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| Severe Weather Forecasting Demonstration Project  SWFDP - Southern Africa  Training Workshop on Severe Weather Forecasting and  Public Weather and Warning Services  Regional Training Centre Pretoria Pretoria, South Africa  November 2014 PROVISIONAL PROGRAMME for GDPFS(Week 1: 3 – 7 November 2014) | | |
| **Day 1: Monday 3 November** | | |
| 0900-1030 | **OPENING AND INTRODUCTION** |  |
| Opening, Welcome and Introduction |  |
| WMO activities and global SWFDP programme, Purpose of this workshop |  |
| **1030-1100** | ***Coffee break*** |  |
| 1100-1200 | **SWPFD-Southern Africa** |  |
| SWFDP-SA:   * Latest developments for Southern Africa | EP |
| RSMC Pretoria Products:   * Webpage demonstration: layout and access to different systems used in this course * Daily guidance products | ES |
| **1200-1400** | ***Collection of per diems, Lunch break*** |  |
| 1400-1700  (*Coffee break: 1530-1545)* | **GLOBAL MODELLING: Description of models and their products for SWFDP-SA** |  |
| Numerical Weather Prediction Process   * Basics: data assimilation, resolution, physical parameterisation | SL |
| Numerical Weather Prediction Access Demo   * ECMWF, products on the RSMC website * MOGREPS, products on the RSMC website * NCEP, products on the RSMC website | ES |
|  | Cocktail for all participants at Schoongezich at 1800 for 1830 |  |
| **Day 2: Tuesday 4 November** | | |
| 0900-1230  (*Coffee break: 1030-1045)* | **REGIONAL MODELLING: Overview** |  |
| Concepts of limited area modelling:   * Overview: Scientific and Operational aspects, boundary conditions, topography * Application in the UM-SA12 in Southern Africa, introduction to upgrade * UM SA12 products: availability, strengths, weaknesses * Météo-France Aladin-Réunion products: availability | SL  SL  ES  ES |
| **ENSEMBLE PREDICTION SYSTEMS (EPS) AND PROBABILISTIC FORECASTING** |  |
| General concepts   * Uncertainty – why do we need EPS? * Deterministic vs probabilistic forecasting * Basics of EPS: scientific basis, operational production, clustering | SL |
| **1230-1400** | ***Lunch break*** |  |
| 1400-1730  (*Coffee break: 1530-1545)* | Operational use of EPS vs deterministic forecasts - Practical   * Forecaster decision-making process blending EPS and deterministic (LAM) forecasts * Using EPS/deterministic forecasts for severe weather forecasting * Quantitative Precipitation Forecasts (QPF) and Probabilistic QPF (PQPF) | ES |
| **Day 3: Wednesday 5 November** | | |
| 0900-1230  (*Coffee break: 1030-1045)* | **NOWCASTING** |  |
| Nowcasting:   * Improved observation of real time events * Improved lead time of convective events * Improved indication of where systems are moving towards | EdC |
| **1230-1400** | ***Lunch break*** |  |
| 1400-1730  (*Coffee break: 1530-1545)* | How does this work in practice? | EdC |
| **Day 4: Thursday 6 November** | | |
| 0900-1230  (*Coffee break: 1030-1045)* | Live weather forecasting practical in small groups:   * Nowcasting, feedback to larger group * Days 1-5 forecasting practical in small groups, feedback to larger group | ES, EdC, SL |
| **1230-1400** | ***Lunch break*** |  |
| 1400-1730  (*Coffee break: 1530-1545)* | * Nowcasting validation | ES, EdC, SL |
| **Day 5: Friday 7 November** | | |
| 0900-1230  (*Coffee break: 1030-1045)* | **FORECAST VERIFICATION** |  |
| Verification overview:   * Concepts * Methods * Guidance forecast verification (Stephanie Landman) | LW |
| **1230-1400** | ***Lunch break*** |  |
| 1400-1600  (*Coffee break: 1530-1545)* | Verification practical session | LW |
| 1600-1700 | Conclusion of Week 1, Completion of workshop questionnaire | Participants |

ES Ezekiel Sebego

EdC Estelle de Coning

LW Laurie Wilson

WJ Winifred Jordaan

SL Stephanie Landman

MG Morne Gijben

EP Eugene Poolman