

Training course on Crop Yield Forecasting

Department of Planning and Statistics, MAFF

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Crop Yield Forecasting Introduction

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What is the Crop Monitoring Box (CM Box)?

The CM Box consists of

- Hardware
- Software (Freeware)
- Data
- Adaptation to national conditions
- **Training**
- Support

Software to be used:

1. AgrometShell
2. Windisp
3. New_LocClim
4. COG (Center of Gravity)
5. ExtraRad
6. MS Excel
7. MS Explorer

AgroMetShell (AMS)

- Data management in a database
- Model of crop features during growing season
- Run water balances at locations (stations)
- Interpolation of water balance parameters to obtain maps
- Principal Component Analysis
- Interpolate tables to replace missing data

Windisp

- Display images
- Calculations with images
- Perform statistics over well defined sub regions.

New_LocClim

- Prepare grids from point data
- Prepare maps of climate and yield information
- Creation of background images

COG and ExtraRad

- COG (Center of Gravity) calculates the centres of gravity for any polygon
- ExtraRad provides the annual cycle of extraterrestrial incoming solar radiation as function of latitude in various units and aggregations.

MS Explorer and Excel

- Explorer in order to deal with many files
- Excel in order to
 - perform spreadsheet calculations,
 - conversations of data,
 - correlations and multiple regression analysis,
 - prepare simple graphs.

Where do I find the software?

1. At the ftp site of The Agromet Group of FAO

<ftp://ftp-ext.fao.org/SD/Reserved/Agromet>

2. At the homepage of Peter Hoefsloot

www.hoefsloot.com/agrometshell.htm

How to install the software?

1. AgrometShell → Run the installation file
2. Windisp → Run the installation file
3. New_LocClim → Unzip and run the installation file
4. COG → Unzip the zipped file
5. ExtraRad → Unzip the zipped file
6. MS Excel → Is installed: do nothing
7. MS Explorer → is installed: do nothing

Where to get help?

1. Some programmes (AMS, New_LocClim come with a help)
2. Read the manual under
http://80.69.76.153/wiki/index.php?title=Main_Page
3. Read the Evaporation manual for respective information
<http://www.fao.org/docrep/X0490E/x0490e00.htm>
4. Email to agromet@fao.org

Exercises?

1. Create a Folder named „MyDownloads“!
2. Download all software into this folder!
3. Install all software on your computer!
4. Download the CM Box Manual!
5. Download the Crop Evapotranspiration Manual!
6. Use COG to draw a map of Laos on the basis of provinces and write something to the center of gravity of each province.

Thanks
for
your
attention