PHOENIX RapidFire

OPERATIONAL TECHNICAL NOTE 2

Relates to PHOENIX RapidFire Version: 4.1
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RELEASE OF VERSION 4.1.3 TO FIX ARITHMETIC OPERATION ERROR

Fire Prediction Services

PHOENIX RapidFire

Introduction

The Tasmania Fire Service reported an issue where they received a number of 'Arithmetic operation resulted in an overflow' errors. Investigations revealed that the issue was associated with how PHOENIX applied one of the algorithms used to calculate fine fuel moisture. A patch has been produced as Version 4.1.3 that addresses the error. The PHOENIX Technical Reference Group has endorsed the new version for release.

Background

The Tasmania Fire Service repeatedly encountered the error message when running large batch scenarios with particular input NetCDF weather. The error was intermittent when using NetCDF, and when using point weather, it had never presented.

Technical Notes

Investigations by Stock Software with assistance from Kevin Tolhurst and Stuart Matthews of the New South Wales Rural Fire Service identified that there was an issue with how PHOENIX applied one of the algorithms used to calculate fine fuel moisture.

Modifications have been made to the PHOENIX code, released as Version 4.1.3.

Testing of the code modifications by Stock Software and the Tasmania Fire Service indicates that the issue has been addressed without any impact on PHOENIX outputs.

Determinations

The PHOENIX Technical Reference Group has endorsed Version 4.1.3 for release.

Further Information

For further information please contact Fire Prediction Services on firepredictions@afac.com.au. PHOENIX versions are available through your PHOENIX licensee.