



World Meteorological Organization
Working together in weather, climate and water

Regional Association VI, Forum Hydrology, Koblenz May 8 – 10, 2012



Statements of the national
hydrological service of Romania

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Organization, role and main tasks

- **National Institute of Hydrology and Water Management as an independent institution under the authority of the National Administration “Romanian Waters” (according to the Government Ordinance 107/2002 approved by Law no.404/2003) is the only specialized national institute which represents Romania in the field of hydrology, hydrogeology and water management at a national as well as international level for, providing operational services, studies and research for:**
 - protection of people and socio-economic well-being
 - development and improvement of life quality
 - environment protection
- **Coordinates 963 river stations, 1050 pluvio, 36 evaporimetric platfors, 3000 wells**



Biggest success

- IMPLEMENTATION OF THE **DESWAT PROJECT** – HYDROLOGICAL INFORMATION SYSTEM FOR MONITORING, DATA PROCESSING AND FORECASTING

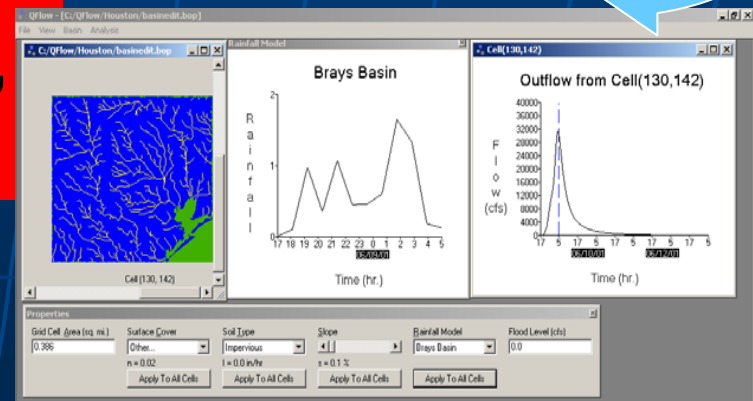
DESWAT MONITORING SYSTEM

AUTOMATE HIDRO STATION:

- 605 HIDRO STATIONS
- 250 RAIN STATIONS
- 60 QUALITY STATIONS

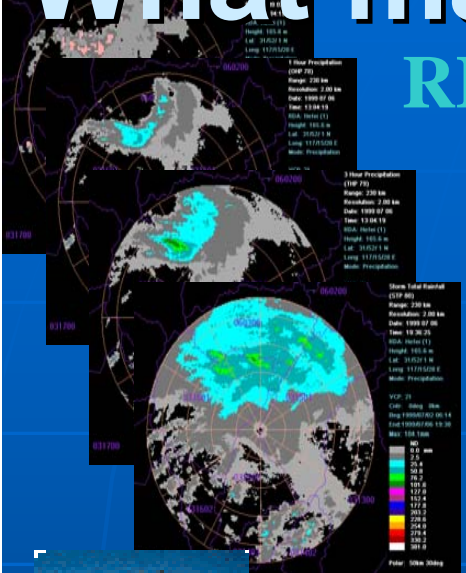
IN-PUTS FOR THE DESWAT MODELING PLATFORM:

- NWS RFS,
- FLASH FLOOD GUIDENS,
- Distributed model

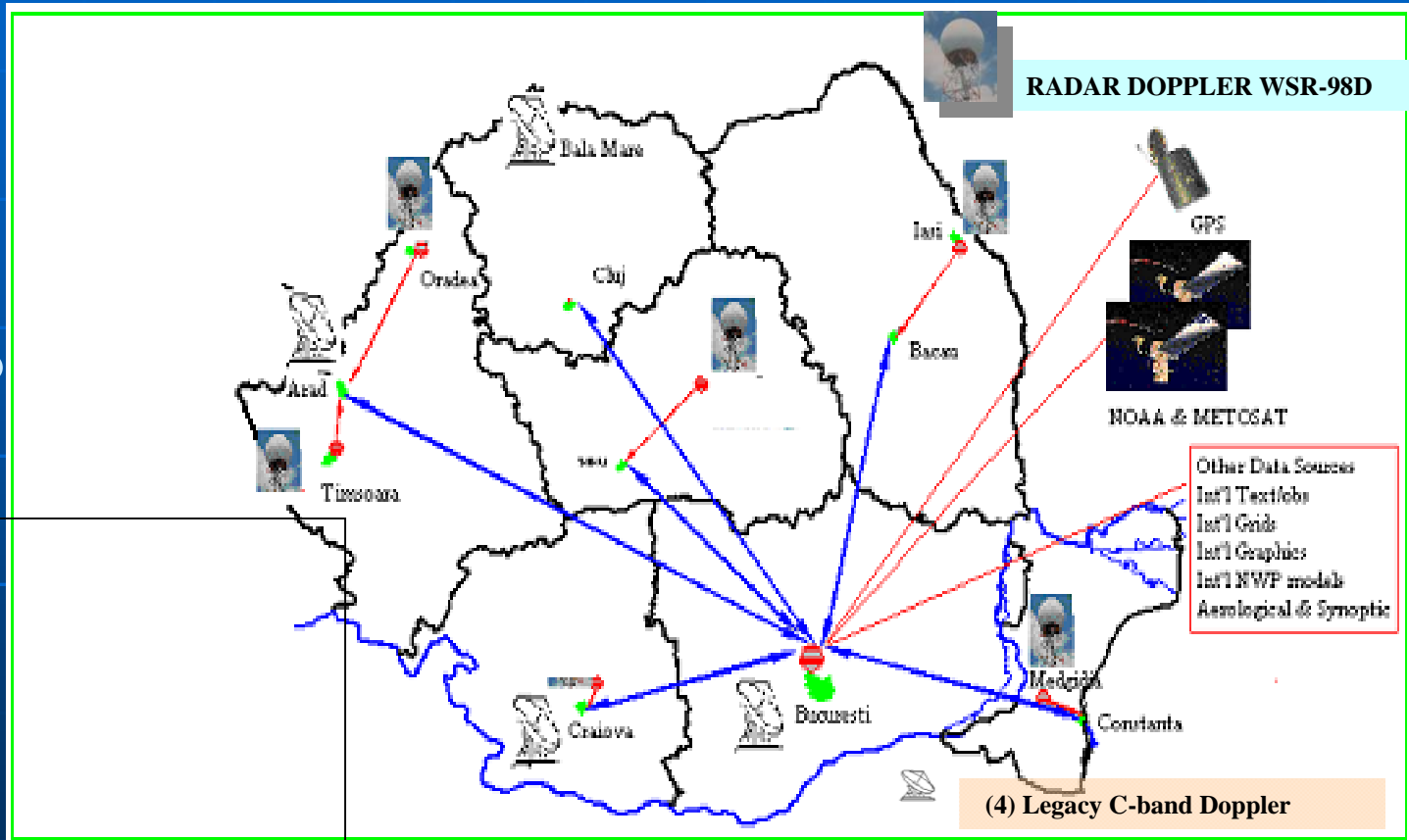
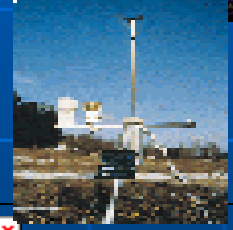


What makes me happy at work?

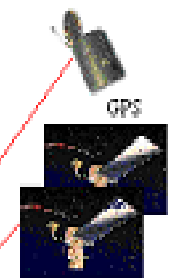
RESULTS OF SIMIN RADARS NETWORK INTEGRATION WITH DESWAT



60 meteo
stations



RADAR DOPPLER WSR-98D



NOAA & METEOSAT

- Other Data Sources
- Inst'l Text/obs
- Inst'l Grids
- Inst'l Graphics
- Inst'l NWP models
- Aeological & Synoptic

(4) Legacy C-band Doppler

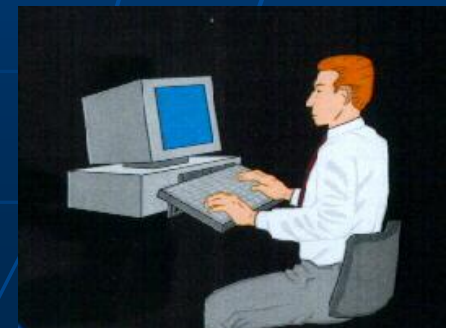


8 lights detectors



Biggest failure

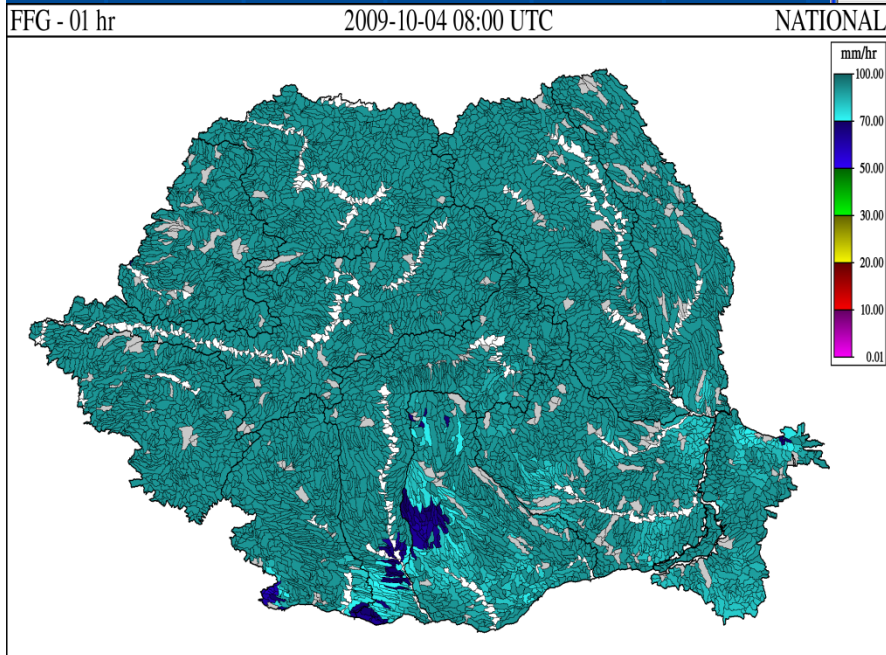
- Scientific: Integration and dissemination of the hydrological and meteorological data by an Internet platform using a geodatabase
- Administrative: not renewing the personnel, capacity decreasing





Expectations at the national level:

- Flash Flood Guidance
- Flash Flood Threat for 8.851 small basins of 30km²



ROFFG Product Console - Windows Internet Explorer

https://192.168.120.168/ROFFG/

File Edit View Favorites Tools Help

ROFFG - Romania Flash Flood Guidance System

Current Date: 2009-10-15 08:06 UTC Product Date: 2009-10-03 08:30 UTC

-1 Month -1 Day -8 Hours -1 Hour +1 Hour +8 Hours +1 Day +1 Month

Reset to Current Year: 2009 Month: 10 Day: 03 Hour: 08

REGION: NATIONAL - 11 Submit

DT	RADAR	MERGED MAP	GAUGE MAP	ASM	FFG	PREV FFG	FFT
01-hr							
03-hr							
06-hr							
24-hr							

Composite Product Test Export: view.html SFTP data transfer (requires WinSCP): EXPORTS NATIONAL 2009-10-03

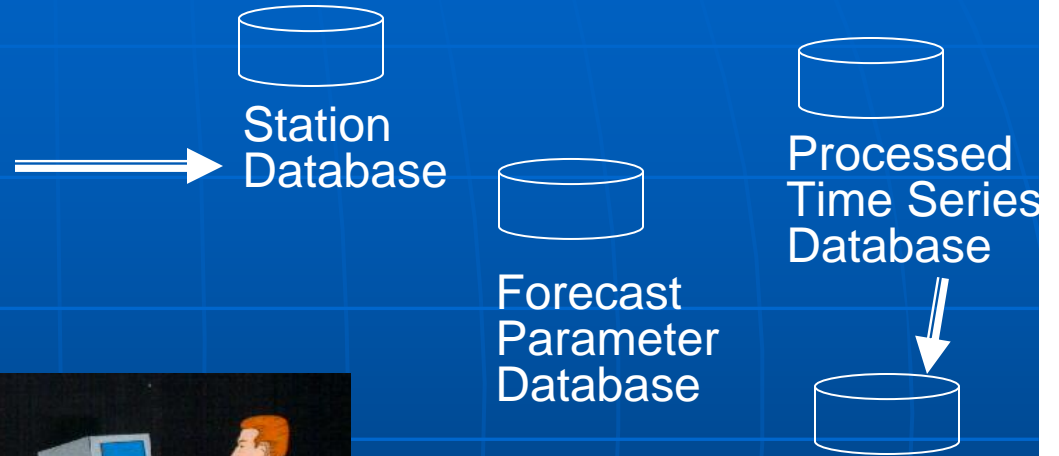
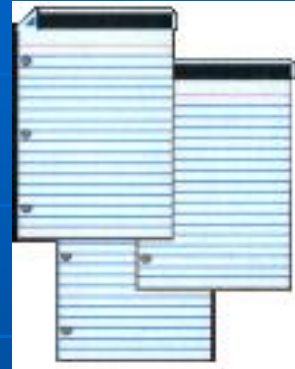
STATION	IR		IA		IS		IM		IM		IM		IM		IM	
	IR	IR	IA	IA	IS	IS	IM	IM	IM	IM	IM	IM	IM	IM	IM	
ANP-ARON	*	*	10.00	*	*	0.00	0.00	0.00	*	*	*	*	*	*	*	*
ANP-ARON	*	*	*	*	*	0.00	0.00	0.00	*	*	*	*	*	*	*	*
ANP-ARON	*	*	*	*	*	0.00	0.00	0.00	*	*	*	*	*	*	*	*
ANP-ARON	*	*	-4.40	*	*	0.00	0.00	0.00	*	*	*	*	*	*	*	*
ANP-ARON	*	*	10.00	*	*	0.00	0.00	0.00	*	*	*	*	*	*	*	*
ANP-ARON	*	*	10.00	*	*	0.00	0.00	0.00	*	*	*	*	*	*	*	*
ANP-ARON	*	*	10.00	*	*	0.00	0.00	0.00	*	*	*	*	*	*	*	*
ANP-ARON	*	*	11.00	*	*	0.00	0.00	0.00	*	*	*	*	*	*	*	*
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ANP-ARON	*	*	*	*	*	0.00	0.00	0.00	*	*	*	*	*	*	*	*
ANP-ARON	*	*	*	*	*	0.00	0.00	0.00	*	*	*	*	*	*	*	*

ROFFG v1.1
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Expectations national/ international levels integration: **LARGE TRANSBORDER BASINS MONITORING HARMONIZATION AND INTEGRATED FORECAST SYSTEMS DEVELOPMENT**

- System Setup and Implementation – MULTIMODEL PLATFORM



- Daily Operations



RuffG Basin ID	Ranges
00,000 - 09,999	* Argos
10,000 - 19,999	* Banat
20,000 - 29,999	* Cris
30,000 - 39,999	* Dobro
40,000 - 49,999	* Ialom
50,000 - 59,999	* Jiu
60,000 - 69,999	* Mures
70,000 - 79,999	* Olit
80,000 - 89,999	* Prut
90,000 - 99,999	* Tisa



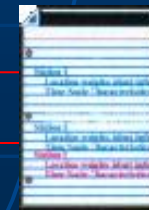
Internet platform for data collection, processing and dissemination for trans-border rivers

- System Maintenance

Terminal Gage



New Gages



Station Database



INTERNATIONAL COOPERATION FOR THE EXISTING NATIONAL (NWS RFS) FLOW STRUCTURE DEVELOPMENT

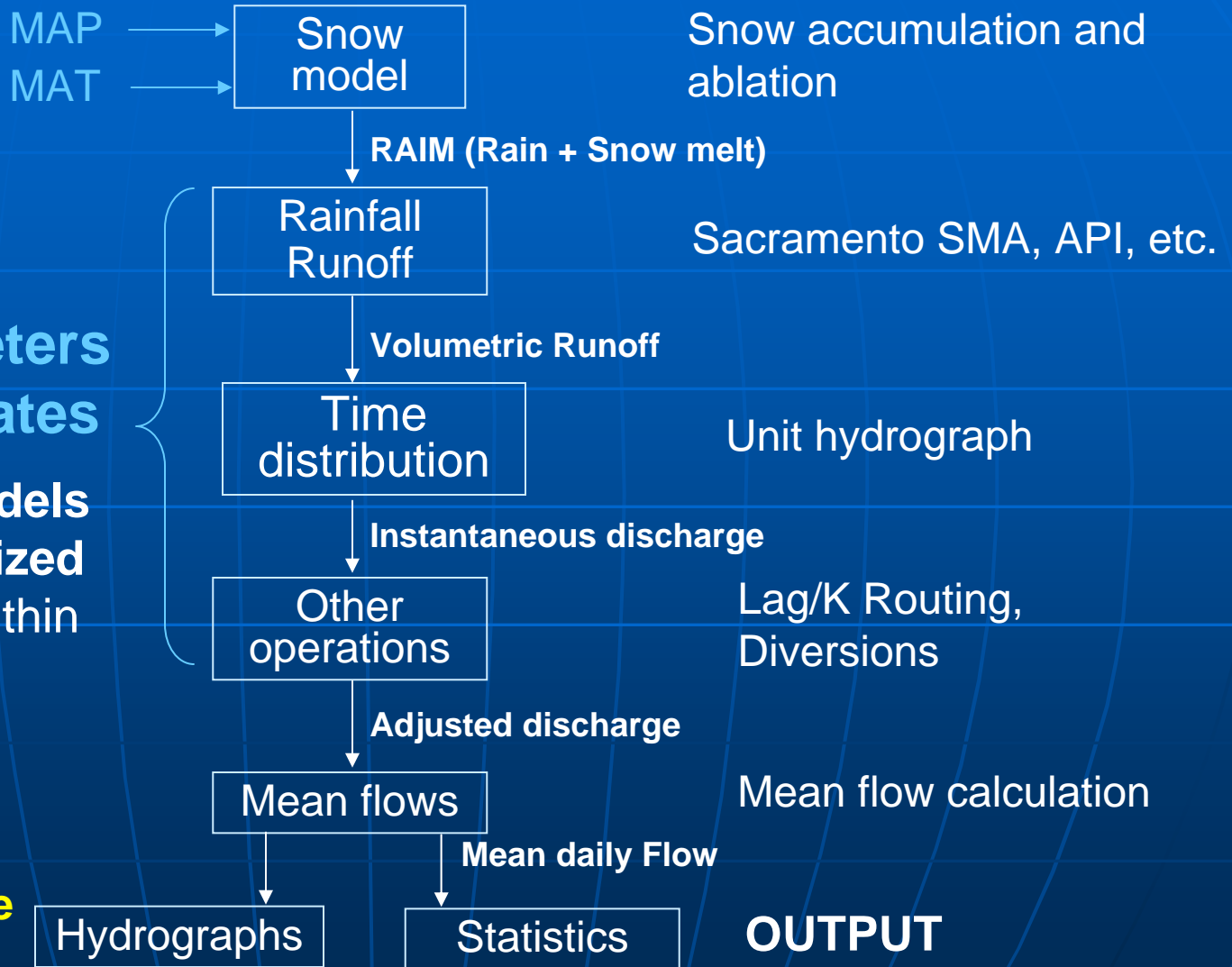
Operations and Models

Parameters and States

Operations and models are logically organized and are executed within the system

With this structure, other models can be incorporated = multimodel procedure development

INTERNATIONAL COOPERATION



OUTPUT

GOOD PRACTICE EXAMPLE: DANUBE FLOODRISK PROJECT –DATA AND METHODS HARMONIZATION FOR FLOOD MAPPING ALONG THE DANUBE

