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EfxINNOs in Georgia

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ILIA STATE UNIVERSITY



Times
Higher
Education

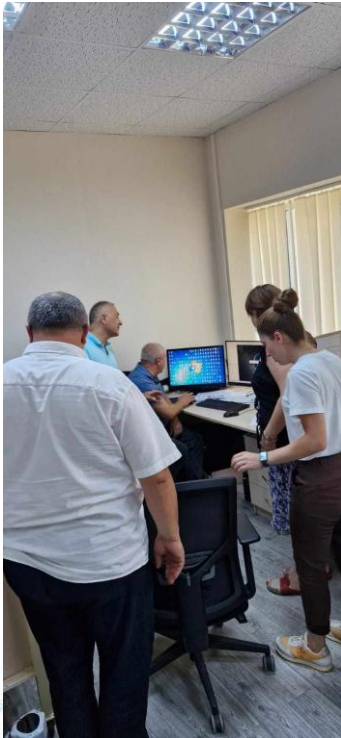
TIMES HIGHER EDUCATION



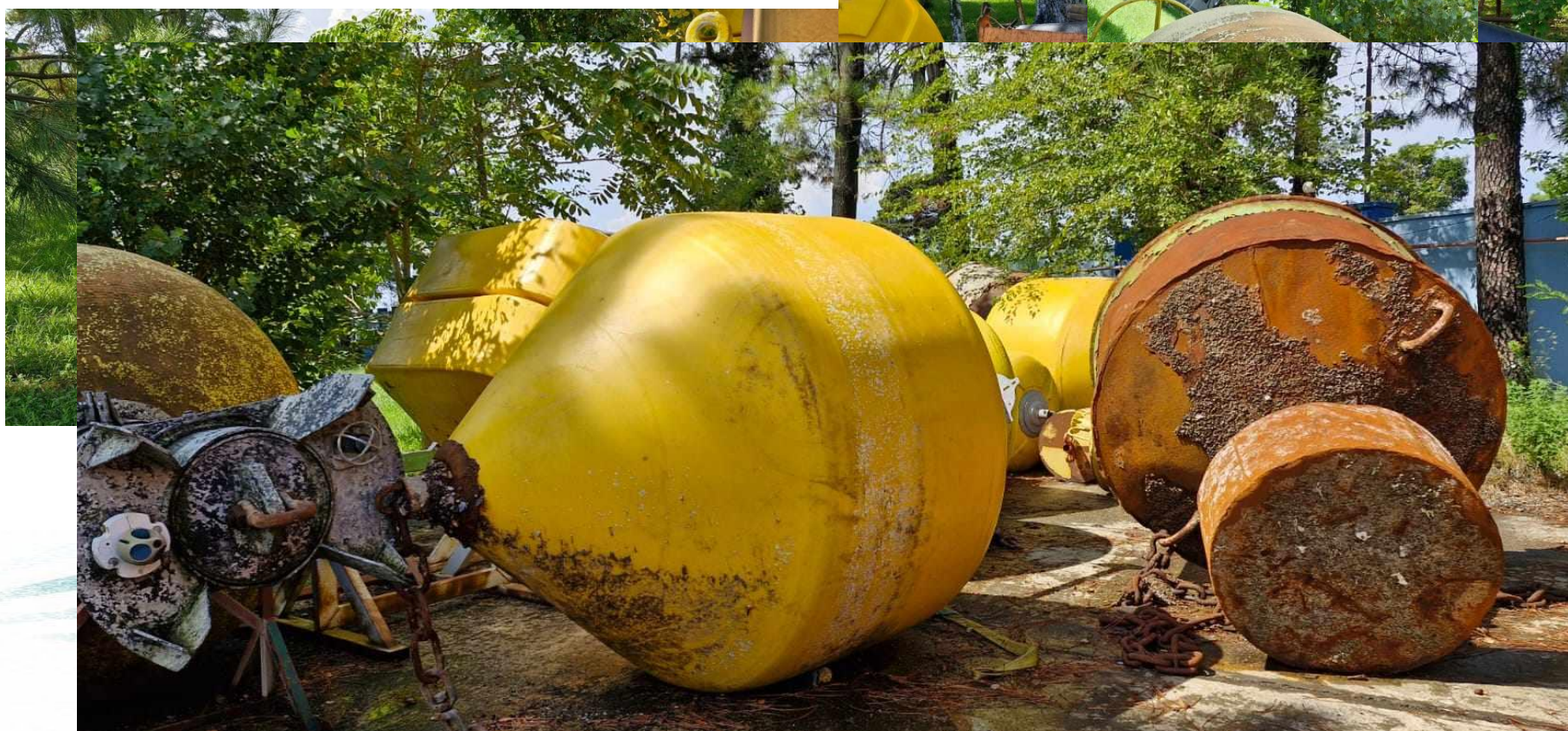
BREAKDOWN VIA YEAR



Identify an area of interest for the physico-chemical buoy installation



Identify an area of interest for the physico-chemical buoy installation



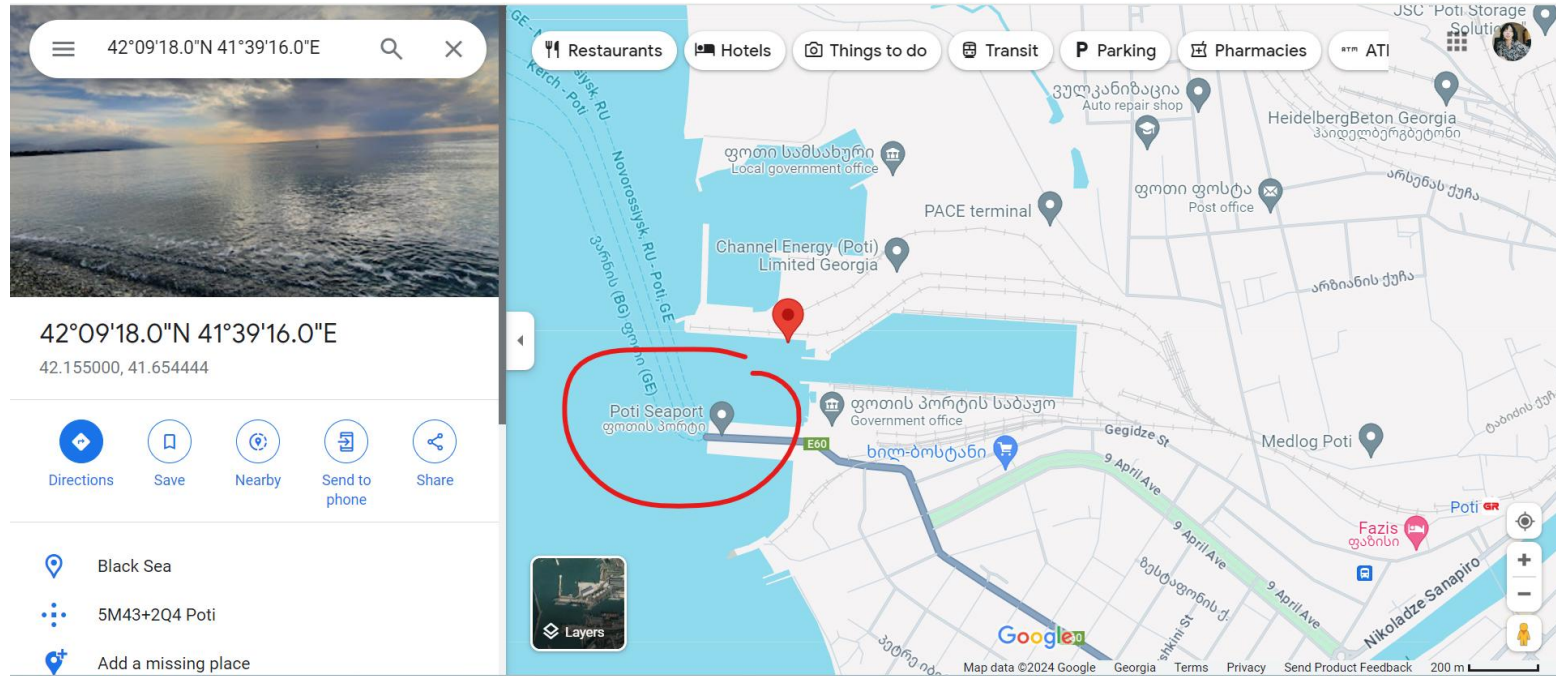
Identify an area of interest for the physico-chemical buoy installation

The **Poti Sea Port** is a major seaport and harbor off the eastern Black Sea coast at the mouth of the Rioni River in Poti. Location at [42°9'18"N 41°39'16"E](#)

The Poti seaport is a cross point of the Trans-Caucasian Corridor, a multinational project which connects the Romanian port of Constanta and Bulgarian port Varna with the landlocked countries of the Caspian region and Central Asia.



Identify an area of interest for the physico-chemical buoy installation



Buoy deployment-29 April,2025



Buoy deployment



Temperature; conductivity
electrode (0-500 mS/cm)
(salinity) turbidity
analyzer(no
wiper)(0~10/100/1,000/4,0
00 NTU),
chlorophyll a analyzer(no
wiper)(0~500 mg/L)



The sensors were cleaned

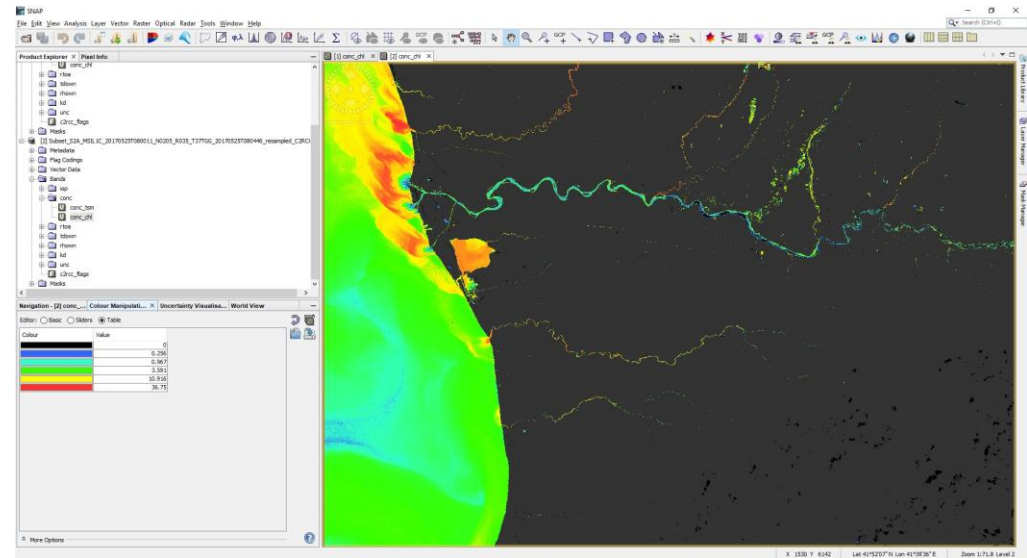
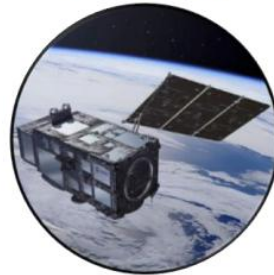


Chlorophyll Measurement with Satellite remote-sensing

Sentinel 2 (10m)
2015 - Today

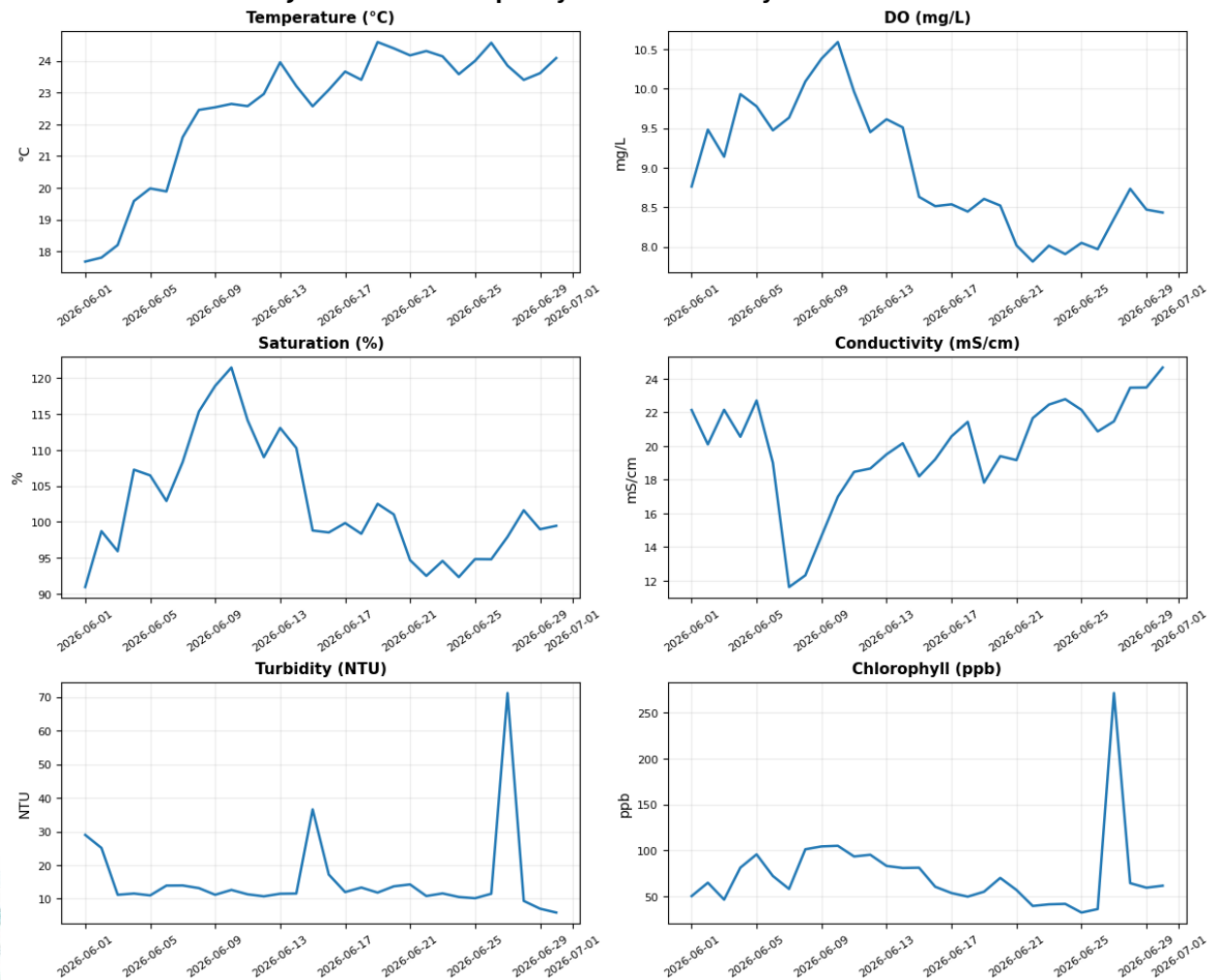


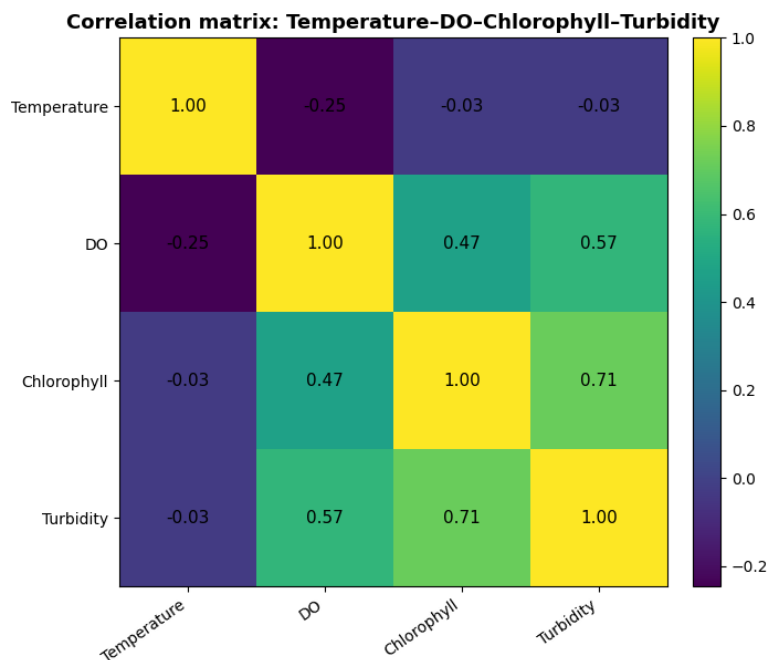
Sentinel 3 (300m)
2016 - Today



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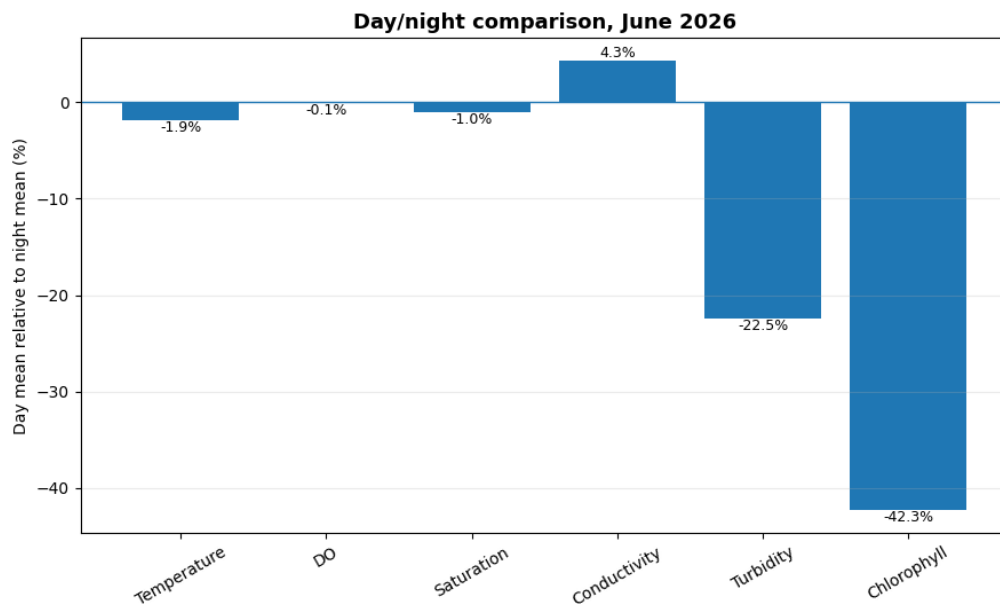
June 2026 water quality dashboard: daily mean values



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The strongest relationship was observed between chlorophyll and turbidity ($r = 0.71$), indicating that periods of higher phytoplankton biomass were generally associated with increased water turbidity. We also found a moderate positive correlation between dissolved oxygen and chlorophyll ($r = 0.47$), which is consistent with oxygen production during photosynthesis. As expected, water temperature showed a weak negative correlation with dissolved oxygen ($r = -0.25$), since warmer water can hold less oxygen. No meaningful relationship was observed between temperature and either chlorophyll or turbidity during June.





Overall, day and night conditions were quite similar in June. The largest differences were observed for chlorophyll and turbidity, while temperature, dissolved oxygen, and oxygen saturation remained almost unchanged



1	Parameter	Unit	Mean	Median	Min	Max	Anomaly count	Anomaly %
2	Temperature	°C	22.553	23.29	16.7	26.14	173	6.01
3	DO	mg/L	8.962	8.87	7.03	43.92	12	0.42
4	Saturation	%	102.45	101	81.2	501.25	41	1.42
5	Conductivity	mS/cm	19.93	20.37	0.09	26.11	122	4.24
6	Turbidity	NTU	15.474	11.28	3.54	5395.9	265	9.2
7	Chlorophyll	ppb	73.637	59	7	10684	60	2.08
8								

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Tbilisi meeting



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Marytime day



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Workshop with Young Researchers



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Thank You

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