

## Monitoring dynamics of the Eastern part of the Big Aral Sea

The satellite images for October 2011 are processed. The water surface area of the gulfs of the Big Aral Sea and the water levels and volumes of the Eastern and Western parts of the Big Aral Sea have been determined (Table).

According to the bathymetric chart the estimated areas correspond to the following levels:

### Eastern Sea:

from March till April 2011 - Water Level  $\approx 28,6$  m; Water Volume  $\approx 6,62$  km<sup>3</sup>  
 May 2011 - Water Level  $\approx 28,5$  m; Water Volume  $\approx 6,21$  km<sup>3</sup>  
 June 2011 - Water Level  $\approx 28,2$  m; Water Volume  $\approx 4,7$  km<sup>3</sup>  
 July 2011 - Water Level  $\approx 27,8$  m; Water Volume  $\approx 3,52$  km<sup>3</sup>  
 from August till September 2011 - Water Level  $\approx 27,6$  m; Water Volume  $\approx 3$  km<sup>3</sup>  
 October 2011 - Water Level  $\approx 27,4$  m; Water Volume  $\approx 2,5$  km<sup>3</sup>

### Western Sea:

March 2011 - Water Level  $\approx 27,8$  m; Water Volume  $\approx 53,27$  km<sup>3</sup>  
 April 2011 - Water Level  $\approx 27,7$  m; Water Volume  $\approx 52,84$  km<sup>3</sup>  
 May 2011 - Water Level  $\approx 27,8$  m; Water Volume  $\approx 53,27$  km<sup>3</sup>  
 June 2011 - Water Level  $\approx 27,9$  m; Water Volume  $\approx 53,64$  km<sup>3</sup>  
 From July till September 2011 - Water Level  $\approx 27,8$  m; Water Volume  $\approx 53,27$  km<sup>3</sup>  
 October 2011 - Water Level  $\approx 27,7$  m; Water Volume  $\approx 52,89$  km<sup>3</sup>

**Table**

**Assessment of water surface area of the Eastern and Western parts of the Big Aral Sea, km<sup>2</sup>**

<b>Water Body</b>	<b>March 2011</b>	<b>April 2011</b>	<b>May 2011</b>	<b>June 2011</b>	<b>July 2011</b>	<b>August 2011</b>	<b>September 2011</b>	<b>October 2011</b>
Western Sea	3934,15	3881,74	3922,68	3977,23	3943,58	3924,89	3938,02	3907,6
Eastern Sea	4583,96	4526,52	4476,27	3702,15	2858,43	2451,28	2267,65	1970,21
Gulfs of the Eastern Sea (Tschebas)	2086,51	1740,01	1188,11	986,60	631,01	576,10	511,43	473,58
<b>Big Aral Sea</b>	<b>10604,62</b>	<b>10148,27</b>	<b>9587,06</b>	<b>8665,98</b>	<b>7433,02</b>	<b>6952,27</b>	<b>6717,1</b>	<b>6356,39</b>