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| **WORLD METEOROLOGICAL ORGANIZATION**  COMMISSION FOR BASIC SYSTEMS OPAGs on DPFS and PWS  **Severe Weather Forecasting Disaster Risk Reduction Demonstration Project**  **SWFDdP – South Pacific Project**  **Meeting of the Regional Subproject**  **Management Team**  Noumea, New Caledonia, 27-28 July 2018 |  | WDS/TCP-RAV-TCC17&DPFS-RSMT-SWFDDP/Doc. 3.2.4  (24.VII.2018)  \_\_\_\_\_\_\_  Agenda item : 3.2  ENGLISH ONLY |

**Summary of ECMWF support for the SWFDDP RAV**

*(Submitted by Anna Ghelli)*

##### Summary and purpose of document

This document describes the contribution of ECMWF to the SWFDDP RAV and highlight the availability of new data and encourage discussion on alternative training opportunities.

##### Action Proposed

The meeting is invited to note the contents of the information contained in the document and to comment on how the proposed resources will help to support the stated aims of the subproject

**Summary of ECMWF support for the SWFDDP RAV**

ECMWF supports the World Meteorological Organisation (WMO)'s Severe Weather Forecasting Demonstration Project (SWFDP) by providing additional graphical products from the global deterministic and ensemble forecast model available via the ECMWF website (login required) to support forecasters of the NHMSs involved in RAV SWFDDP. The additional graphical products have been agreed with WMO and made available for the demonstration phase of the project.

ECMWF Council at its 90th Session (June 2017) agreed that ECMWF support for SWFDPs could continue when the demonstration phase moved to an operational setting. The contact for the RAV SWFDDP is Dr Anna Ghelli (anna.ghelli@ecmwf.int).

**ECMWF data available to WMO countries**

ECMWF has substantially increased the amount of weather prediction data it makes available free of charge to Members of the WMO. The provision of the data is part of the Centre’s obligations as a World Meteorological Centre (WMC). ECMWF became a WMC in June 2017.

The additional data enable a much more comprehensive view of atmospheric conditions as predicted by ECMWF than before, including near-surface weather conditions. This will help users to make better assessments of weather-related risks out to day 10. Registered NMHSs have been able to access the new data since 2 July 2018. Additional fields are available for both probabilistic and deterministic forecasts. Users can now assess the probability of more than 1 mm and 5 mm precipitation in 24-hour periods out to 10 days ahead. They can complement this with precipitation information based on the high-resolution forecast that is now available at 6-hour intervals. They can also access 6-day forecasts of 2-metre temperature and 10-metre wind. All forecasts of weather variables are now provided at 6- or 12-hour time steps instead of 24-hour time steps.  The new products also include additional ocean wave forecast fields (peak wave period and mean zero-crossing wave period), with all wave forecast products provided at 3- or 6-hour time steps.  Together, these changes help to provide forecasters in the NMHSs of WMO Members with the information they need to carry out their operational activities. The following link gives details on the data (GRIB edition 2 format on a 0.5x0.5 lat/lon grid and BUFR format for Tropical Cyclones) and how to access them:

<https://www.ecmwf.int/en/forecasts/datasets/wmo-and-acmad-datasets>

**Training**

ECMWF has been developing eLearning modules on basic elements of Numerical Weather Prediction (NWP) like convection, parametrization, use of satellite data, data assimilation, ensemble forecasting and other topics, and on ECMWF specific products (Extreme Forecast Index). The modules are freely available and can be found at:

<https://www.ecmwf.int/en/learning/education-material/elearning-online-resources>

We strongly encourage checking the page and taking advantage of these modules to deepen the understanding of NWP models and ECMWF products. ECMWF has also been working with the World Bank to build a training programme (funded by the World Bank) for countries in Central Asia who are part of the SWFDP-Central Asia. This is a new venture for ECMWF and it could be explored for other SWFDPs to provide additional training. We are willing to discuss with WMO on other opportunities to offer training, including the WMO fellowship programme.