From: Greene, Mary C. (GSFC-610.2)[TELOPHASE CORP] via merra-news < merra-news@lists.nasa.gov>

Sent: 29. november 2021 16:41

To: merra-news@lists.nasa.gov

Subject: [merra-news] Notification of October MERRA-2 data Oct delay and reprocessing for June - September 2021

Dear MERRA-2 data users,

The GMAO is reporting that a significant issue in observation pre-processing has been found in MERRA-2, that will require reprocessing all data from the summer of 2021 forward.

MERRA-2 analyzed values of near-surface temperature have shown an increased warm bias since early summer 2021, with corresponding biases in related quantities such as sensible heat flux. The cause of these biases has been traced to an error in the pre-processing of ocean buoy observations of near-surface temperature used in the analysis, in which the routine conversion from temperature to virtual temperature was inadvertently applied twice. The resulting biases in

MERRA-2 analyzed near-surface temperature reach roughly 2C in regions around the Caribbean and Gulf of Mexico during late summer 2021, with generally smaller values elsewhere. A modification to the observation pre-processing procedure has been implemented that corrects the problem.

As a result, we are currently reprocessing a portion of 2021 and will deliver new versions of MERRA-2 data products for June 2021 through September 2021. The replacement data filenames will have the product counter incremented to reflect a new file version, as documented in the MERRA-2 file specification. For example, the file:

MERRA2\_400.inst1\_2d\_asm\_Nx.20210801.nc4

will be replaced by: MERRA2 401.inst1 2d asm Nx.20210801.nc4

The MERRA-2 data for October have not yet been distributed, so the filenames for this month and beyond will be as normal.

We hope to have all of the reprocessed months, as well as October and November available by mid-December.

We apologize for the inconvenience and thank you for your patience.

Thank you GES DISC User Service