

## **Training Workshop (act. 5.2)**

### **Integrated Drought Management Programme in Central and Eastern Europe**

## **Workshop Minutes**

### **Venue & Date:**

Slovenian Forestry Institute, Ljubljana, Slovenia, 14 – 15 November 2013

### **Persons present:**

Vesselin Alexandrov, Bulgarian Academy of Sciences, Bulgaria  
Sabina Bokal, GWP CEE  
Igor Buksha, Ukrainian Forestry Institute, Ukraine  
Maxym Buksha, Ukrainian Forestry Institute, Ukraine  
Darja Istenič, Limnos d.o.o., Slovenia  
Andrej Kobler, Slovenian Forestry Institute, Slovenia  
Lado Kutnar, Slovenian Forestry Institute, Slovenia  
Primož Simončič, Slovenian Forestry Institute, Slovenia  
Gintautas Stankunavicius, Vilnius University, Lithuania  
Urša Vilhar, Slovenian Forestry Institute, Slovenia  
Martina Zupan, GWP CEE / GWP Slovenia

## **1. WEATHER DATA**

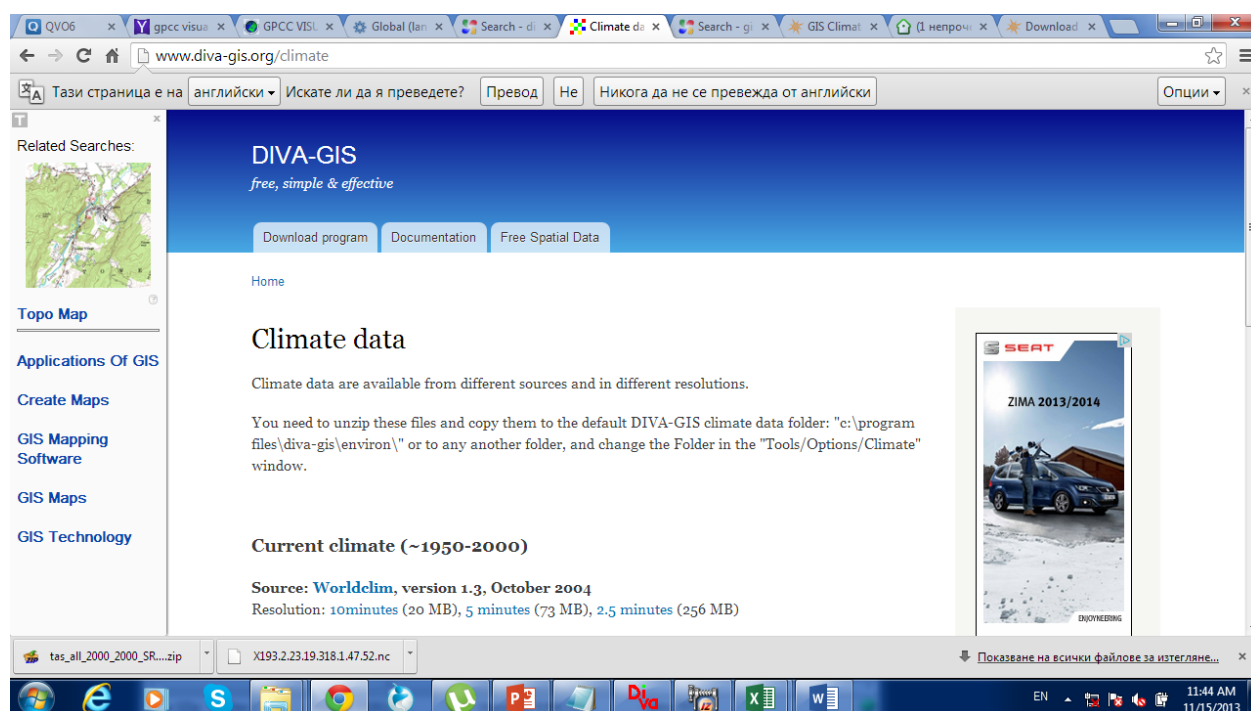
### **1.1. Observed weather data for the current climate (1961-1990 or 1971-2000)**

Measured weather data to be provided by the national weather services or gathered from other sources (annual books, atlases, reports, etc)

### **1.2. Grid weather data**

In case observed data are not available for this project Weather grided data will be collected by various sources such as:

<http://www.diva-gis.org/climate>



It was assumed that a spatial resolution higher than 50 x 50 km would be appropriate for the project implementation. A resolution down to 1 x 1 km is also possible to be explored, by applying the data specified on the above web page.

### 1.3. Climate change scenarios

The workshop participants agree that Vesselin and Gintautas will provide climate change scenarios for the participating countries till the end of November 2013. The respective outputs will have a spatial resolution 50 x 50 km or higher including newer global/regional climate models.

## 2. Required meteo elements

Monthly norms of mean air temperature (in degrees C) and precipitation (in mm)

## 3. Interpolation

All participating countries if necessary will interpolate the current and expected climate data by themselves. For those who needs assistance a software such as SURFER will be provided by FTP (Vesselin ) today.

#### **4. Integration of weather data and scenarios**

All participating countries will merge the weather data for the current climate with the climate change scenarios for the years 2050 and 2100.

#### **5. Methods & software**

The indices of de Martonne and Holdridge classification were selected to be applied for the vulnerability assessment of forest ecosystems in the selected regions of interest.

As suggested by the Slovenian partner an evaluation of the respective thresholds of the de Martonne index should be implemented in the project countries beyond Bulgaria (already tested). Scientific literature on testing the thresholds related the de Martonne index will be provided by Vesselin (and some volunteers in the terms of central as well western Europe (deadline, 15 December 2013, milestone 3)

The workshop members agreed that if necessary additional indices (e.g., Koepen) could be used instead of the de Martonne index. Generally, No more than 5 indices will be considered into the study. For all indices the input data will be fixed to air temperature (in degrees C) and precipitation (in mm).

Vesselin might provide the other project partners by a software calculating the above 2 major indices (de Martonne and Holdridge) (till the end of the year 2013)

#### **6. Reports**

THE DEADLINE FOR SUBMISSION OF THE 2nd REPORT (A FEW PAGES, INCLUDING INTRODUCTION, DATA AND METHODS, RESULTS AND DISCUSSION, CONCLUSIONS) IS 16 DECEMBER 2013. Galja B. is responsible for collection of relevant info from the project partners.

The 3rd report should be ready till June 2014 (all partners led by Galja Bardarska).

## Training Workshop Integrated Drought Management Programme in Central and Eastern Europe

### Workshop Agenda

Venue: Slovenian Forestry Institute, Ljubljana, Slovenia

Date: 14 – 15 November 2013













<b>Thursday 14 November</b>	
08:30 – 09:00	<i>Coffee &amp; registration</i>
09:00 – 09:10	<i>Welcome and opening of the workshop</i> <i>Martina Zupan, Integrated Drought Management Programme in CEE</i> <i>Primož Simončič, Director, Slovenian Forestry Institute</i>
09:10 – 9:30	<i>Presentation of the Slovenian Forestry Institute and of Slovenian forests</i> <i>Primož Simončič</i>
9:30 – 9:45	<i>Outline of the project and of the activity 5.2</i> <i>Sabina Bokal, Programme Manager, Integrated Drought Management Programme in CEE</i>
9:45 – 10:15	<i>Summary of the Bratislava meeting (parts relevant to activity 5.2)</i> <i>Martina Zupan, Sabina Bokal</i>
10:15 – 11:00	<i>Presentation of the proposed methodology (Holdridge model, De Marton climate index method, data needs, harmonization issues, software tools, implementation, reporting)</i> <i>Vesselin Alexandrov, Gintautas Stankunavicius</i>
11:00 - 11:30	<i>Coffee break</i>
11:30 – 12:00	<i>Presentation of Bulgaria (existing knowledge, models, forecasts, scenarios, data availability, ...)</i> <i>Vesselin Alexandrov</i>
12:00 – 12:30	<i>Presentation of Lithuania (existing knowledge, models, forecasts, scenarios, data availability, ...)</i> <i>Gintautas Stankunavicius</i>
12:30 – 13:00	<i>Presentation of Ukraine (existing knowledge, models, forecasts, scenarios, data availability, ...)</i> <i>Igor Buksha, Maksym Buksha</i>
13:30 – 15:00	<i>Lunch</i>
15:00 – 15:30	<i>Presentation of Slovenia (existing knowledge, models, forecasts, scenarios, data availability, ...)</i> <i>Andrej Kobler, Lado Kutnar</i>
15:30 – 17:00	<i>Discussion</i>
19:00	<i>Social dinner</i>

<b>Friday 15 November</b>	
08:30 – 09:00	<b>Coffee</b>
09:00 – 11:00	<b>Hands-on training</b> Vesselin Alexandrov, Gintautas Stankunavicius
11:00 – 11:30	<b>Coffee break</b>
11:30 – 13:30	<b>Hands-on training and conclusion</b> Vesselin Alexandrov, Gintautas Stankunavicius
13:30 – 15:00	<b>Lunch</b>
15:00 – 17:00	<b>Optional</b>










Training Workshop  
Integrated Drought Management Programme in Central and Eastern Europe

Attendance List

Venue: Slovenian Forestry Institute, Ljubljana, Slovenia  
Date: 14 – 15 November 2013

Name and Surname	Institution	E-mail	Signature 14. 11. 2013	Signature 15. 11. 2013
Andrej Kobler	Slovenian Forestry Institute	andrej.kobler@godis.si		
Igor Bukšna	Ukrainian Forestry Inst.	Buksha@URIFM.ORG.UA		
Maxsym Buksha	Ukrainian Forestry Inst.	mak.buk@urifm.ORG.UA		
Gilberto Stanković	Vilnius University	gilberto.stankovicus@gf.vu.lt		
Lado Kutnar	Slovenian Forestry Inst.	lado.kutnar@godis.si		
Veselin Alexandrov	BULGARIAN ACADEMY OF SCIENCES	veselin.alexandrov@meb.bg		

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Name and Surname	Institution	E-mail	Signature 14. 11. 2013	Signature 15. 11. 2013
SABINA BOKAL	GWP CEE	idmp.sabina@gmail.com		
DARJA ISTENIČ	LIMNOS d.o.o.	darja@limnos.si		
URŠA VILHAR	Slovenian Forestry Institute	cas.vilhar@godis.si		
MARTINA ZUPAN	GWP CEE and GWP Slovenia STI	martina.zupan@sid.net		
Prisost Finovnik		prisost-finovnik@pobini.si		

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