

PROGRAM TO CONVERT MM5-3DVAR ANALYSIS INCREMENTS OUTPUT TO VIS5D

This program is similar to the algorithm 4 presented by Group 01 of the Iberian MM5 Network <http://redibericamm5.uib.es>

This particular program converts the analysis increments diagnosis output of the MM5-3DVAR system to Vis5D. The analysis output from the 3DVAR system is an MMINPUT-like file. This algorithm is intended to convert analysis increments though MMINPUT (sigma) files can also be converted.

The MM5-3DVAR system uses a variational method to combine observations with a background first-guess field. The output from the program is an MMINPUT file which can be used to initialize the MM5. Besides, it generates diagnosis files of the analysis. One of them is the DAProg_3DVAR.analinc which contains the perturbations added to the background field due to the observations, which is an estimate of the analysis error.

COMPILATION: The version included in this file is a binary compiled under Linux with the Portland Group compiler, though I guess it could easily be ported to a different system. It is important to modify the Makefile to make sure that the compiler will find all Vis5d dependencies (vis5df.h).

RUN: Analinc3dvar_to_v5d pars.Analinc3dvar file.v5d

EXAMPLE: The example included are the analysis increments of 19 December 1979 at 1200 UTC using NCEP fields as first guess and standard sounding and surface data.

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October 2003