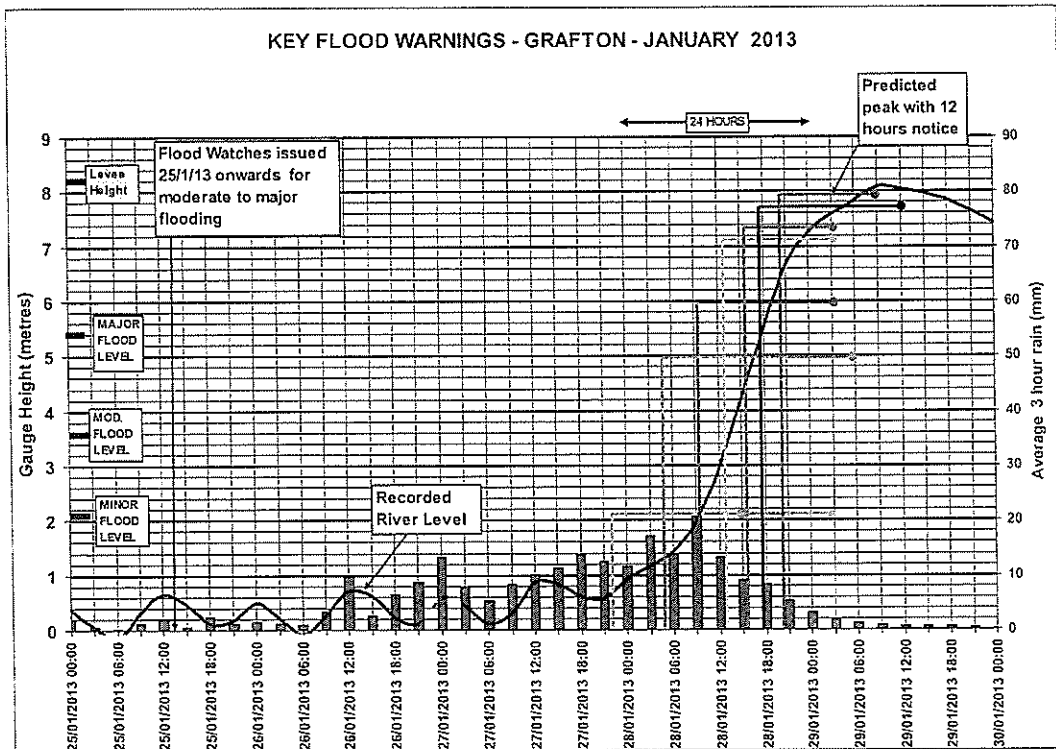
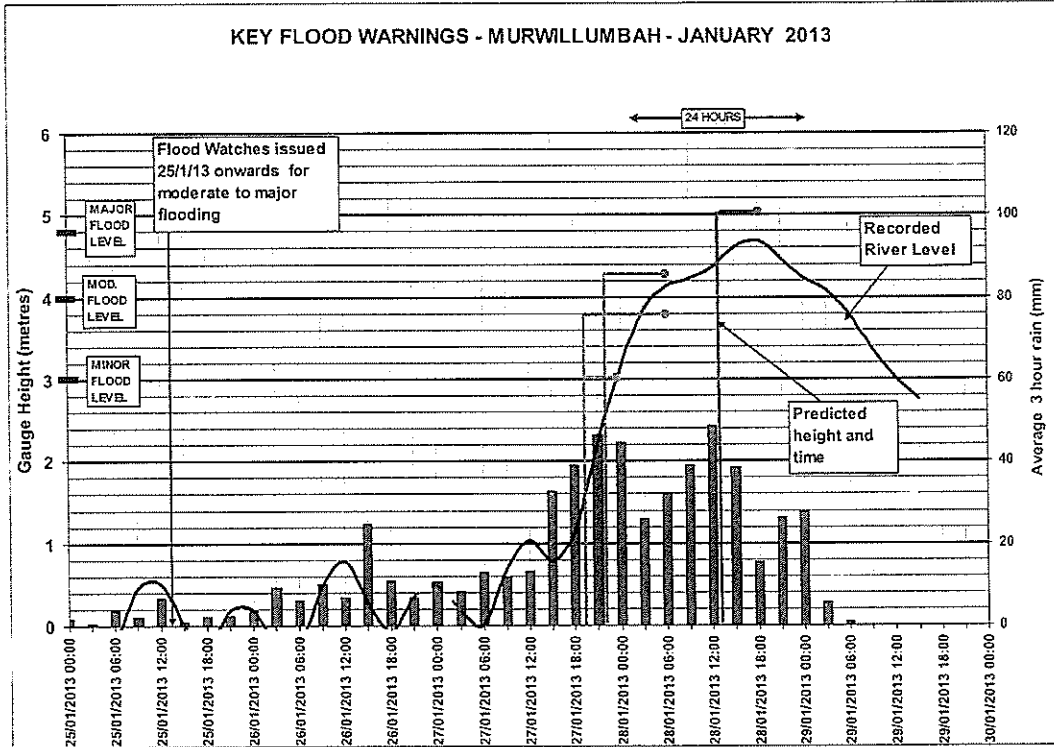
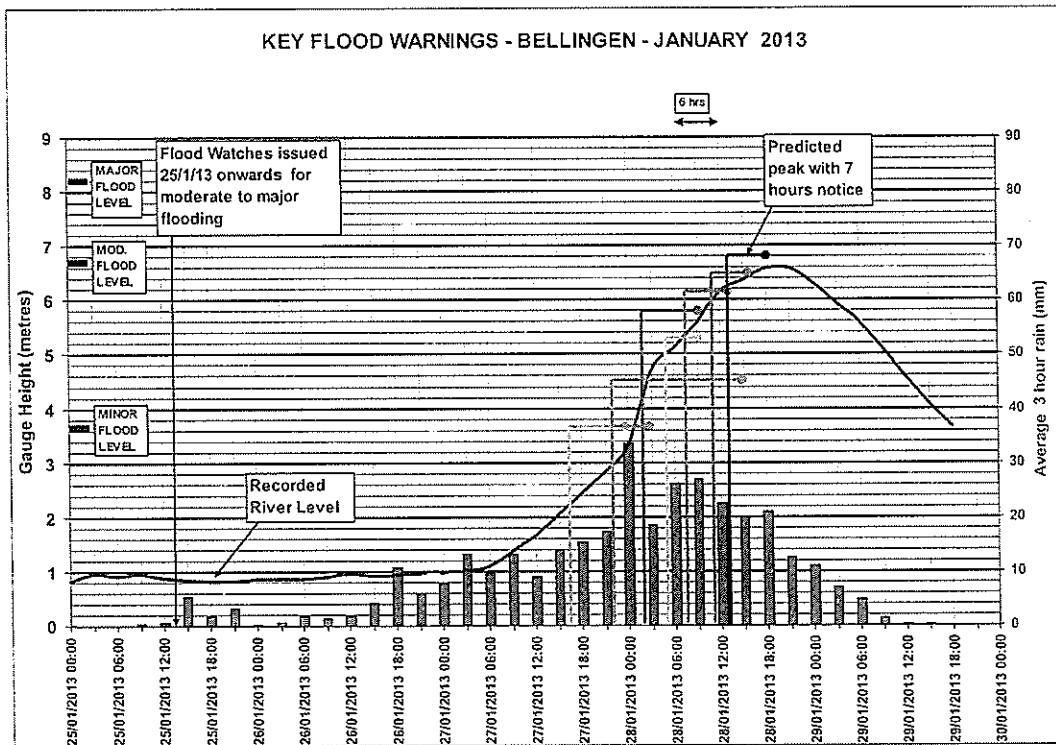
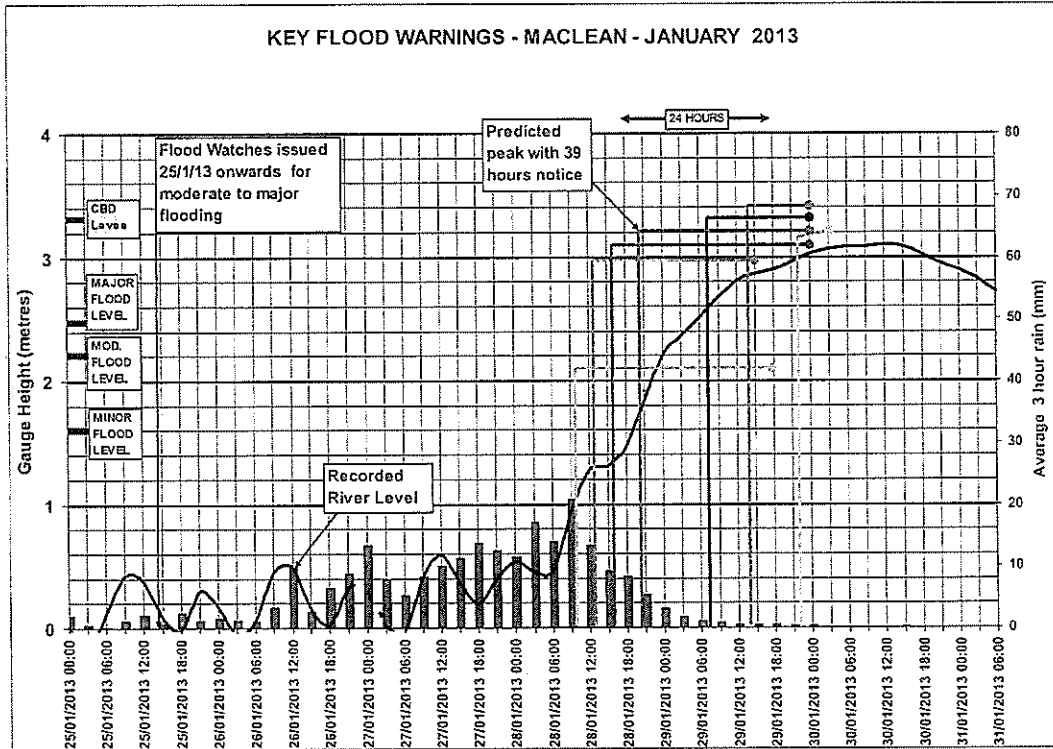


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[REDACTED]

From: [REDACTED]
Sent: Friday, 25 January 2013 11:12
To: [REDACTED]
Cc: amir
Subject: AMIR YBBN [SEC=UNCLASSIFIED]
Attachments: AMIR_VA_YBBN_20121117_TS.pdf

Dear [REDACTED]

Please find attached the requested Aviation Meteorological Incident Report (AMIR) for YBBN.

Please accept my apologies for the delay in forwarding this information on to you. If you require further assistance, please do not hesitate to contact me by return email (cc to [REDACTED]).

Kind regards,

[REDACTED]

[REDACTED]

National Manager Aviation Weather Services
Weather and Ocean Services Branch
Bureau of Meteorology
GPO Box 1289 Melbourne VIC 3001
700 Collins Street
Docklands VIC 3008
T [REDACTED] M [REDACTED]
F [REDACTED]
Email: [REDACTED]
Web: www.bom.gov.au

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AVIATION METEOROLOGICAL INCIDENT REPORT

Contact Details

Name: [REDACTED]
Organisation: Virgin Australia
Phone: [REDACTED]
Email: [REDACTED]

Incident Details

Reference number: dw01/12
Time/Date (UTC): 0200UTC 17/11/2012
Location: YBBN
Aircraft Detail: Various
Weather Phenomena: Thunderstorm

Incident Description

Thunderstorm Widespread disruptions detailed below were caused to Virgin Australia operations over this weekend due to heavy thunderstorms and changes to forecast strategy.

During the event there were a number of changes to forecasts (TAFs and TTF's) giving little lead time to the development of significant weather. This led to difficulty for the airline Operations Centre to develop and maintain a disruption management strategy to mitigate the impact of this event on airline operations.

Impact on Operations:

[REDACTED] S47G [REDACTED]
[REDACTED]

Met Info Required:

Were the forecasts appropriate and timely for the weather affecting over the weekend 17-18 November?
How did the TTFs and TAFs verify against actual observations?

Basis of Forecast

A complex surface trough and convergence was located over SE Qld with an upper level trough moving over the region on Saturday (17th) night. Models indicated that conditions near the coast during Saturday morning were relatively stable and any storms advecting into that area would weaken; these conditions were expected to continue until the early afternoon. Instability, convergence and heating were expected to lead to early afternoon thunderstorms with possible severe cells on both days.

Over the period 162300 to 180800 five thunderstorms had an impact on the conditions and forecasts for Brisbane Airport. In post-analysis, all thunderstorms have been assessed as having a 30% or greater probability of affecting the airport and were either on the forecasts or amended prior to impacting on the airport. The shortest notice for an amendment was 46 minutes prior to the first storm at 170041Z reaching the airport.

Apart from routine TAFs and TTFs, two airport warnings were issued at 162355 and 170843 with a minimum warning of time of 46 minutes.

Reason for Forecast Deficiency

All thunderstorms were forecast; however there a short lead on the first thunderstorm due to the faster than normal movement and development in an area which was expected to be more stable. Radiosondes from 16/11z and 17/23z at Brisbane AP would have assisted analysis of the environment for this event.

System or Equipment Faults

Radiosonde equipment at Brisbane AP not operating on Friday (16/11z) night and Saturday (16/23) morning. There was a technical fault with the issue of the 170830UTC TTF YBBN where TTF was not attached.

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Recommended Preventative Action
Procedural Nil.
Information Nil.
Training Due to the complexity of the situation it is recommended that these events and the decisions made into case studies for competency training of aviation forecasters.
Other Humidity sensors on aircraft would make AMDAR data very useful in similar events, particularly when radio sonde stability data is limited or not available.
SRAV Comments
Agree with comments and recommendations
Author Details
Prepared by: [REDACTED], SRAT, & [REDACTED], RAM-NE Date: 24/01/2012
Approved by: [REDACTED], National Manager, Aviation Weather Services (SRAV) Date: 25/01/2012

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