Monitoring of changes in the water surface and wetland area of the Aral Sea and the Aral Region

SIC specialists are constantly monitoring the state of the Southern Aral Sea and parts of the Greater Aral Sea by using the Landsat 8-9 OLI images. The use of the NDVI index with refined threshold values has been started, which allow recognizing three categories of surfaces: 1) open water surface, 2) wetlands, 3) land. According to the image from 6 August 2023, the areas of wetlands and open water surface were determined

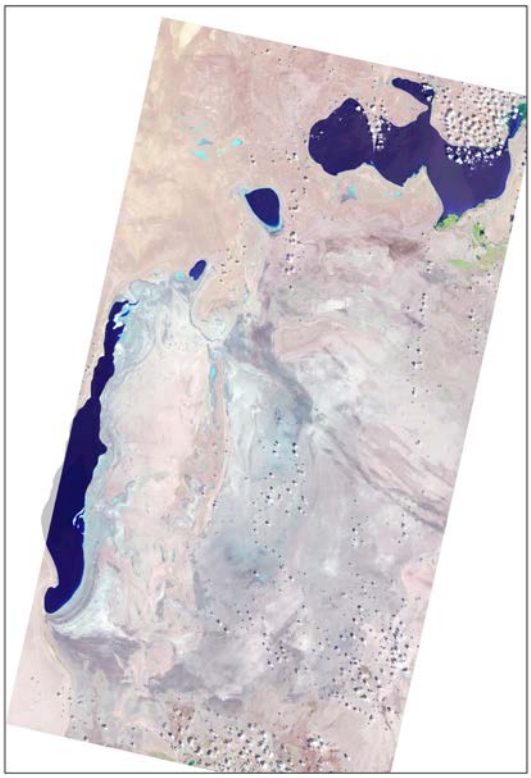

Figure 1 Western and Eastern parts of the Aral Sea Landsat 8-9, 6 August 2023

Table 1

**The area of wetlands, open water surfaces and dried ground*
in the Western and Eastern parts of the Aral Sea**

	18.01.2023	**15.03.2023**	**26.05.2023**	**27.06.2023**	**13.07.2023**	**06.08.2023**
Western part of the Aral Sea, ha						
Wetland	250 244.3	335 725	335 540	336 388	271 323	244 268
Water surface	209 733	213 212	210 294	206 861	208 318	207 332
Dried ground*	101 372.9	12 413	15 516	18 101.2	81 709	109 750
Eastern part of the Aral Sea, ha						
Wetland	1 386 722	1 342 826	1 405 970	1 446 824	1 430 500	Облачно
Water surface	364.41	1 128.5	2 588	699	406	
Dried ground*	109 737.8	152 869	88 266	49 190	65 918	

* bare soil, dense or rare vegetation

Таблица 2

Inflow to Inflow to the Aral Region and Aral Sea

Year	Month	Inflow to Inflow to the Aral Region and Aral Sea, mln.m^3					Runoff from North Aral Sea, mln.m^3
		From Amu Darya River	from canal systems	collector-drainage runoff	Total	Plan	
2023	Jan	92	8	40	**140**	774	0
	Feb	32	98	45	**175**	167	0
	Mar	85	50	122	**257**	185	0
	Apr	38	0	214	**252**	180	0
	May	35	0	71	**106**	336	0
	June	71	0	91	**162**	391	0

Prepared by: I. Ruziev and I. Ergashev