

Online Session I: Fortran IDE and LaTeX

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1 Integrated Development Environment - Fortran

- Simply Fortran
- Starting the Environment
- Translog Production Program
- Write the Linear – Vector Multiplication

2 LaTeX - TeXnicCenter

Simply Fortran

As a first step, you need to acquire Simply Fortran from
<http://www.simplyfortran.com>.

Starting the Environment

- When you first enter Simply Fortan, it is going to ask you for a project. Open a command line project under new projects.
- I opened “OnlineExample01”.
- Next, open a blank tab in the environment.
- Check out the Help; Contents; Editing in Simply Fortran; Editing in Simply Fortran tab for help with the indentations

Translog Production Program

$$\ln(y) = \begin{bmatrix} 0.03 \\ 0.04 \\ 0.05 \end{bmatrix}' \begin{bmatrix} \ln(x_1) \\ \ln(x_2) \\ \ln(x_3) \end{bmatrix} +$$

$$\begin{bmatrix} \ln(x_1) \\ \ln(x_2) \\ \ln(x_3) \end{bmatrix}' \begin{bmatrix} -0.0030 & 0.0010 & 0.0005 \\ 0.0010 & -0.0040 & 0.0003 \\ 0.0005 & 0.0003 & -0.0025 \end{bmatrix} \begin{bmatrix} \ln(x_1) \\ \ln(x_2) \\ \ln(x_3) \end{bmatrix} \quad (1)$$

Write the Linear – Vector Multiplication

```
program translog
implicit real*8(a-h,o-z)
double precision a(3),aa(3,3),x(3),dlnx(3)
data a /0.03,0.04,0.05/
data aa /-0.0030, 0.0010, 0.0005,
1 0.0010,-0.0040, 0.0003,
2 0.0005, 0.0003,-0.0025/
data x /100.0,75.0,80.0/
do 10 i=1,3
  dlnx(i) = dlog(x(i))
10 continue
  dlny = a(1)*dlnx(1)+a(2)*dlnx(2)+a(3)*dlnx(2)
  write(6,100) dlny
100 format(' ',10f10.6)
end
```

LaTeX - TeXnicCenter

You need to install MiKTeX 2.9 and TeXnicCenter.