

FORTRAN 90: FORTRAN 77

Fixed Format

Meteorology 227
Fall 2009

Purpose

- Students should learn to recognize and use FORTRAN 77 code.
 - Still widely used.
 - Legacy models are written in FORTRAN 77.
- FORTRAN 90: free form
- FORTRAN 77: fixed form

Fixed Form

- First 72 columns of each line are scanned.
 - Short lines are padded.
 - Long lines are truncated.
- First five columns must be blank or contain a numeric label.
- Continuation lines are identified by a nonblank, nonzero in column 6.
- Column one: Only location for comment indicators
 - C , c , ! , *
 - ! : indicates a comment in any column.

Type Statements

- Variables
 - Same variable types exist in FORTRAN 77 as FORTRAN 90
 - FORTRAN 90: `INTEGER :: Temp, Dew_pt`
 - FORTRAN 77: `INTEGER Temperature, Dew_pt`
- Parameters
 - FORTRAN 90: `REAL, PARAMETER :: Pi = 3.141593`
 - FORTRAN 77: `PARAMETER (Pi = 3.141593)`
- Arrays
 - FORTRAN 90: `INTEGER, DIMENSION(100,2) :: Temps`
 - FORTRAN 77: `DIMENSION Temps(100,2)`
`INTEGER Temps`
 - FORTRAN 77: `INTEGER Temps(100,2)`