A&OS C115/C228 – How to use Vis5D

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The ARPS model (not DTDM) can produce model output in Vis5D format. Here are a few quick notes regarding producing and viewing model output in Vis5D on our Synoptic Lab Linux computers. There are several steps:

(1) Getting Vis5D ARPS output involves recompiling the model, and running it again. You cannot get ARPS output in GrADS and Vis5D formats simultaneously. Recompile with this command

```
makearps -io v5d arps
```

(2) Modify the `arps.input` file, and set `hdmpfmt` to 11. `hdmpfmt` = 9 was for GrADS.

(3) Run the model. One Vis5D history dump is made for each model output time, with the name determined by `runname` and the output time appended. For example: `delcity,v5d000000`, `delcity.v5d0000300`, etc..

(4) Combine these files into a single Vis5D file, using the `v5dappend` command. The last name in the sequence is the name used for the combined file. You can further combine files that already represent Vis5D combined data. Example

```
/home/fovell/v5dappend delcity.v5d000000 delcity.v5d0000300 delcity.v5d0000600 part1.v5d
/home/fovell/v5dappend delcity.v5d000900 delcity.v5d0001200 delcity.v5d0001500 part2.v5d
/home/fovell/v5dappend part1,v5d part2.v5d whole_run.v5d
```

This winds up creating a single Vis5D file called `whole_run.v5d`.

(5) Launch Vis5d. There are many, many buttons to play with. Plus, Vis5D tends to be buggy and bad things ca happen. Prepare to spend a fair amount of time playing with it. You can export images (the SAVE PIC button).

```
/home/fovell/vis5d -mbs 500 whole_run.v5d
```

A Vis5D file for you to work with: `/home/fovell/delcity.v5d`. More information, including documentation: `http://vis5d.sourceforge.net/`.