Republic Hydrometeorological Service of Serbia
(established 1888, WMO member since 1947)

SEECOP

http://seecop.meteo.co.me/

SEEVCCC

South-East European Consortium for Operational weather Prediction (SEECOP)

Report on the SEECOP Questionnaire on NWP activities in the member countries

Further actions based the questionnaire outcomes

NWP validation

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Republic Hydrometeorological Service of Serbia (RHMSS), Belgrade, Serbia

The Sixth Meeting of the Council of the South East European Consortium for Operational Weather Prediction (SEECOP), January 19, 2021 - online meeting

The results of the SEECOP questionnaire

1. Name of the institution.

8 responses

Cyprus Department of Meteorology
Federal Hydrometeorology Institute, Sarajevo BH
UKRAINIAN HYDROMETEOROGICAL CENTRE OF THE EMERGENCY SERVICE OF UKRAINE
Republic Hydrometeorological Service of Republic of Srpska
IHMS of Montenegro
Hydrometeorological Service of Republic of North Macedonia
Department of Meteorology
Republic Hydrometeorological Service of Serbia

2. Your name and position?

8 responses

Kleanthis Nicolaides, Director
Ibrahim Hadzismailovic, Head of department of weather forecast
Bilyk Vladyslav CHIEF of WEATHER FORECASTERS DEPARTMENT
Bozidar Perovanovic Senior Associate in Meteorological Weather Watch department
Angel Marčev, Head of the department for numerical modelling, satellite and radar meteorology
Ivica Todorovski, Director
Filippos Tymvios, head of the synoptic and aeronautical unit
Bojan Cvetkovic - Numerical Weather Prediction expert

Who has responded?

Email
metservice@dom.moa.gov.cy
ibrahim.hadzismailovic@fhmzbih.gov.ba
bilyk@meteo.gov.ua
b.perovanovic@rhmzrs.com
angel.marcev@meteo.co.me
ivica.todorovski@meteo.gov.mk
ftymvios@dom.moa.gov.cy
bojan.cvetkovic@hidmet.gov.rs

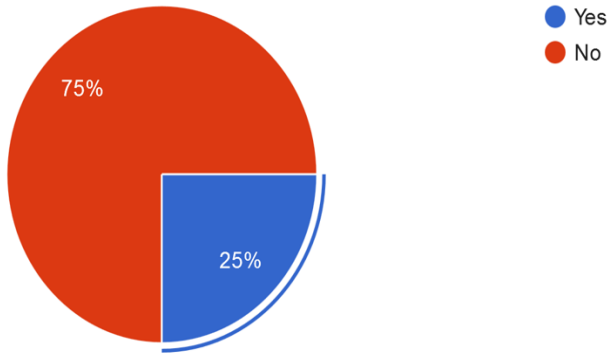
Total: 8 responses

Bojan Cvetkovic, Ilija Jovicic, Republic Hydrometeorological Service of Serbia,
5th meeting of the SEECOP Council and Coordination Experts Team, 5.11.2019 Tel Aviv, Israel

Numerical Weather Prediction – Current status in member institutions

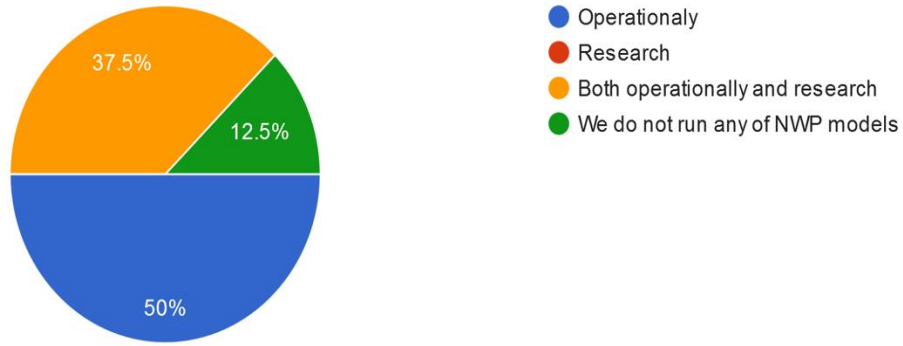
3. Does your institution have NWP (Numerical Weather Prediction) department?

8 responses



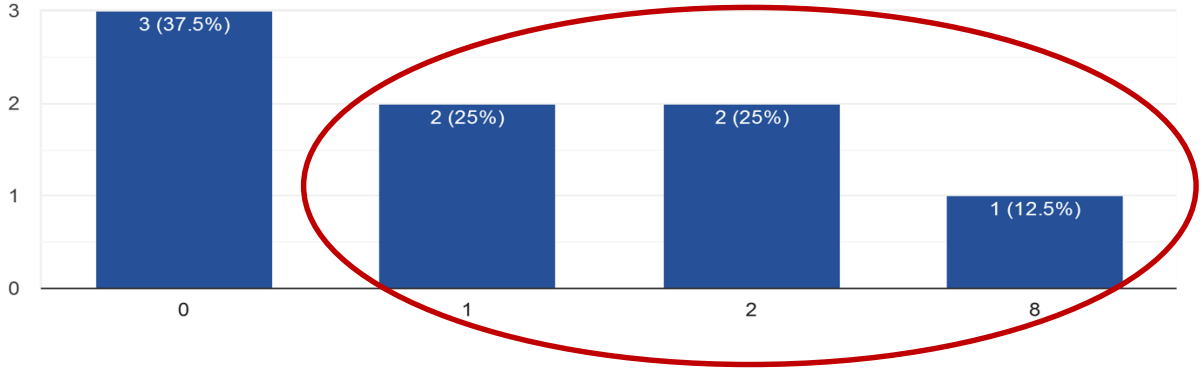
4. For which purposes you are running NWP models?

8 responses



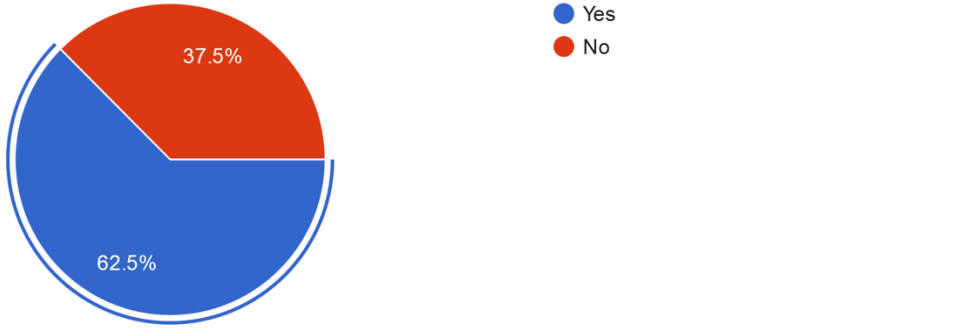
5. Please specify the number of people within your institution which have experience in running Numerical Weather Prediction models.

8 responses



7. Do you have technical capabilities and experienced stuff to run regional high resolution model at your institution?

8 responses



It would be useful to increase these numbers in the future

75% **do not have** NWP department but 62.5% **have** technical capabilities and experienced stuff

The results of the SEECOP questionnaire

Please list the NMMB model output parameters needed as initial and lateral boundary conditions for running your regional model. (4 responses of 8)

- No NMMB model output parameters are being used.
- Our model makes use of most of the GFS output variables for all levels.
- We download boundary conditions from NCAR so in few words, whatever exists in those files
- None

RHMSS plans to make available high resolution NMMB output files in addition to current dissemination products (global NMMB model)

Potential case studies (intensive precipitation situations) for running high resolution NMMB model

Cyprus:
20.10.2018, Platania (34°56'N, 32°55' E), Farmakas (34°55' N, 33°08' E)
4-6.12.2018, Paphos Airport (34°43'3.59'' N 32°29'3.59'' E), Asprogremos, Paralimni (35° 0' 7.07'' N and 34° 2' 50.38'' E)
15-16.01.2019, Platania (34°56'N, 32°55' E)
12-13.06.2019 Kyperounta (34°56'N, 32°58' E)

Federation of Bosnia and Herzegovina:
13-17.05.2014, north-east part of the country, Tuzla

Ukraine:
13-18.08.2019, Kyiv region

Republic of Srpska:
24.05.2012, whole country

North Macedonia:
10.10.2015, whole country
06.08.2016, whole country, especially in the vicinity of Skopje
16.05.2017, north-eastern part of the country, in the vicinity of Kumanovo

Greece:
10.07.2019

Serbia:
13-18 May 2014
02-04 June 2019
24 June 2019

Total: 14 cases

We will run high resolution (4km) NMMB for 5 of them and verify the results.

People who showed interest to participate in the case studies verification process:

- Angel Marcev - Institute of Hydrometeorology and Seismology of Montenegro, Montenegro
- Kostadinka Arsovska - National Hydrometeorological Service of the Republic of North Macedonia
- Demetris Charalambous - Cyprus
- Bojan Cvetkovic – Republic Hydrometeorological Service of Serbia

Additional plans for SEECOP activities

Republic Hydrometeorological Service of Serbia
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inDust

International Network to Encourage the Use of Monitoring and Forecasting Dust Products (inDust) – EU COST Action 16202

- **Dust aerosol transport and impacts + high resolution atmospheric fields/products**

High resolution atmospheric model coupled with Dust Regional Atmospheric Model

NMME/NMMB + DREAM

MEDCYCLONES

European network for Mediterranean cyclones in weather and climate (MEDCYCLONES) – EU COST Action CA19109

Research focus

- **To significantly improve the European capacity to predict environmental and climate impacts of the Mediterranean cyclones**
- **Dust impacts on cyclones (cloud interactions, heterogeneous ice nucleation in cold clouds due to dust, radiation, convection etc.)**
- **Dust impacts on air quality, health, transportation etc.**

SEECOP

Knowledge and experience from inDust and Medcyclones will be beneficial for SEECOP consortia!