PREPARED BY

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CURRENT PRODUCTS AND SERVICES

PRODUCTS

- Numerical Weather Prediction Models
  - Temperature
  - RH
  - Pressure
  - Cloud Cover
- Forecasts
  - Daily,
  - Five Days
- PUMA Synergie
  - MSG Satellites Images
  - Precipitation
  - Upper Air profiles

- Remote Sensing Products
  - NDVI (Normalized Difference Vegetation Index)
  - Drought Risk Map
  - Soil Moisture Index Estimates
  - Active Fire

- Agrometeorological Bulletins
- Stratospheric Ozone Data and Information

SERVICES

- Aviation
- Issue Route Forecast
- Terminal Aerodrome Forecast (TAF)
- Sigmet

- Climate
  - Seasonal Forecast
  - Climate Change Information

- **Severe Weather and Flash Flood Forecast and Warning Products**
  - Heat Waves
  - Cold Waves
  - Heavy Foods Warnings
  - Fog
  - Strong Winds

- **How are Forecasts Produced**
  - Observations (both sfc and upper Air, 25 of Automatic Weather Stations (AWS), 17 Synoptic Stations)
  - Analyze the Data
  - Use NWP models as a guidance to come up with the forecast

- **How are Warnings Produced**
  - Issue a Press Release for the heat/cold wave if temperature are 5^oC above normal for more than 3 consecutive days.
  - For Flooding we look at the weather patterns like moisture, deep surface trough, easterly wave, quasi-stationary cut-off low.

- **Dissemination Of Products To Users**
  - E-mail
  - Telephone
  - Radio
  - Television
  - Facebook

- **How Do Products Reach Users**
  - The forecasts reach users through the same platform as for dissemination. Some users call the office especially individuals during active weather.

- **Who Are The Users**
  - Farmers
  - Public
  - Water Sector
  - Power
  - Construction
  - Health
  - National Disaster Management Office (NDMO)

- **What Do They Do With Information**
  - Farmers use it for preparing for planting
  - Water Sector- Check water levels in the dams
  - Health-Provide advisory to malaria prone community areas, especially during rainy season.
  - Disaster- Provide Disaster Risk Reduction guidance to disaster prone areas to reduce impacts brought by weather related hazards.

- **What Are Weaknesses And Gaps In The Forecast And Warning Processes**
  - Observational data gap density
  - The NWP models failure to resolve localized features (e.g. squall lines)
  - Warnings if disseminated they do not reach the users in most remote areas.
  - Received when the hazard has already occurred.

- **New Products That Would Improve Forecast Services**
  - Flash Flood Guidance-Enhance forecasting of Flash floods
  - Thunderstorm Identification, Tracking Analysis and Nowcasting (TITAN)
    - -Improve forecasting of storm location, direction and speed.
    - - Provides 6 hourly forecasts

THANK YOU