



WMO Workshop: WHOS Hydrological Data Exchange Training

Deutschand III Österreich /// Česká republika /// Slovensko IIII Maeraka solovenija 29 January 2024, Zagreb

Welcome to the Danube River Basin Hydrological Information System - in short: DanubeHIS!

1065

580

1208

active stations

validated time series

current measurements

Featured results: Measurements with highest percentage increase in last 24 hours

Station	Property	Time ago	Value		24h- Change	10d-Situation			
Zell am Ziller- Zellbergeben AT	Current river discharge	1 hour 10 min	71	m³/s	232 %	ARABITAL	more	•	
Donji Miholjac C.S. HR	Current water level	2 hours 10 min	51	cm	168 %	~~	more	•	
Krvavec SI	Total precipitation within an hour	2 hours 10 min	0.4	mm	100 %	_	more	*	
Felsőberecki HU	Current water temperature	8 hours 10 min	0.9	°C	80 %	<u> </u>	more	7	
Amlach AT	Current river discharge	1 hour 10 min	148	m³/s	69 %	warden	more	•	
Tiszalök-alsó HU	Current water temperature	8 hours 10 min	2.2	°C	57 %	~	more	٠	
Tiszalök-felső HU	Current water temperature	8 hours 10 min	2.2	°C	57 %	~	more	·	
Hart im Zillertal AT	Current river discharge	1 hour 10 min	106	m³/s	53 %	MANAN	more	•	
Amlach AT	Current water level	1 hour 10 min	125	cm	45 %	water	more	•	
Almår HU	Current river discharge	3 hours 10 min	0.77	m³/s	43 %		more	•	

→ View a map with all latest measurements of water level and other properties

Water levels





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Minimum

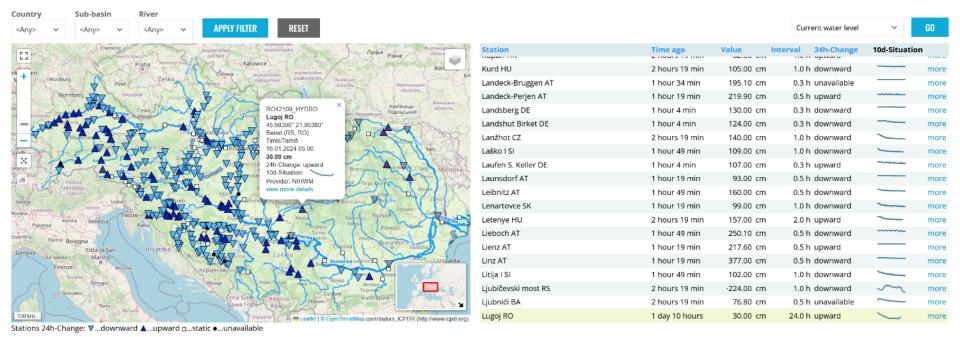
-392.00

Maximum



Disclaimer: Please note that this is operational raw data and not quality checked - More detailed information

LATEST MEASUREMENTS OF CURRENT WATER LEVEL (CM)



Data sources: AT: BML BA: AVPS, FHMZ, RHMZRS BG: NIMH CZ: CHMI DE: LFU, LUBW HR: DHMZ HU: OVF RO: NIHWM RS: RHMSS SI: ARSO SK: SHMU UA: UHMC

Latest

17.01.2024 14:15

Earliest

14.01.2024 16:00

Results

Discharge (changed background layers example)





MEASUREMENTS ~ SYST

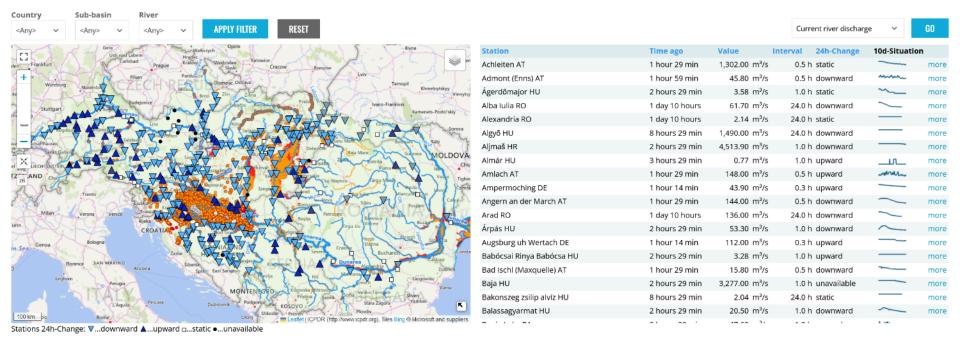
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Disclaimer: Please note that this is operational raw data and not quality checked - <u>More detailed information</u>

LATEST MEASUREMENTS OF CURRENT RIVER DISCHARGE (M³/S)



 Results
 Earliest
 Latest
 Minimum
 Maximum

 368
 14.01.2024 21:00
 17.01.2024 14:15
 0.20
 9,930

Data sources: AT: BML BA: AVPS, FHMZ, RHMZRS BG: NIMH CZ: CHMI DE: LfU, LUBW HR: DHMZ HU: OVF RO: NIHWM RS: RHMSS SI: ARSO SK: SHMU UA: UHMC

Hourly Precipitation





MEASUREMENTS ~ SYSTEM ~

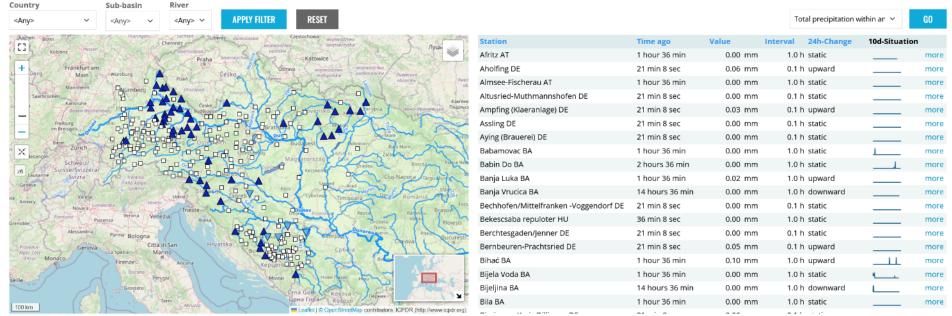
•

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Disclaimer: Please note that this is operational raw data and not quality checked - <u>More detailed information</u>

LATEST MEASUREMENTS OF TOTAL PRECIPITATION WITHIN AN HOUR (MM)



Stations 24h-Change: ▼...downward Δ...upward □...static •...unavailable

 Results
 Earliest
 Latest
 Minimum
 Maximum

 267
 17.01.2024 01:00
 17.01.2024 15:15
 0.00
 1.4

Data sources: AT: BML BA: AVPS, FHMZ, RHMZRS CZ: CHMI DE: LfU HR: DHMZ HU: OMSZ SI: ARSO SK: SHMU

Daily Precipitation (Sub-basin filter and sorting example)



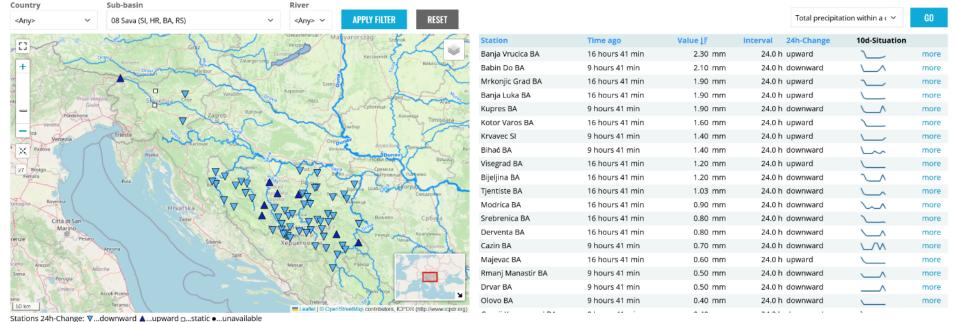


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Disclaimer: Please note that this is operational raw data and not quality checked - More detailed information

LATEST MEASUREMENTS OF TOTAL PRECIPITATION WITHIN A DAY (MM)



Results	Earliest	Latest	Minimum	Maximum
67	17.01.2024 00:00	17.01.2024 07:00	0.00	2.3

River filter example Sorting by River-km





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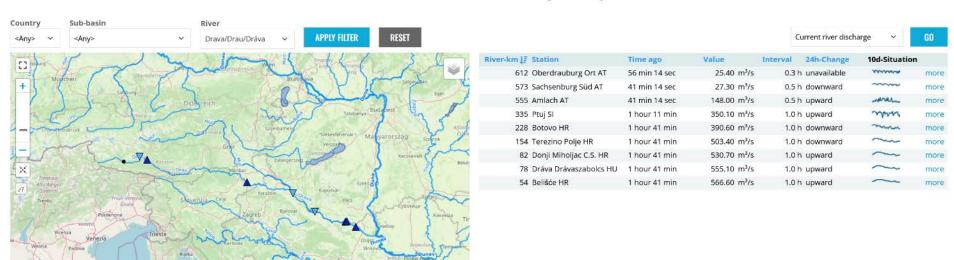
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Disclaimer: Please note that this is operational raw data and not quality checked - More detailed information

■ Leaflet I © OpenStreetMap contributors, ICPDR (http://www.icpdr.org

LATEST MEASUREMENTS OF CURRENT RIVER DISCHARGE (M³/S)



Stations 24h-Change: ▼...downward ▲...upward □...static •...unavailable

Results	Earliest	Latest	Minimum	Maximum
9	17.01.2024 14:00	17.01.2024 15:00	25.40	566.6

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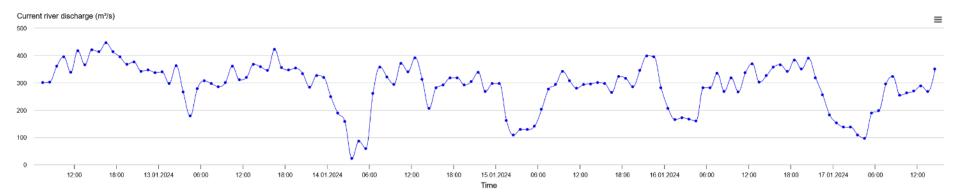


Country SI 2110 National code HYDRO Station type Name Ptuj River Drava/Drau/Dráva River-km 335.38 Catchment area 13,664.1 km² Subbasin 07 Drava-Mura (AT, SI, HR, HU) Vertical reference Trieste Gauge zero 214.65 m Latitude 46,41690 Longitude 15.86750 Slovenian Environment Agency (ARSO)

RESULTS

Daily mean water level (cm)
Daily mean water temperature (°C)





Time ▼	Value Unit	Property
17.01.2024 14:30	350.1 m ³ /s	Current river discharge
17.01.2024 13:30	267.2 m ³ /s	Current river discharge
17.01.2024 12:30	288.4 m³/s	Current river discharge
17.01.2024 11:30	269.3 m ³ /s	Current river discharge
17.01.2024 10:30	262.3 m ³ /s	Current river discharge
17.01.2024 09:30	254.1 m³/s	Current river discharge
17.01.2024 08:30	322.6 m³/s	Current river discharge
47.01.2024.07:20	204.01/-	Company since disabases

Visulation example of multiple properties



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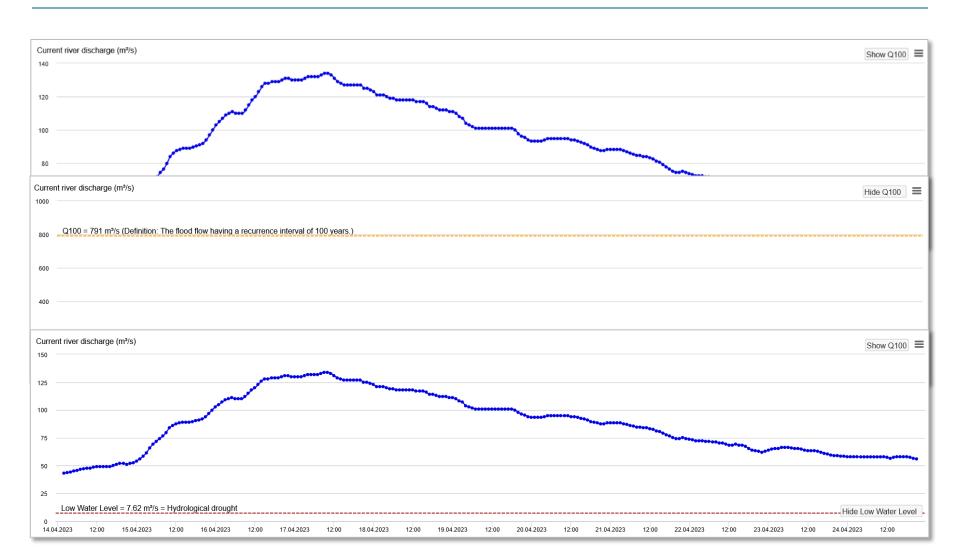


Visualisation example of Q100 and Low Water level



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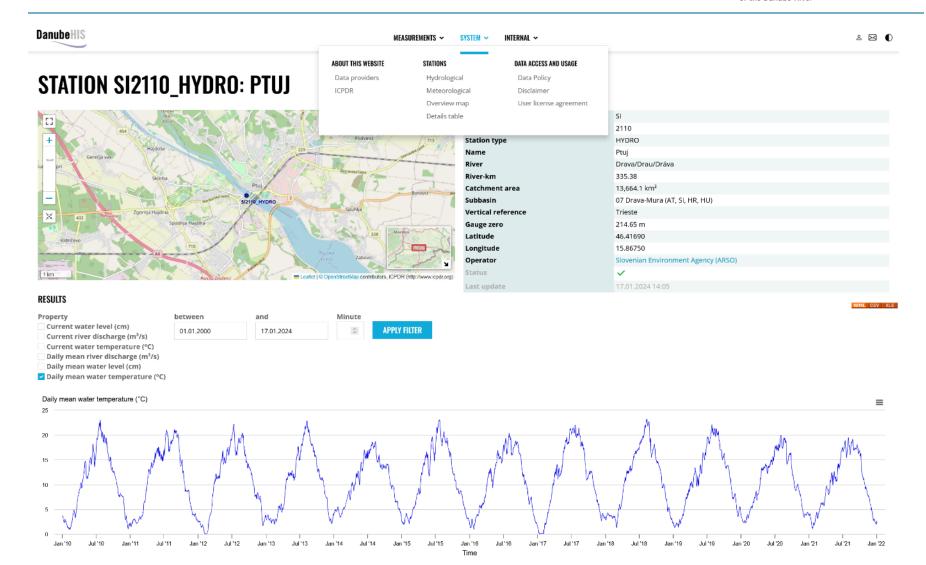


Visulation example of long-term time-series



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Time Series Overview



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Grey fields are only visible to internal users

TIME SERIES OVERVIEW

<any> v processed data v</any>	<any></any>	<any> v</any>	<any></any>	RESET			
	D-4-4						
Property	Data type	Symbol	Begin (unrestricted)	Begin	End	Series Country	
Air temperature, daily mean	near real-time data	ta_mean_daily	06.10.2020	17.01.2022	16.01.2024	15 RS	view stations
Current air temperature	near real-time data	ta	28.02.2019	09.09.2020	17.01.2024	178 BA, DE, HR, ME, RO, SI, UA	view stations
Current atmospheric pressure	near real-time data	p	09.09.2020	09.09.2020	17.01.2024	7 SI	view stations
Current river discharge	near real-time data	Q	09.05.2020	24.09.2020	17.01.2024	406 AT, BA, BG, CZ, DE, HR, HU, ME, RO, RS, SI, SK, UA	view stations
Current water level	near real-time data	h	15.01.2020	24.09.2020	17.01.2024	451 AT, BA, BG, CZ, DE, HR, HU, ME, RO, RS, SI, SK, UA	view stations
Current water temperature	near real-time data	tw	06.08.2020	24.09.2020	17.01.2024	203 BA, HR, HU, RO, RS, SI, SK, UA	view stations
Daily mean river discharge	processed data	Q_mean_daily	01.01.1895	17.01.1924	31.12.2022	197 CZ, DE, HR, HU, RS, SI	view stations
Daily mean water level	processed data	h_mean_daily	01.01.1918	17.01.1924	31.12.2022	229 CZ, DE, HR, HU, RS, SI	view stations
Daily mean water temperature	processed data	tw_mean_daily	01.02.1896	17.01.1924	31.12.2022	154 HR, HU, RS, SI	view stations
Snow cover	near real-time data	dn	11.02.2021	11.02.2021	17.01.2024	22 RS, SI	view stations
Total precipitation within 12 hours	near real-time data	P_total_12h	11.02.2021	11.02.2021	17.01.2024	7 SI	view stations
Total precipitation within 6 hours	near real-time data	P_total_6h	20.11.2020	17.01.2022	01.03.2023	17 UA	view stations
Total precipitation within a day	near real-time data	P_total_daily	16.09.2020	17.01.2022	17.01.2024	137 AT, BA, BG, DE, HU, RO, RS, SI	view stations
Total precipitation within an hour	near real-time data	P_total_hourly	28.02.2019	04.10.2020	17.01.2024	409 AT, BA, CZ, DE, HR, HU, ME, SI, SK	view stations
Total precipitation within half an hour	near real-time data	P_total_hhourly	y 11.02.2021	11.02.2021	17.01.2024	7 SI	view stations

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All times in timezone Europe/Vienna. You can change this in your user account

Time Series by country



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This table shows the number of time series available per country and observed property in the Danube River Basin.

Country	Current river discharge	Current water level	Total precipitation within a day	precipitation	·		Daily mean river discharge	Daily mean water level		temperature,	Snow cove
AT	87	51	2	74							
BA	39	53	62	62	62	14					
BG	6	6	6								
CZ	6	6		1			6	6			
DE	40	48	1	214	48		3	3			
HR	33	43		12	12	6	39	43	13		
HU	91	123	14	14		76	104	123	90		
ME	3	4		3	3						
RO	30	30	30		29	29					
RS	18	26	15			17	17	26	23	15	1
SI	27	28	7	7	7	28	28	28	28		
SK	12	13		22		13					
UA	14	20			17	20					

Time Series of a property



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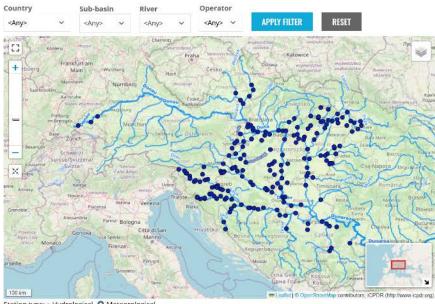
MEASUREMENTS ~

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TIME SERIES: DAILY MEAN RIVER DISCHARGE (M3/S)



Begin (unrestricted)	Begin	End	Latest measurement	
01.01.1961	17.01.2022	31.12.2022	3	view results
01.01.2000	17.01.2022	31.12.2022	12.4	view results
01.01.1990	17.01.2022	31.12.2022	1,196.3	view results
01.01.2001	01.01.2001	31.12.2021	2,077.173	view results
01.01.2000	17.01.2022	31.12.2022	0.1	view results
01.01.1961	17.01.2022	31.12.2022	8.1	view results
01.01.1961	17.01.2022	31.12.2022	2.6	view results
01.01.1990	17.01.2022	31.12.2022	2,450.5	view results
01.01.1961	17.01.2022	25.08.2022	0.1	view results
01.01.1961	17.01.2022	31.12.2022	5.1	view results
09.03.2001	09.03.2001	31.12.2021	1,774.646	view results
01.01.1961	17.01.2022	31.12.2022	71.5	view results
01.01.1961	17.01.2014	31.12.2022	4.121	view results
01.01.1962	17.01.1964	31.12.2021	259.165	view results
01.01.1961	17.01.2022	31.12.2022	0	view results
31.12.2001	17.01.2022	31.12.2022	0	view results
01.11.1929	17.01.2022	31.12.2022	52.414	view results
01.01.1961	17.01.2014	31.12.2022	2,500	view results
01.01.2016	01.01.2016	31.12.2017	13.534	view results
01.01.1974	01.01.1974	31.12.2021	11.019	view results
	01.01.1961 01.01.2000 01.01.1990 01.01.2001 01.01.2000 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961 01.01.1961	01,01,1961 17,01,2022 01,01,1990 17,01,2022 01,01,2000 17,01,2022 01,01,2001 01,01,2001 01,01,2000 17,01,2022 01,01,1961 17,01,2024 01,01,1961 17,01,2014 01,01,1961 17,01,2016	01.01.1961 17.01.2022 31.12.2022 01.01.2000 17.01.2022 31.12.2022 01.01.1990 17.01.2022 31.12.2021 01.01.2001 01.01.2001 31.12.2022 01.01.2000 17.01.2022 31.12.2022 01.01.1961 17.01.2022 31.12.2022 01.01.1961 17.01.2022 31.12.2022 01.01.1961 17.01.2022 25.08.2022 01.01.1961 17.01.2022 31.12.2022 09.03.2001 09.03.2001 31.12.2021 01.01.1961 17.01.2022 31.12.2022 01.01.1961 17.01.2014 31.12.2022 01.01.1961 17.01.2014 31.12.2021 01.01.1961 17.01.2022 31.12.2021 01.01.1961 17.01.2022 31.12.2022 01.01.1961 17.01.2022 31.12.2022 01.01.1961 17.01.2022 31.12.2022 01.01.1961 17.01.2022 31.12.2022 01.01.1961 17.01.2022 31.12.2022 01.01.1961 17.01.2024 31.12.2022	01.01.1961 17.01.2022 31.12.2022 3 01.01.2000 17.01.2022 31.12.2022 12.4 01.01.1990 17.01.2022 31.12.2022 1,196.3 01.01.2001 01.01.2001 31.12.2021 2,077.173 01.01.2000 17.01.2022 31.12.2022 0.1 01.01.1961 17.01.2022 31.12.2022 8.1 01.01.1961 17.01.2022 31.12.2022 2.6 01.01.1990 17.01.2022 31.12.2022 2,450.5 01.01.1961 17.01.2022 31.12.2022 0.1 01.01.1961 17.01.2022 31.12.2022 5.1 09.03.2001 09.03.2001 31.12.2021 1,774.646 01.01.1961 17.01.2022 31.12.2021 17.74.646 01.01.1961 17.01.2014 31.12.2022 4.121 01.01.1962 17.01.1964 31.12.2022 25.165 01.01.1961 17.01.2022 31.12.2022 0 31.12.2001 17.01.2022 31.12.2022 0 01.01.1961

Station type: • Hydrological, O Meteorological

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All times in timezone Europe/Vienna. You can change this in your user account

Visulation example of long-term time-series



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DanubeHIS MEASUREMENTS ~ SYSTEM ~ ≗ ⊠ O . Please note that output of results was limited. You can select a shorter time period to display all results Chart Daily mean river discharge (m²/s) was limited to 5000 results. STATION HR5005_HYDRO: BELIŠĆE 5005 National code Station type HYDRO Name Belišće River Drava/Drau/Dráva River-km Subbasin 07 Drava-Mura (AT, SI, HR, HU) Vertical reference HVR51875 Gauge zero 83.993 m Latitude 45.68890 Longitude 18.41789 Operator Croatian Meteorological and Hydrological Service (DHMZ) Leaflet I @ OpenStreetMap contributors. ICPDR (http://www.icpdr.org) RESULTS WML CSV XLS Property Minute Current water level (cm) **APPLY FILTER** 17.01.1964 31.12.2021 Current river discharge (m3/s) ✓ Daily mean river discharge (m³/s) Daily mean water level (cm) Daily mean river discharge (m3/s) \equiv

Jan 109 Jul 109 Jan 110 Jul 110 Jan 111 Jul 111 Jan 112 Jul 112 Jan 113 Jul 113 Jan 114 Jul 114 Jan 115 Jul 115 Jan 116 Jul 116 Jan 117 Jul 117 Jun 118 Jul 118 Jan 119 Jul 119 Jan 120 Jul 121 Jul 121 Jun 121 Jul 121

Thanks for your attention!





Please visit

https://www.danubehis.org

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