



Model Analyses and Guidance

Version 5.2.0 Release Notes - Mar 28, 2025

Scope

The release includes the following changes:

- Upgrade to the RHEL8 environment.
- Backend improvements to enhance the stability, performance and security of the application.
- Upgrade to PHP8.
- Implement additional security measures.

WCOS2 Resource Changes : NO

WCOS2 Updates

This release is focused on upgrading to PHP8 in conjunction with the RHEL8 environment upgrade and the associated security compliances. Two programmatical exceptions listed below notwithstanding, all the changes are on the web part of the MAG repo.

The two files that are changed on the wcos part of the MAG repo are:

1. `/sorc/skewmap.cd/skewtmap.c`. This change is needed to comply with web browsers' content security policy. Per production protocol, the skewtmap.c has to be re-compiled by HPC as detailed in the Implementation Instruction document - <https://docs.google.com/document/d/15aDWEIj-sSCi9A-Yuu7IAvDkgXBg3RgLBUZ4jWd04q8/edit?tab=t.0>.
2. `/ush/dev/mod-snd-sorc/modsnd_map_table.c`. Similar to the skewtmap change described above, this change is required to adhere to the content security policy with the RHEL8 upgrade. However, the compilation of this code is only done when the web code is updated by the SDB team, hence, no additional change has to be made by the HPC team.

A file listing differences between (current production version) and v5.2.0 named **diff_5.1.1_prod_5.2.0_20250328** is placed under **/wcos/docs** in the baseline.

A copy is also available in Google Drive:

https://docs.google.com/document/d/1xYWgs51z0-S0wxG80sNxmsHGfKsi51FwGIWIIngb7xo8/edit?usp=drive_link

Tickets

The following list contains all tickets that are included in this version:

- [MAG-369] Fix sizeof() Syntax Error in observation-skewt-parameter_body.php (RHEL8/PHP8)
- [MAG-370] Fix TypeError from strpos() in model-guidance-model-parameter_body.php (RHEL8/PHP8)
- [MAG-377] Forecast Hours Grid Has Incomplete/Incorrect Data in Model Guidance for Some Models Due to PHP8/RHEL8 Update
- [MAG-378] Replace In-Line JavaScript for MAG RHEL8 Update for Security

