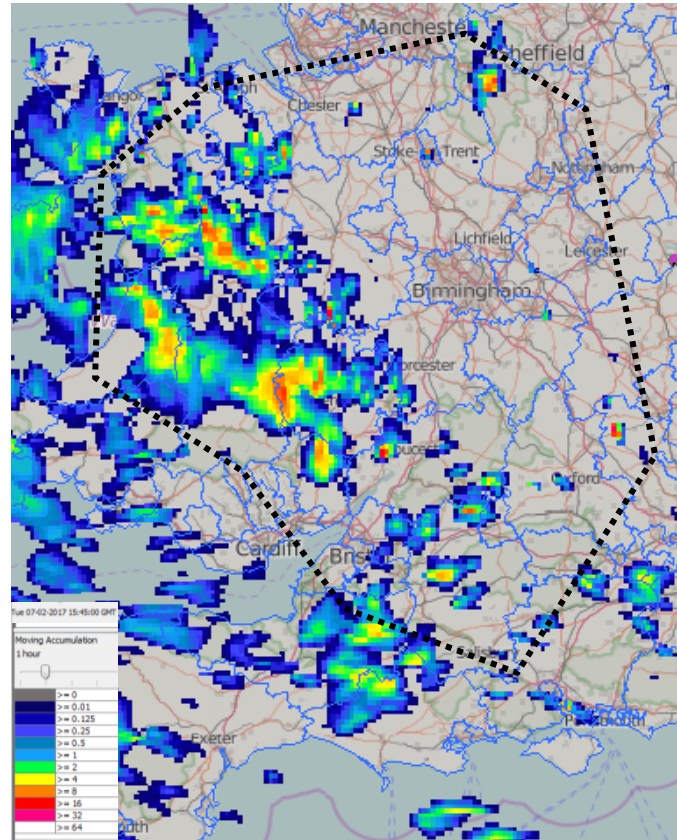
Bonnie
Hydromet

Log off

Future Flood Forecasting System

System Status

- Dashboard
- Hydromet Services
- Coastal Model Inputs
- Rainfall Data
- Rainfall Deterministic
- Short Range Forecast
- Medium Range Forecast
- Long Range Forecast
- Coastal Wind
- Coastal Wave and Surge
- View Ensembles
- Layer Selector
- Threshold Summary



HRA Status

Hydromet Tools & Data

Set as: Hydromet Best Estimate

Confidence Level: Low Medium High

Modify: CAP TRGT DD MAX DD

Max: 15mm

Min:

Comment:

HM Best Estimate modified to 'cap' the maximum hourly rainfall to 15mm due to known model problems. This cap has been applied to all data within the polygon.

Save as Draft

Publish

From: 17.02.2017 06:00 (4)

To: 21.02.2017 18:00 (22)

Model Origin



Hydromet Data Management tool example



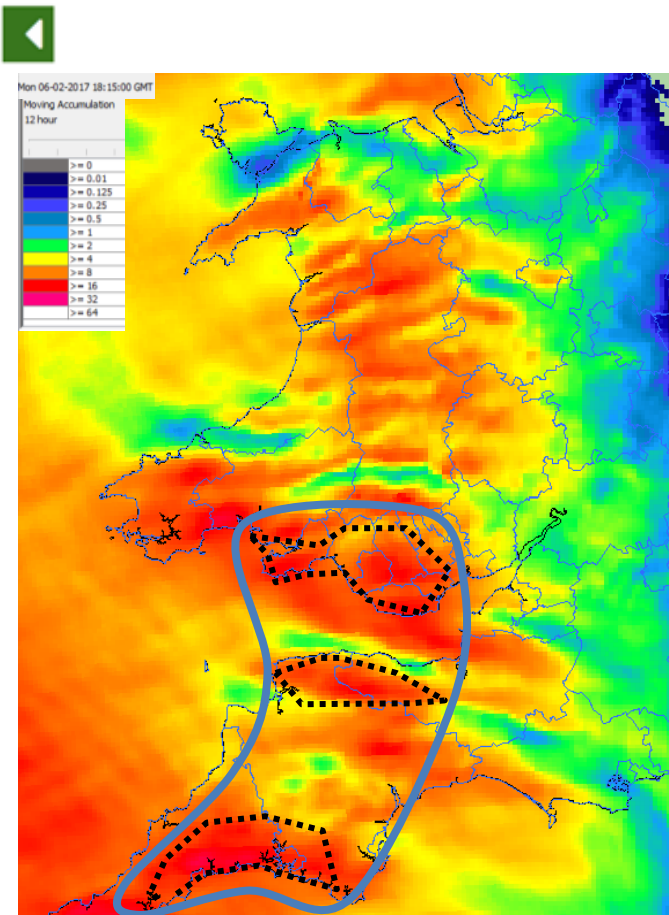
Bonnie
Hydromet

Log off

Future Flood Forecasting System

System Status

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HRA Status

Hydromet Tools & Data

Set as: Hydromet RWC

Confidence Level: Low Medium High

Modify: CAP TRGT DD MAX DD

TRGT DD Multiplier 1.5

Comment:

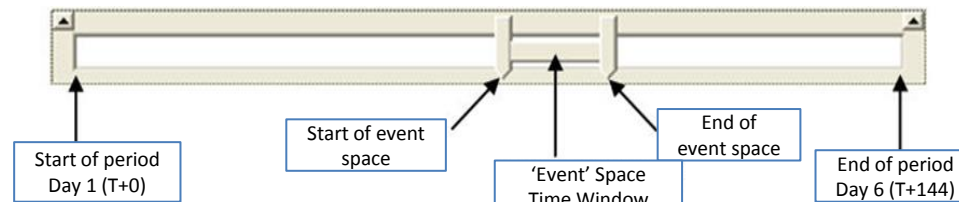
HM RWC modified to increase the 12 hour rainfall totals in the south-west by a factor of 1.5 to account for a slower front, with orographic enhancement

Save as Draft

Publish

From: 17.02.2017 06:00 (4)

To: 21.02.2017 18:00 (22)



Discussion:

- Any other forecasting centres doing similar activities?
- Any other forecasting centres interested in similar functionality to this?
- What level of modification is acceptable?