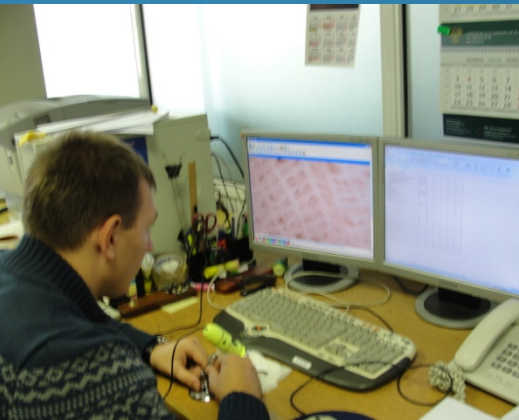


Marine litter problem at the Russian Far East and approaches for solution



Yana Yu. Blinovskaya, doctor of science (technical),
Maritime State University named after admiral G.I. Nevelskoy, Vladivostok, Russia

Russian Far East sea coasts





Marine litter in Japan



Marine litter in Republic of Korea



Marine litter in China



Marine litter in Russia

Sea Protection and Shelf Development Institute practical research

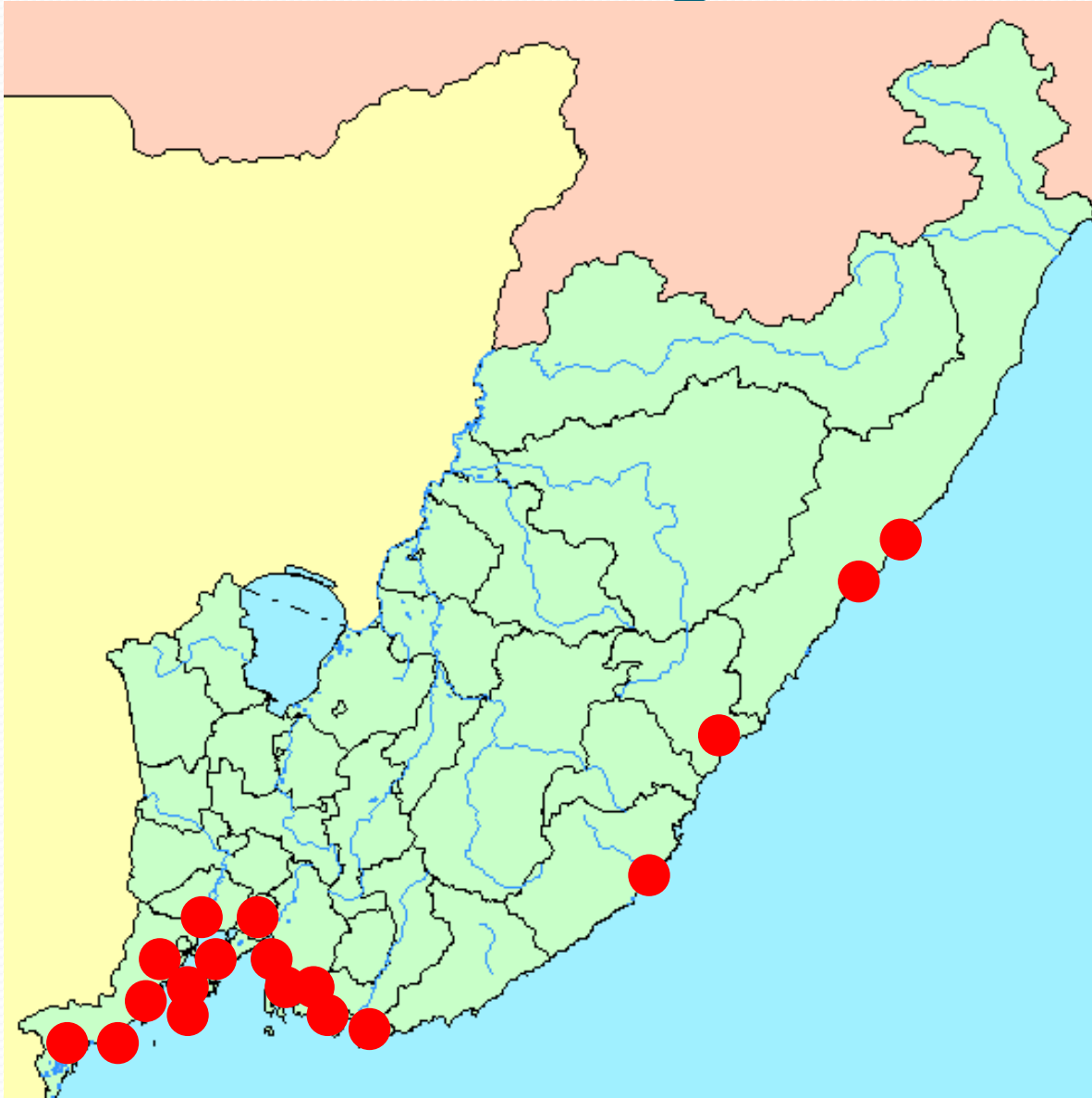


Researches results:



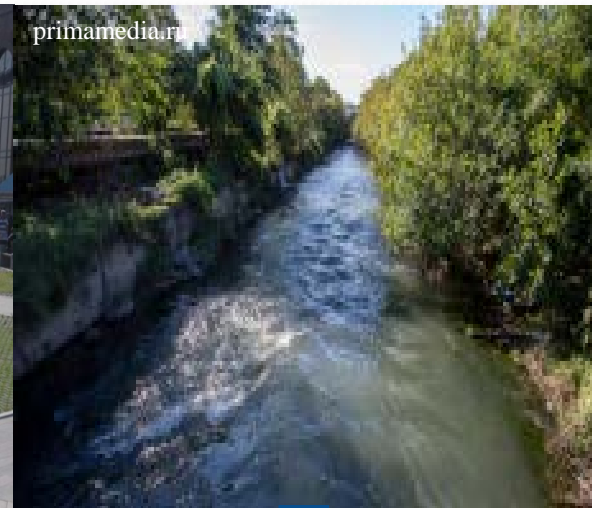
- It's the supralittoral zone which is the most heavily polluted part of the coastal zone;
- The coast is the more polluted the closer it is to the developed lands;
- Near-estuary areas are subject to extensive pollution;
- Smalls predominate in the litter structure.

Monitoring sites in Primorye



1. Fedorova bay (Vladivostok);
2. Peschany peninsula;
3. Baklan bay;
4. Slavyanka bay;
5. Olga bay;
6. Ugolny gulf;
7. Amursky gulf (Tavranchanka);
8. Plastun bay;
9. Vladimir gulf;
10. Lidovka (Dalnegorsk);
11. Troitsa bay
12. Tabunnaya bay;
13. Expedition bay;
14. Popov island;
15. Russky island
16. Novgorodskaya bay (Posiet)
17. Boisman bay
18. Nakhodka gulf

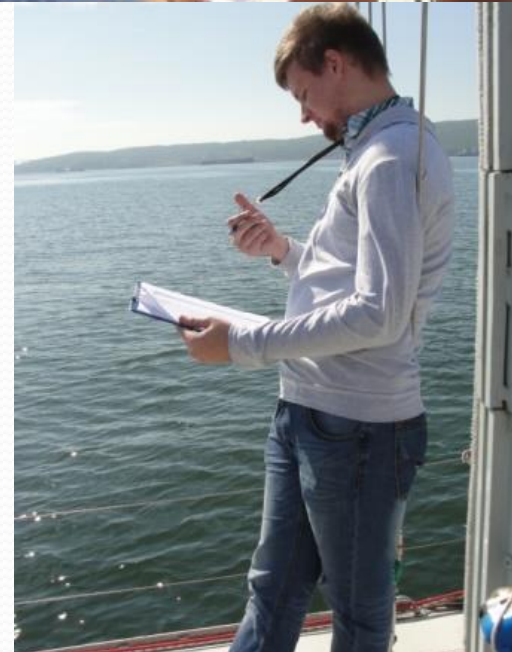
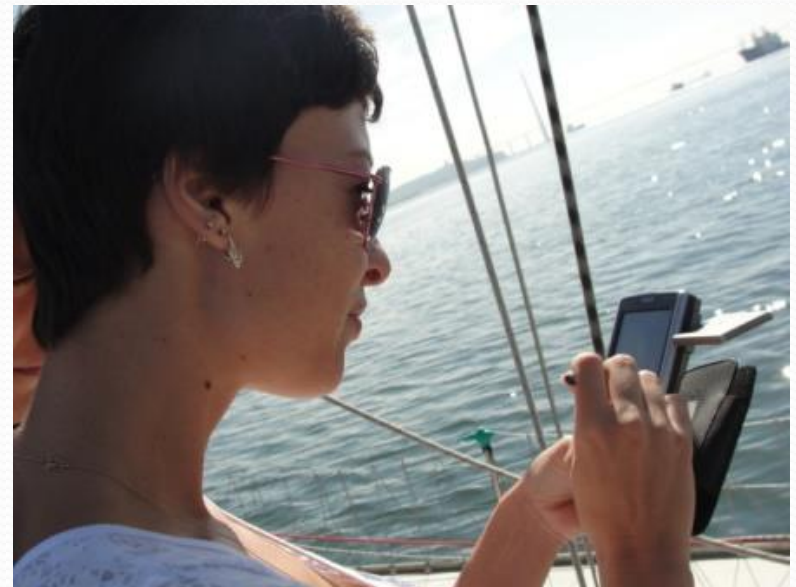
Vladivostok coastal area



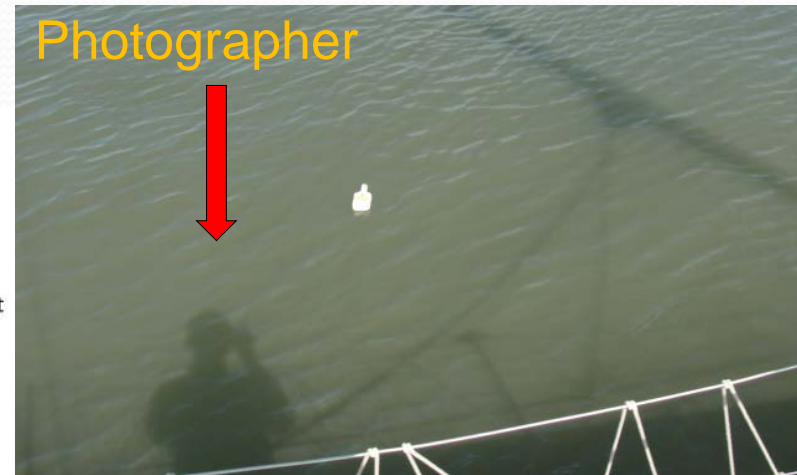
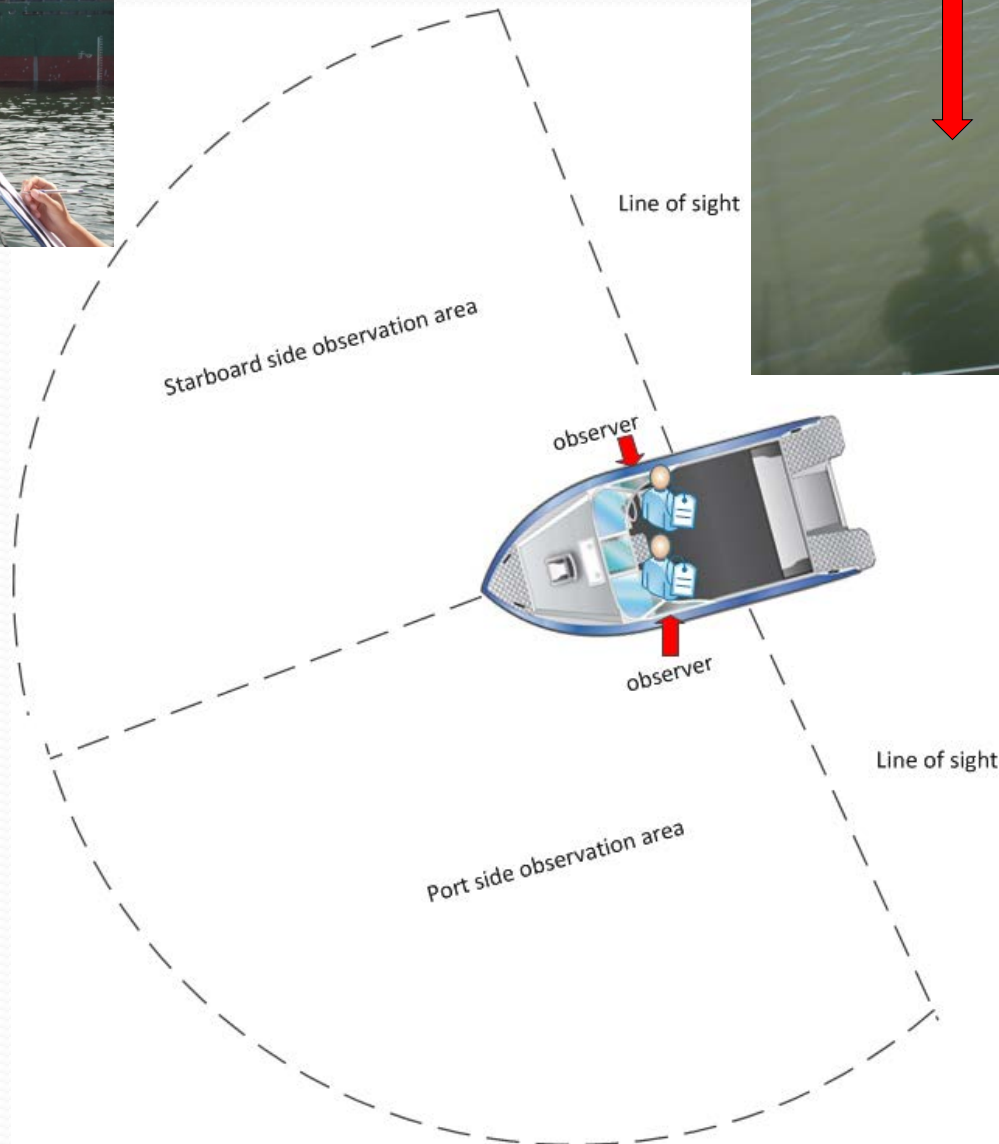
Floating litter monitoring



Floating litter monitoring



Floating litter monitoring



Equipment and Software



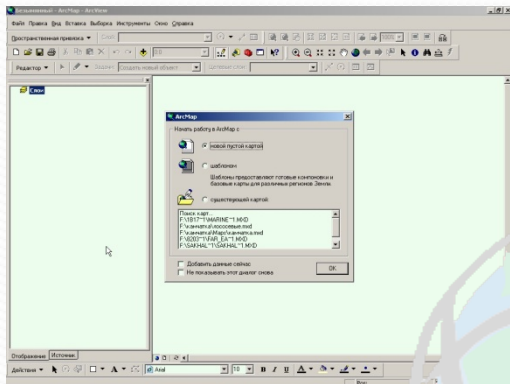
Sony Cyber-shot DSC-H20
10,10 MP, 10x zoom
Carl Zeiss Vario-Tessar



Sony DCR-SX60E
4MP, 60x zoom
Carl Zeiss Vario-Tessar



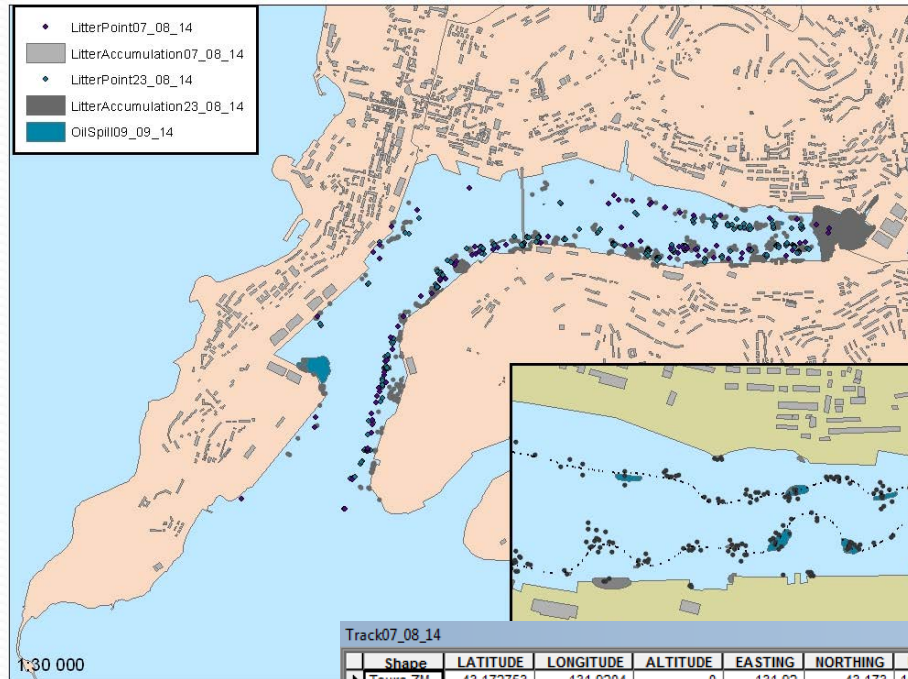
ASUS MyPal A639
Swivel GPS Patch Antenna



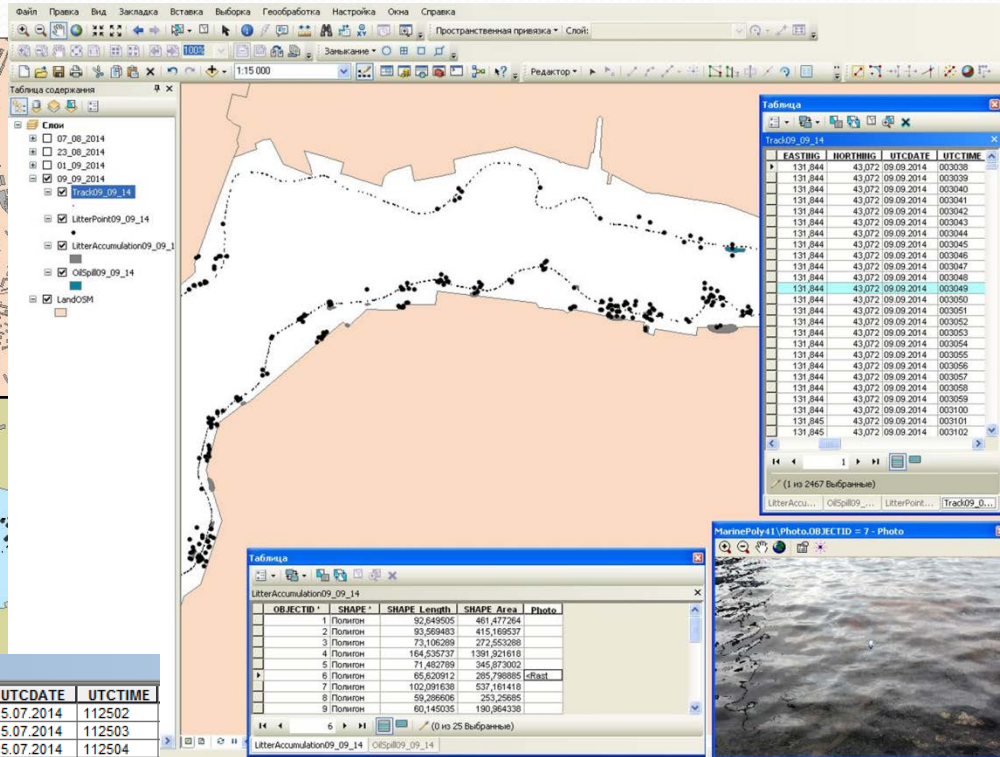
ArcGIS software



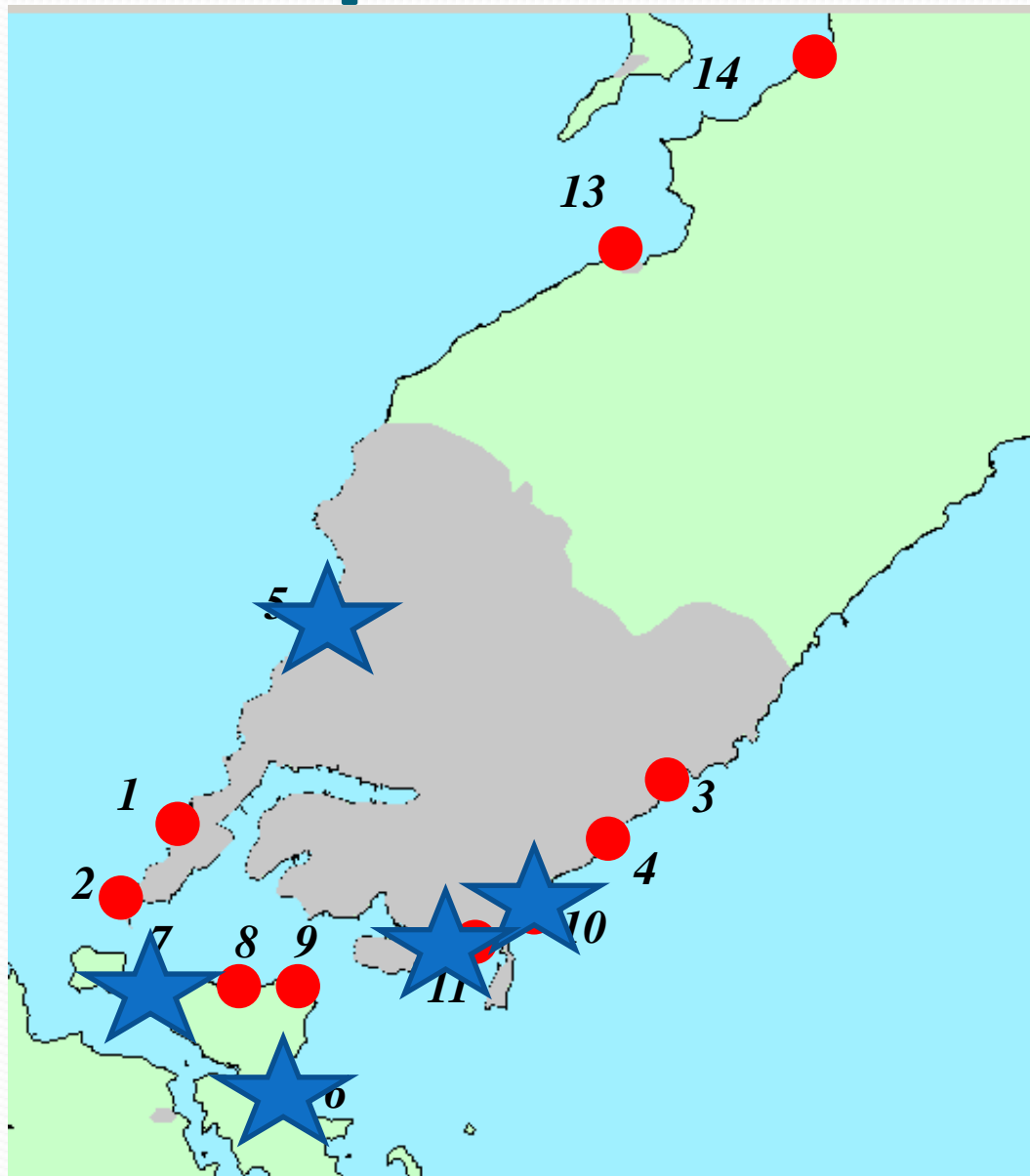
Marine litter mapping



Track07_08_14							
Shape	LATITUDE	LONGITUDE	ALTITUDE	EASTING	NORTHING	UTCDATE	UTCTIME
Точка ZM	43,172753	131,9204	0	131,92	43,173	15.07.2014	112502
Точка ZM	43,172752	131,920392	0	131,92	43,173	15.07.2014	112503
Точка ZM	43,172752	131,920397	0	131,92	43,173	15.07.2014	112504
Точка ZM	43,172752	131,920407	0	131,92	43,173	15.07.2014	112505
Точка ZM	43,17275	131,920415	0	131,92	43,173	15.07.2014	112506
Точка ZM	43,172752	131,920428	0	131,92	43,173	15.07.2014	112507
Точка ZM	43,172752	131,920412	0	131,92	43,173	15.07.2014	112508
Точка ZM	43,17275	131,92038	0	131,92	43,173	15.07.2014	112509
Точка ZM	43,172747	131,920357	0	131,92	43,173	15.07.2014	112510
Точка ZM	43,172743	131,920348	0	131,92	43,173	15.07.2014	112511
Точка ZM	43,172742	131,920345	0	131,92	43,173	15.07.2014	112512
Точка ZM	43,17274	131,92034	0	131,92	43,173	15.07.2014	112513
Точка ZM	43,172738	131,920335	0	131,92	43,173	15.07.2014	112514
Точка ZM	43,172737	131,920338	0	131,92	43,173	15.07.2014	112515
Точка ZM	43,172735	131,920345	0	131,92	43,173	15.07.2014	112516
Точка ZM	43,172733	131,920342	0	131,92	43,173	15.07.2014	112517
Точка ZM	43,172732	131,920335	0	131,92	43,173	15.07.2014	112518
Точка ZM	43,17273	131,920325	0	131,92	43,173	15.07.2014	112519
Точка ZM	43,172728	131,920313	0	131,92	43,173	15.07.2014	112520
Точка ZM	43,172728	131,920302	0	131,92	43,173	15.07.2014	112521
Точка ZM	43,172727	131,920287	0	131,92	43,173	15.07.2014	112522
Точка ZM	43,172725	131,920275	0	131,92	43,173	15.07.2014	112523
Точка ZM	43,172725	131,920265	0	131,92	43,173	15.07.2014	112524
Точка ZM	43,172725	131,92026	0	131,92	43,173	15.07.2014	112525
Точка ZM	43,172725	131,920258	0	131,92	43,173	15.07.2014	112526
Точка ZM	43,172725	131,920255	0	131,92	43,173	15.07.2014	112527

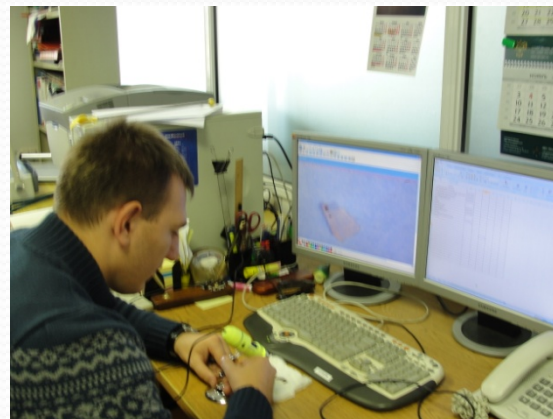
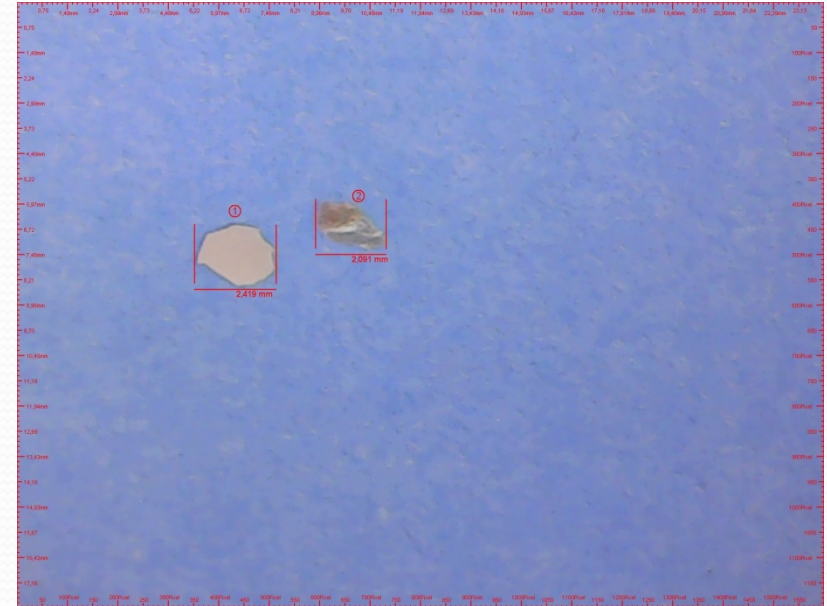
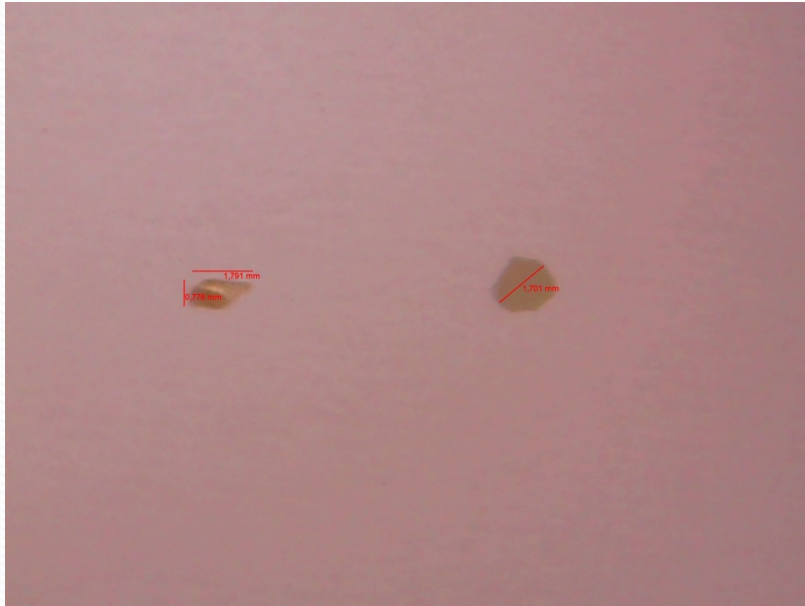


Microplastic monitoring sites



1. Fedorova bay (Vladivostok);
2. Tokarevsky lighthouse;
3. Steklyannaya bay;
4. Gornostay bay;
5. Vtoraya rechka mouth;
6. Ayaks bay;
7. Channel;
8. Pospelova cape
9. Bosfor Vostochny strait;
10. Patrokl bay;
11. Uliss bay;
12. Bogataya river mouth
13. Uglovoy bay

Microplastic fragments



Thanks a lot for your
attention!

