WEATHER IMPACTS AND PREDICTABILITY IN SOUTHERN AND EASTERN AFRICA

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TANZANIA MET AGENCY
MODEL USED FOR PREDICTION

- ECMWF
- METEO FRANCE
- NCEP
- ANALYSIS OF REAL TIME DATA (SURFACE PRESSURE, RADIO SONDE, MOISTURE AND CLOUD)
SEASONS AND RAINFALL DISTRIBUTIONS

• TWO SEASONS (DRY AND WET)
• FOUR SEASON
• BI-MODAL
• UNI-MODAL
MAJOR METEOROLOGICAL SYSTEMS INFLUENCING WEATHER

• SUBTROPICAL HIGHs
• INTER-TROPICAL CONVERGENCE ZONE (ITCZ)
• SUBTROPICAL JETS
• TROPICAL CYCLONES
• CONVECTIVE INSTABILITY (CIFK &CISK)
• CONGO TROUGH (MOISTURE)
IMPACTS AND SECTORS AFFECTED

- FLOODS
- DROUGHT
- STRONG WINDS
- TRANSPORT
- AGRICULTURAL
- ENERGY
- TOURISM
Tropical Cyclone *Eline* 1400 GMT 22 February 2000
Tropical Cyclone *Eline* at 0700Z 23 February 2000
FLOODED VILLAGE
DRIED SORGHUM
TROPICAL CYCLONE HUDAH APRIL 2004

HUDAH CYCLONE
HUDAH CYCLONE
SUMMARY

• FEW OBSERVING STATIONS
• THORPEX MAY PROBABLY INCREASE OBSERVING STATIONS HENCE BETTER MODEL PREDICTION
• IF INTELLIGENTLY USED TOGETHER WITH LOCAL ANALYSIS, IT WILL VERY USEFUL TOOL FOR DISASTER MITIGATION, PREVENTION ON EXTREME WEATHER EVENTS
• HOWEVER THIS NEED COORDINATION BETWEEN SCIENTIST, POLICY MAKERS AND DISASTER MANAGEMENT TEAM