

To: Distribution

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Subject: Installation Procedures for the PUFF-AFWA Program Version 3.00

## 1 BACKGROUND

The purpose of this memo is to document the installation procedures developed to install PUFF-AFWA software on the UNIX platform. The UNIX products were backed-up to tar files using the tar (tape file archiver) command and the tar files copied to a CD.

## 2 UNIX INSTALLATION PROCEDURES

The UNIX installation CD contains the tar file. Listed below are the instructions to install the software on a UNIX host machine:

- Load the CD labeled “*PUFF-AFWA Software Version 3.00*” into the CD drive
- If your CD drive is on a PC, then FTP the tar file from the CD drive to the UNIX host machine, to the directory <**your installation directory**>.
- If your CD drive is on the UNIX host machine, then copy the tar files from the CD drive to the directory <**your installation directory**>.
- Change directory to the top level PUFF-AFWA installation directory:  
**cd <your installation directory>**.
- Extract the software files by issuing the following commands:  
**tar -xvf puff-afwa-v300.tar**

- Review and edit the .args files, which contain settings and pointers which are dependent on the software version, the user’s file structure and the location of wind data files.
  - puff.args - Contains settings, paths and wind file directory defaults.
  - puffview.args - Contains display and path defaults.
  - ashdump.args - Contains ash output defaults.
  - uni2puff.args - Contains unidata defaults.

The following table lists the arguments that ***must*** be edited and the file(s) in which they reside. If data is not available for all models (avn, nogaps, mm5, avn-datacube, or merge-datacube), it is sufficient to specify only the path of the GRIB files whose model type matches the “model” argument.

ARG NAME	Value	Location and File
model	<wind model name (avn, nogaps, mm5, avn-datacube, or merge-datacube)>	<your installation directory>/src/puff.args
avnDatacubePath	<path to your AVN-based Datacube GRIB files>	<your installation directory>/src/puff.args
avnPath	<path to your AVN modelGRIB files>	<your installation directory>/src/puff.args
mergeDatacubePath	<path to your AVN and merged MM5-based Datacube GRIB files>	<your installation directory>/src/puff.args
mm5Path	<path to your MM5 model GRIB files>	<your installation directory>/src/puff.args
nogapsPath	<path to your MM5 model GRIB files>	<your installation directory>/src/puff.args
pinPath	<your installation path>/src/viewgmt/pushpins.txt	<your installation directory>/src/puff.args, puffview.args
pushpinCfg	<your installation path>/src/viewgmt/pushpins.cfg	<your installation directory>/src/puff.args, puffview.args
volvPath	<your installation path>/src/puffsrc/vokanos.txt	<your installation directory>/src/puff.args, puffview.args

**ashdump.args** (The parameters listed in this file are set to default values. If necessary, the user may edit these parameters using any UNIX compatible editor.)

**uni2puff.args args** (The parameters listed in this file are set to default values. If necessary, the user may edit these parameters using any UNIX compatible editor.)

- Establish a series of symbolic links. These are not reproduced when tar’ing and they need to be done exactly as described.

- **cd <your installation directory>/src/puffsrc**  
**ln -s args.C ashdump\_args.C**  
**ln -s args.C puff\_args.C**  
**ln -s args.C uni2puff\_args.C**
  
  - **cd <your installation directory>/src/dstsrc**  
**ln -s ../puffsrc/puff.args afwa2puff.args**  
**ln -s ../puffsrc/args.C afwa2puff\_args.C**
  
  - **(cd <your installation directory>/src/gui**  
**ln -s ../puffsrc/puff.args puffgui.args**  
**ln -s ../puffsrc/args.C puffgui\_args.C**
  
  - **cd <your installation directory>/src/viewgmt**  
**ln -s ../puffsrc/args.C puffview\_args.C**
- The following environment variable **must** be adjusted for your configuration as needed. They can be set in your .cshrc file so that they will always be active.

**setenv OPENWINHOME <your openwin directory>**

**setenv GMTHOME <your GMT directory>/GMT3.3.4**

**set path= ( <your installation directory>/src/bin <your GMT directory >/bin  
 \$OPENWINHOME/bin <your SUNWspro path>/bin \$path )**

- Modify the Makefile to point to your installation paths:

**cd <your installation directory>/src**

**vi Makefile**

**edit the following variables:**

**UPOS\_SW to point to <software path to YOUR system tools>/\$(HOSTTYPE)/**

**X11\_INCPATH to point to <your X11 include path>**

**X11\_LIBPATH to point to <your X11 library path>**

**cd <your installation directory>/src/libsrc**

**vi Makefile**

**edit**

**UPOS\_SW to point to <software path to YOUR system tools>/\$(HOSTTYPE)/**

- Compile all the software by issuing the following commands, using a **gcc 3.0 or higher** version compiler:

**cd <your installation directory>/libsrc**

**make clean**

**make all**

**cd <your installation directory>/src**

**make clean**

**make all**

### **3 UNIX UNINSTALL PROCEDURES**

Listed below are the instructions to uninstall the software from the UNIX host machine:

- Log on to the host machine and change directory to the top level PUFF-AFWA directory:

**cd <your installation directory>**

**rm -rf puff-afwa-v300**

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