

- Minutes of the 5th SEECOP
- Short Report on SEECOP Activities
- Dust-related products

Slobodan Nickovic, Goran Pejanovic, Bojan Cvetkovic *Republic Hydrometeorological Service of Serbia (RHMSS)*

6th EWGLAM virtuall Meeting Jan 2021



Minutes of the SEECOP 5th Meeting (Tel Aviv, Israel, 5November 2019)

Slobodan Nickovic

Republic Hydrometeorological Service of Serbia (RHMSS)

6th EWGLAM virtual meeting, Jan 2021

- The Council elected by acclamation Mr. Luka Mitrovic, Director of the Institute for Hydrometeorology and Seismology of Montenegro (IHMS) as Council Chair for the next two years.
- Reports:
 - SEECOP activities between two Council Sessions (S. Nickovic)
 - **EUMETNET/SRNWP activities (**Szűcs)
 - Members' presentations
 - Abania,
 - the Republic of Srpska,
 - the Federation of Bosnia and Herzegovina,
 - North Macedonia,
 - Montenegro,
 - Serbia,
 - Ukraine

• Conclusions and recommendations

essential for all SEECOP members to be able to install and use NMMB

- either to repeat a training course, or
- to form an expert group that would visit each SEECOP member and perform training on site
- SEECOP Coordination Experts Team to propose the best way forward
- No any financial resorces one of the major limiting factor for cooperation
- RHMSS will extend its current NWP dissemination scheme (gobal model) with hi-res regional NMMB outputs
- NMHS of Cyprus expressed interest to join SEECOP
- to contact the NMHS of Albania and ask to nominate a new SEECOP Council member and a CET representative

Short report on SEECOP activities

SEECOP

- SEECOP: South East European European Consortium for Operational weather Prediction
- Consortium model: NCEP/NMMB
- SEECOP Consortium Member Countries:
 - Albania
 - Federation of Bosnia and Herzegovina
 - Republic of Srpska (Bosnia and Herzegovina)
 - North Macedonia
 - Montenegro
 - Serbia
 - Ukraine

Members with pending Agreement signatures:

- Belarus
- Cyprus
- Moldova

Observers:

- Turkey
- Greece
- Israel

Participating countries in 6th SEECOP

Federation of Bosnia and Herzegovina

Republic of Srpska (Bosnia and Herzegovina)

Montenegro

Serbia

Ukraine







5th Annual SEECOP Council Session (5 Nov 2019, Tel Aviv, Israel)

- □ Ukraine joined SEECOP
- □ Belarus pending for signing the SEECOP Agreement
- □ Cyprus –expected new SEECOP member (pending for signing the SEECOP Agreement)
- ❑ Observers
 ➢ Greece
 ➢ Moldova
 ➢ Israel





SEECOP management

- Consortium Council (CC)
 - Composed of the Members' Directors
 - Reguar anuual
- Coordination Experts Team (CET)
 - operation plans
- Working Group subjects (WGs)
 - Data assimilation
 - Applications
 - System aspects (code management)
 - Diagnostic, validation and verification





Principles of Consortium cooperation

- **sharing resources** (expertise, data, modelling)
- reducing overlaps with other Members in NWP
- training
- open for cooperation with other consortia
- open for new memberships, not necessarily belonging to SEE region
- **self-funding**, searching for external funding
- model code repository with the basic and developed programs
- **research** and **appications** focused on operational needs

Consortium resources

- Travel/meeting costs: covered by participants
- Occasionally: some external support (CEI, WMO)
- In the case of RHMSS, in-kind contributions:
 - Dissemination of model products
 - Workshop organization
 - Hosting some annual meetings

6th SEECOP participants



The Sixth Meeting of the Council of the SEE Consortium for the Operational Weather Predictio / SEECOP -6			
19.jan.21			
Country	Name	Possition	E-mail
MONTENEGRO	Mr. Luka Mitrovic	Director / Council member	luka.mitrovic@meteo.co.me
	Mr.Angel Marcev	Participant	angel.marcev@meteo.co.me
	Mrs. Mirjana Spalevic	Participant / ZOOM host	mirjana.spalevic@meteo.co.me
	Mrs.Ivana Adzic	Participant	ivana.adzic@meteo.co.me
SERBIA	Mr.Jugoslav Nikolic	Director /Council member	jugoslav.nikolic@hidmet.gov.rs
	Mr.Slobodan Nickovic	Participant / Mediator	slobodan.nickovic@hidmet.gov.rs
	Mrs. Ljiljana Dekic	Participant	ljiljana.dekic@hidmet.gov.rs
	Mr Ilija Jovicic	Participant	ilija.jovicic@hidmet.gov.rs
	Mr Milos Lompar	Participant	milos.lompar@hidmet.gov.rs
	Mr.Goran Pejanovic	Participant	goran.pejanovic@hidmet.gov.rs
	Mr Bojan Cvetkovic	Participant	bojan.cvetkovic@hidmet.gov.rs
	Diana Mijuskovic	Participant	diana.mijuskovic@hidmet.gov.rs
	Milica Arsic	Participant	milica.arsic@hidmet.gov.rs
BOSNIA AND HERZEGOVINA	Mr.Ibrahim Hadzismailovic	Participant	ibrahim.hadzismailovic@fhmzbih.gov.ba
REPUBLIC OF SRPSKA	Mr. Bozidar Perovanovic	Participant	b.perovanovic@rhmzrs.com
UKRAINE	Mr. Mykola Kulbida	Director / Council member	kulbida@meteo.gov.ua
	Mr. Ruslan Reviakin	Participant	reviakin@meteo.gov.ua
HUNGARY	Mr. Szintia Balazs	C-SRNWP Manager	szintai.b@met.hu
GREECE	Mr. Stavros Solomas	Observer	<u>stavros@noa.gr</u>
ISRAEL	Mr. Pavel Kishcha	Observer	pavel@cyclone.tau.ac.il
NORTH MACEDONIA	Mr. Boris Sekirarski	Participant	bsekirarski@yahoo.com
	Mrs.Konstadinka Arsovska	Particpant	kostadinka.arsovska@meteo.gov.mk
	Country MONTENEGRO SERBIA BOSNIA AND HERZEGOVINA REPUBLIC OF SRPSKA UKRAINE HUNGARY GREECE ISRAEL NORTH MACEDONIA	The Sixth Meeting of the Council of the SEE C 1 1 Country Name MONTENEGRO Mr. Luka Mitrovic Mr.Angel Marcev Mrs. Mirjana Spalevic Mrs. Mirjana Spalevic Mrs. Ivana Adzic SERBIA Mr.Jugoslav Nikolic SERBIA Mr.Jugoslav Nikolic Mrs. Ljiljana Dekic Mr.Slobodan Nickovic Mr.S. Ljiljana Dekic Mr Hilija Jovicic Mr Milos Lompar Mr.Goran Pejanovic Mr Bojan Cvetkovic Diana Mijuskovic Diana Mijuskovic Milica Arsic BOSNIA AND HERZEGOVINA Mr.Ibrahim Hadzismailovic REPUBLIC OF SRPSKA Mr. Bozidar Perovanovic UKRAINE Mr. Mykola Kulbida Mr. Ruslan Reviakin Mr. Ruslan Reviakin HUNGARY Mr. Szintia Balazs GREECE Mr. Stavros Solomas ISRAEL Mr. Boris Sekirarski NORTH MACEDONIA Mrs.Konstadinka Arsovska	The Sixth Meeting of the Council of the SEE Consortium for the Operational W 19.jan.21 Country Name Possition MONTENEGRO Mr. Luka Mitrovic Director / Council member Mr.Angel Marcev Participant Mrs. Mirjana Spalevic Participant Mrs. Mirjana Spalevic Participant / ZOOM host Mrs. Ivirana Adzic Participant SERBIA Mr.Jugoslav Nikolic Director / Council member Mr. Slobodan Nickovic Participant Mr. Lija Jovicic Participant Mr. Slobodan Nickovic Participant Mr Bojan Ovetkovic Participant Mr. Bojan Cvetkovic Participant Mr Bojan Cvetkovic Participant Mr. Bojan Cvetkovic Participant Milica Arsic Participant Milica Arsic Participant BOSNIA AND HERZEGOVINA Mr. Bozidar Perovanovic Participant Milica Arsic BOSNIA AND HERZEGOVINA Mr. Bozidar Perovanovic Participant Milica Arsic BURALIC OF SRPSKA Mr. Bozidar Perovanovic Participant Milica Arsic MILNGARY Mr. Szintia Balazs <

SEECOP questionnaire

- A questionnaire on
- NWP activities and experiences of consortium members
- Selection of extreme weather cases for model validation

https://docs.google.com/forms/d/e/1FA IpQLSfrnD6DV07UAOxH4Q262nvtveL7qZ LKreQPjLZq_j5qhgSA_Q/viewform?vc=0 &c=0&w=1



1

0

1 (16.7%)

2

Current NWP products (SEECOP dissemination)



SEECOP NMMB global model

- Global domain
- Horizontal res 0.48 x 0.36 degrees
- Vertical res 64 levels
- 10 days forecast
- Initial conditions from GFS
- daily dissemination through a dedicated server
- access: a web page link



Dust related products

DREAM dust model as a part of the RHMSS Earth Model System (EMS)

NMMB - atmospheric driver of other Earth systems: atmosphere, aerosol, hydrology, ocean, etc



Dust-cloud interaction Ice Nucleation due to minera dust:



Nickovic et al, 2016, Atmos. Chem. Phys., 16, 11367–11378

Mineral Aerosol Impacts to Sub-seasonal to Seasonal Predictability

- Global NMMB-DREAM (dust) model
- Operational cold coud formation by dust



MSG SEVIRI ice water path vs. DREAM IN



Global DREAM

DREAM operational dust predictions

- At SEEVCC: <u>http://www.seevccc.rs/?p=8</u>
- At WMO SDS-WAS



Daily dust warning maps (to be established)

