

“Long-term series of satellite data products used in Roshydromet for climate change prediction”

Roshydromet

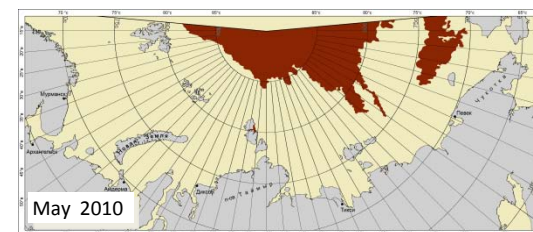
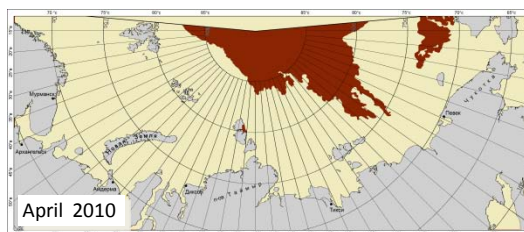
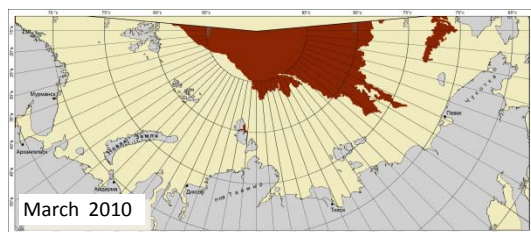
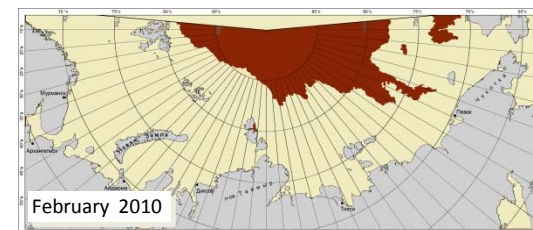
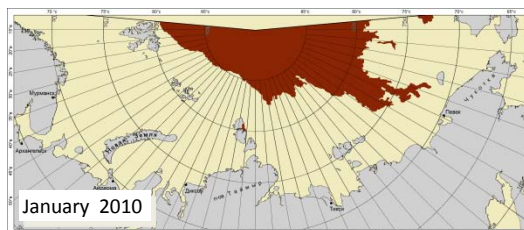
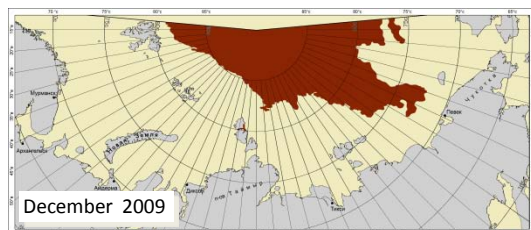
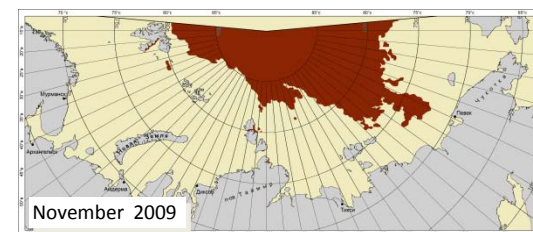
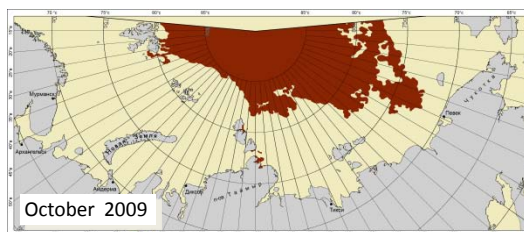
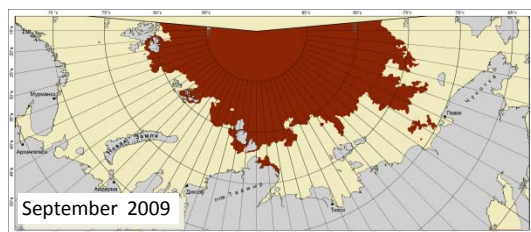
State Research Center for Space

Hydrometeorology «Planeta», Russia



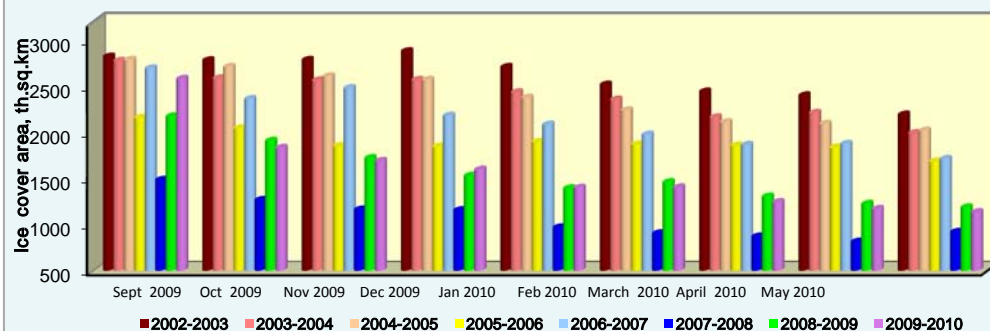
Multiyear ice Cover Dynamics in the Russian Part of Arctic

(QuikSCAT/Sea Wind NRT, ENVISAT/ASAR, AQUA/AMSR-E, MetOp/ASCAT, September 2009 - May 2010)



■ - Multiyear ice

Multiyear ice cover area in the Russian part of Arctic



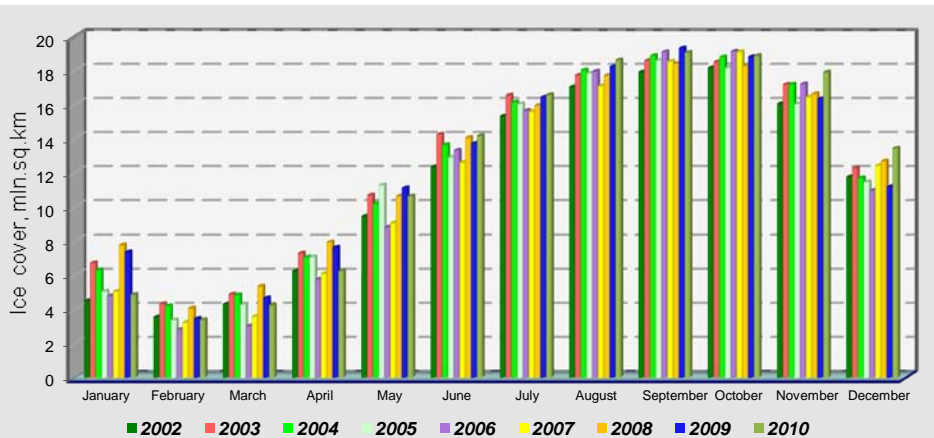
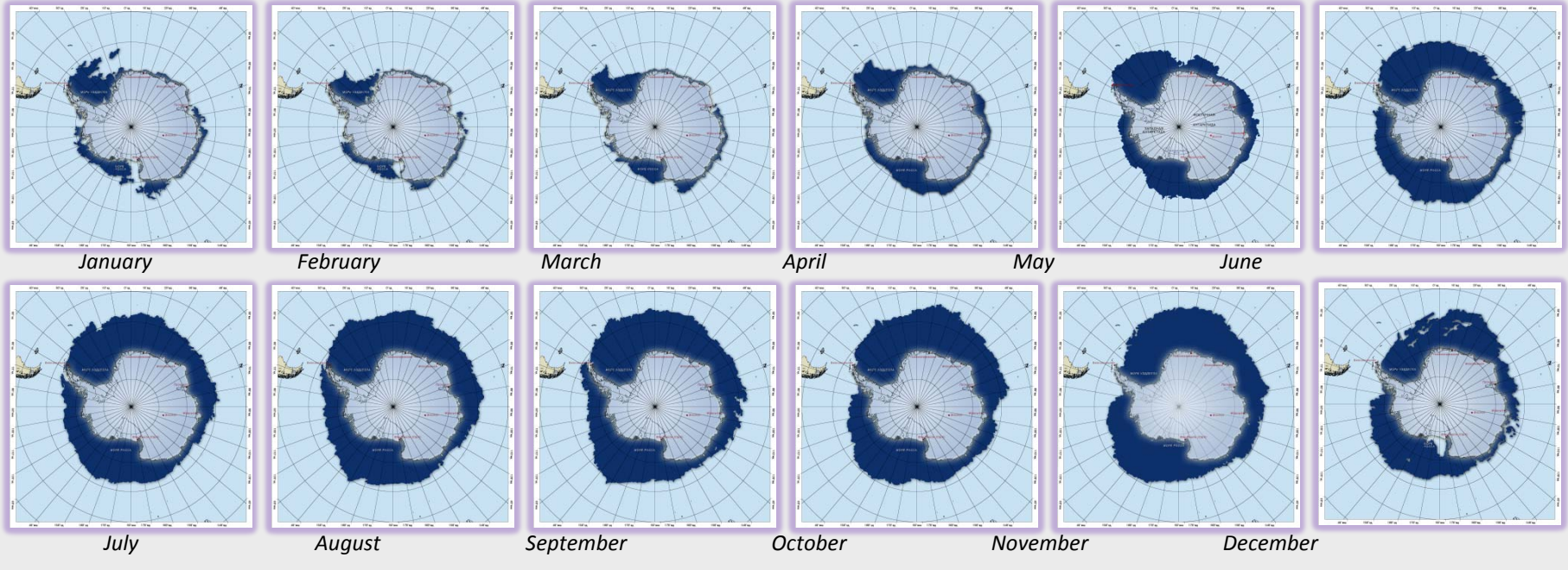
	September	October	November	December	January	February	March	April	May
2002 - 2003	2820*	2781	2784	2879	2708	2515	2440	2399	2190
2003 - 2004	2774	2585	2563	2567	2433	2353	2159	2208	1989
2004 - 2005	2786	2709	2607	2568	2375	2237	2106	2090	2016
2005 - 2006	2153	2040	1847	1842	1893	1864	1851	1833	1685
2006 - 2007	2693	2359	2478	2177	2081	1972	1860	1872	1714
2007 - 2008	1486	1266	1162	1155	967	904	869	813	919
2008 - 2009	2170	1903	1723	1530	1394	1460	1304	1224	1186
2009 - 2010	2579	1828	1692	1598	1400	1404	1244	1169	1134

* - Ice area (th.sq.km)

Antarctic Ice Cover Dynamics

(QuikSCAT/Sea Wind NRT, ENVISAT/ASAR, AQUA/AMSR-E, MetOp/ASCAT)

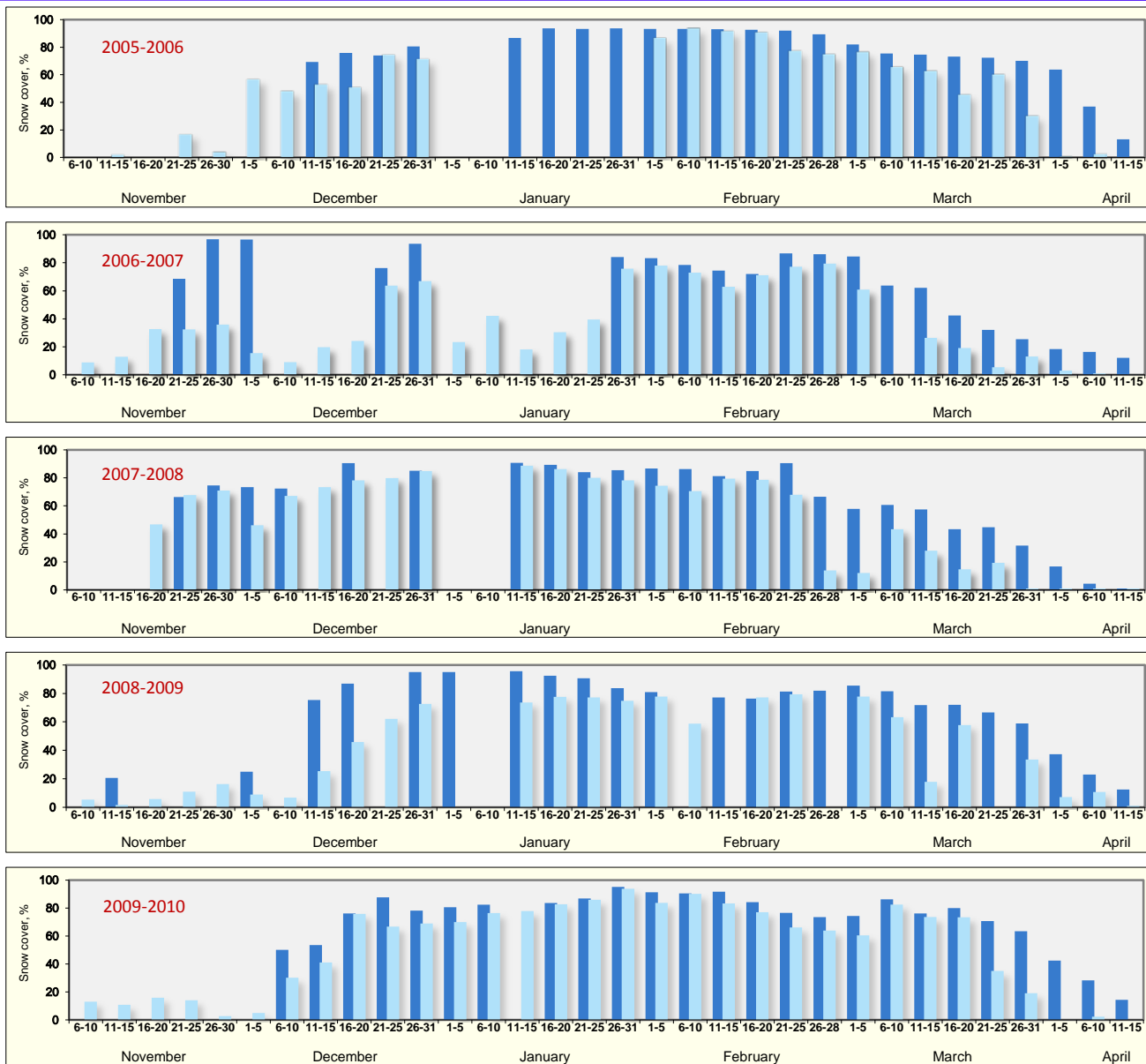
Antarctic ice cover dynamics (2010)



	January	February	March	April	May	June	July	August	September	October	November	December
2002	4,51*	3,55	4,31	6,25	9,46	12,33	15,32	17,02	17,90	18,15	16,04	11,74
2003	6,73	4,32	4,89	7,30	10,66	14,24	16,54	17,71	18,57	18,50	17,16	12,25
2004	6,31	4,20	4,84	7,06	10,17	13,62	16,13	18,01	18,86	18,78	17,17	11,68
2005	5,06	3,37	4,28	7,08	11,26	12,89	16,03	17,83	18,59	18,14	16,02	11,45
2006	4,79	2,81	3,02	5,77	8,83	13,30	15,63	17,94	19,08	19,12	17,19	10,95
2007	5,05	3,23	3,58	6,10	9,07	12,59	15,59	17,09	18,52	19,09	16,44	12,41
2008	7,78	4,07	5,35	7,94	10,62	14,04	15,94	17,70	18,40	18,26	16,62	12,67
2009	7,37	3,45	4,66	7,64	11,09	13,71	16,42	18,21	19,30	18,80	16,33	11,46
2010	4,86	3,39	4,24	6,25	10,61	14,16	16,57	18,60	19,04	18,86	17,89	13,42

Snow Cover Monitoring of European Russia

(NOAA/AVHRR, NOAA/AMSU-A, 2005 - 2010)



		2005 - 2006		2006 - 2007		2007 - 2008		2008 - 2009		2009 - 2010	
		continuous	dry	continuous	dry	continuous	dry	continuous	dry	continuous	dry
November	6-10	0	9					5	13		
	11-15	2	13				21	2	11		
	16-20		33		47		6		16		
	21-25	17	69	32	66	68	11		14		
	26-30	4	97	36	75	71	16		3		
December	1-5	57	97	16	73	46	25	9	5		
	6-10	48	9	72	67		7	50	30		
	11-15	69*	53	20	73	75	25	54	41		
	16-20	76	51	24	91	78	87	46	76	76	
	21-25	74	74	76	64	80	91.5	62	88	67	
January	26-31	81	71	94	67	85	95	73	78	69	
	1-5			23		95		81	70		
	6-10			42				82	77		
	11-15	87		18	91	89	96	74	78		
	16-20	94		31	89	86	92	78	84	83	
February	21-25	93		39	84	80	91	77	87	86	
	26-31	94		84	76	86	78	84	75	95	94
	1-5	93	86	83	78	87	74	81	78	91	84
	6-10	93	94	78	73	86	70	83.01	59	91	90
	11-15	93	91	74	63	81	79	77		92	83
March	16-20	93	91	72	71	85	79	76	77	84	77
	21-25	92	77	87	77	90	68	81	79	77	66
	26-28	89	74	86	79	66	14	82		73	64
	1-5	82	77	85	61	58	12	85	78	74	61
	6-10	76	66	64		61	43	82	63	86	82
April	11-15	75	63	62	26	57	28	72	18	76	74
	16-20	73	46	42	19	43	15	72	58	80	73
	21-25	72	60	32	5	45	19	67		71	35
	26-31	70	30	25	13	32	1	59	33	63	19
April	1-5	64	1	18	3	17	1	37	7	42	
	6-10	37	3	16	1	4	1	23	11	28	2
	11-15	13	0	12	0	1	1	13	1	14	0

■ - continuous snow cover (NOAA/AVHRR) ■ - dry snow cover (NOAA/AMSU-A)

* - Snow cover, %

SRC "Planeta"

products available via Internet:

Operative products: <http://planet.iitp.ru>

Satellite data:

<http://sputnik1.infospace.ru>

Climatic data:

<http://seakc.meteoinfo.ru>

<http://neacc.meteoinfo.ru>

***Thank you for
your attention!***

A satellite image of the Arctic region, showing a large expanse of white and light blue ice and snow covering the land and sea. The ice has a textured, cracked appearance. The surrounding oceans are dark blue. The image is taken from a high angle, showing the curved horizon of the Arctic circle.