

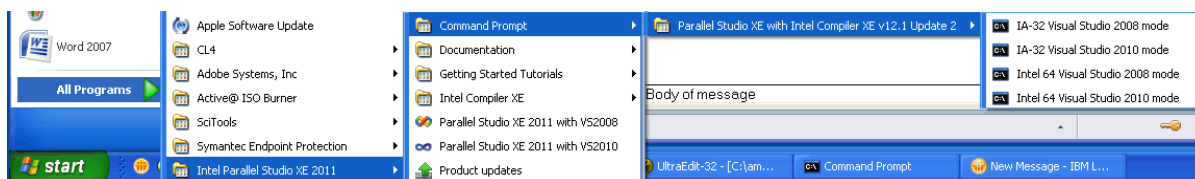
## Compiling/recompiling DEGADIS (12260)

DEGADIS was written in Fortran and consists of 9 program modules. Each module is comprised of several or more subroutines.

While a list of the subroutines that comprise each module can be written out here, MAKE files were generated instead to aid in the compiling and recompiling of each module. Each MAKE file contains instructions in a standard format to allow a MAKE utility program to read those instructions and successfully compile a program or module. The contents of each MAKE file are in text format and should be easy enough for a person with some compiling skill to compile these modules with a different Fortran compiler (e.g. G95, Absoft, etc.) For any particular programming environment, knowing how to execute the appropriate MAKE utility is important. The following instructions are based on Microsoft's Visual Studio NMAKE utility.

The following are instructions for compiling and recompiling DEGADIS based on an Intel Fortran Compiler operating in a Windows Operating System environment.

- 1) After installing the Intel Fortran Compiler, there will be one or two Command Prompt menu entries accessible via the Start button, typically one for a 32-bit and the other for a 64-bit computing environment as appropriate. Click on the appropriate Command Prompt menu item. It is necessary to use one of these Command Prompt windows as opposed to the Command Prompt window available under Accessories. When the Intel generated Command Prompt window is activated, a number of environmental variables are created that point to various library and compiler related functions.



- 2) Make files have been created for each one of the DEGADIS modules. In order to be able to use the program NMAKE, the path to NMAKE.EXE has to be set. You can use the Windows Explorer program to search for its location to determine its full path name. Here is an example:

```
set path=%path%c:\Program Files (x86)\Microsoft Visual Studio 9.0\VC\bin
```

- 3) The NMAKE execution entered in the Intel Command Prompt window is:

```
nmake -f make_src.mak where -f indicates the MAKE file name
```

- 4) The MAKE files included with the DEGADIS V2.1 package on SCRAM: Make\_jet.mak, Make\_jetin.mak, Make\_jetinp.mak, Make\_obs.mak, Make-sobs.mak, Make\_src.mak, Make\_srt.mak, Make\_brg.mak, Make\_dos.mak, Make\_inp.mak. These MAKE files were written to use Intel's XE Fortran compiler but have worked with later Intel versions.

Here are the executables each MAKE file generates:

make\_inp.mak generates DEGINP.exe (interactive input for ground-level plume model)

make\_src.mak generates DEG1.exe

make\_obs.mak generates DEG2.exe

make\_sobs.mak generates DEG2s.exe

make\_srt.mak generates DEG3.exe

make\_dos.mak generates DEG4.exe

make\_jetint.mak generates jetint.exe (interactive input for vertical jet/plume model)

make\_jetin.mak generates jetpluin.exe

make\_jet.mak generates jetplu.exe

- 5) If you have any issues with these instructions, please send us an email through the SCRAM web site "Contact Us" link at: <http://www.epa.gov/ttn/scram/comments.htm>