

Fig. 1. Overview of the data. brown = russian data, all gears, black= icelandic data, all gears; blue = main effort, based on VMS data 2005-2007). Note that data from the Barents Sea area are excluded from the figure. Also note that VMS data from the northern Reykjanes Ridge area are excluded.

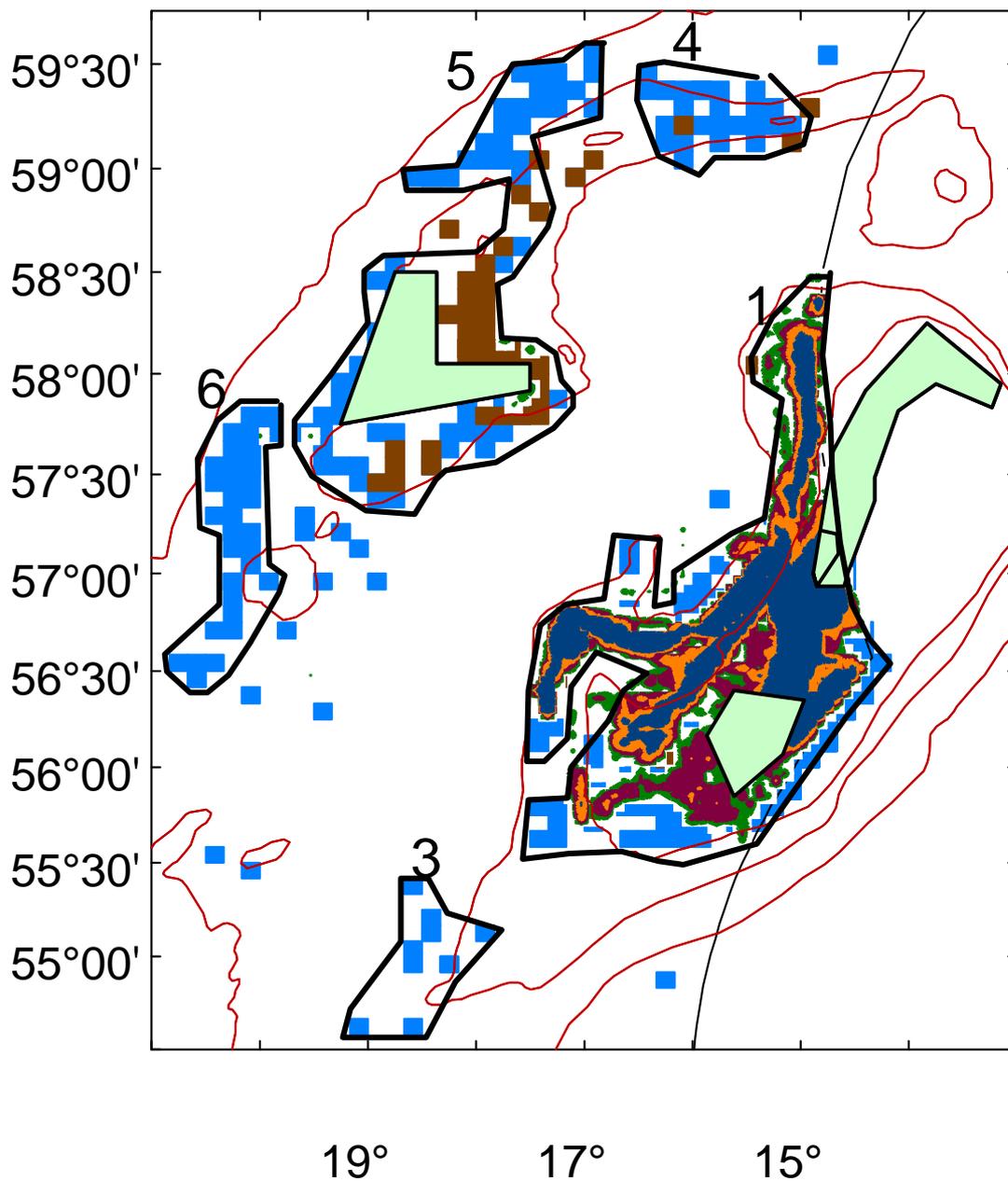


Fig. 2. “Existing fishing areas”. Based on data from Russia and Iceland (1987-2007) as well as VMS data (2005-2007). Blue = Russia; brown=Iceland; dark blue, orange, purple and green presents the VMS data where dark blue indicates the highest effort. Number on the figure indicates the areas in table 1. Note this is an alternative picture with Fig2. The only difference is the closed areas are filled with blue colour.

Table 1. Coordinates given on figure 1.

lat	lon	LAT	LON	area
58.49612675	-14.72661561	582977	-144360	1
58.0915412	-14.79796502	580549	-144788	1
57.7605274	-14.72661561	574563	-144360	1
57.501178	-14.70783965	573007	-144247	1
57.15453279	-14.63649024	570927	-143819	1
56.84159513	-14.52758762	565050	-143166	1
56.6645375	-14.36611154	563987	-142197	1
56.53844197	-14.17083926	563231	-141025	1
56.25997089	-14.58391678	561560	-143504	1
55.86162227	-15.08336396	555170	-150500	1
55.59942199	-15.40631482	553597	-152438	1
55.48894057	-16.08601403	552934	-160516	1
55.5080844	-16.31508381	553049	-161891	1
55.55908915	-16.65681192	553355	-163941	1
55.5484696	-17.14123755	553291	-170847	1
55.51871781	-17.56933532	553112	-173416	1
55.82999785	-17.51676187	554980	-173101	1
55.84054121	-17.1562591	555043	-170938	1
56.00046141	-17.1224616	560003	-170735	1
56.2411943	-16.78073479	561447	-164684	1
56.39946106	-16.63803467	562397	-163828	1
56.48871842	-16.42398643	562932	-162544	1
56.59637466	-16.88963611	563578	-165338	1
56.41815998	-17.1224616	562509	-170735	1
56.15135864	-17.1562591	560908	-170938	1
56.03194707	-17.37030733	560192	-172222	1
56.03194707	-17.53178341	560192	-173191	1
56.39946106	-17.51676187	562397	-173101	1
56.73463528	-17.40786054	564408	-172447	1
56.84159513	-17.17503505	565050	-171050	1
56.87033872	-16.8182867	565222	-164910	1
57.19320929	-16.72816133	571159	-164369	1
57.17285636	-16.30006356	571037	-161800	1
56.83132198	-16.35263702	564988	-162116	1
56.85186263	-16.17238499	565111	-161034	1
57.00759449	-16.17238499	570046	-161034	1
57.20134788	-15.63914031	571208	-153835	1
57.27856531	-15.33496541	571671	-152010	1
57.87453171	-15.17348933	575247	-151041	1
57.96029962	-15.44011232	575762	-152641	1
58.08161621	-15.45888827	580490	-152753	1
58.2796083	-15.263616	581678	-151582	1
58.47649964	-14.90311193	582859	-145419	1
58.47649964	-14.76041311	582859	-144562	1
55.41653735	-18.44430811	552499	-182666	3
55.23280205	-18.26781179	551397	-181607	3
55.14276059	-17.7646089	550857	-174588	3
54.86493348	-18.19270667	545190	-181156	3
54.56558866	-18.46308407	543394	-182779	3
54.56558866	-19.23290865	543394	-191397	3

lat	lon	LAT	LON	area
54.71987597	-19.16155923	544319	-190969	3
55.08047127	-18.69590955	550483	-184175	3
55.41653735	-18.69590955	552499	-184175	3
55.41653735	-18.44430811	552499	-182666	3
59.44457932	-15.27863624	592667	-151672	4
59.24545281	-14.90311193	591473	-145419	4
59.11655128	-14.97446134	590699	-145847	4
59.05288277	-15.33496541	590317	-152010	4
59.05288277	-15.79686067	590317	-154781	4
58.96974516	-15.9395595	585818	-155637	4
59.06060735	-16.31508381	590364	-161891	4
59.32792681	-16.5141118	591968	-163085	4
59.49036613	-16.49533584	592942	-162972	4
59.50942391	-16.26251035	593057	-161575	4
59.43694128	-15.40631482	592622	-152438	4
59.59125821	-16.83706265	593548	-165022	5
59.24545281	-16.8520842	591473	-165113	5
59.15315623	-17.47920995	590919	-172875	5
59.06060735	-17.4266365	590364	-172560	5
58.81258751	-17.28393768	584876	-171704	5
58.71912231	-17.33651113	584315	-172019	5
58.47649964	-17.65946199	582859	-173957	5
58.43917356	-17.80216081	582635	-174813	5
58.1767909	-17.7646089	581061	-174588	5
58.16688691	-17.44165804	581001	-172650	5
58.10146342	-17.26516042	580609	-171591	5
57.9682657	-17.21258697	575810	-171276	5
57.90247742	-17.10368564	575415	-170622	5
57.83657124	-17.10368564	575019	-170622	5
57.7304656	-17.28393768	574383	-171704	5
57.55964465	-17.81718235	573358	-174903	5
57.51933228	-18.28283203	573116	-181697	5
57.47292098	-18.3729587	572838	-182238	5
57.29885719	-18.56823098	571793	-183409	5
57.31711199	-19.01886041	571903	-190113	5
57.49108931	-19.51830759	572947	-193110	5
57.64414891	-19.67978367	573865	-194079	5
57.76853782	-19.67978367	574611	-194079	5
57.99812961	-19.33805556	575989	-192028	5
58.25195642	-19.00008445	581512	-190001	5
58.40181057	-19.03388066	582411	-190203	5
58.5059389	-19.03388066	583036	-190203	5
58.5804071	-18.85738433	583482	-185144	5
58.59802135	-17.99743309	583588	-175985	5
58.70936981	-17.74583164	584256	-174475	5
58.95038073	-17.69325819	585702	-174160	5
58.89610673	-18.12135725	585377	-180728	5
58.89610673	-18.6433361	585377	-183860	5
58.99683496	-18.6771323	585981	-184063	5
59.01617331	-18.17768512	590097	-181066	5
59.34516335	-17.83595831	592071	-175016	5
59.49989637	-17.65946199	592999	-173957	5
59.5189514	-17.19381101	593114	-171163	5

lat	lon	LAT	LON	area
59.59885876	-16.99478302	593593	-165969	5
59.59885876	-16.8182867	593593	-164910	5
57.84456479	-19.80370653	575067	-194822	6
57.64414891	-19.80370653	573865	-194822	6
57.63611093	-19.94640536	573817	-195678	6
57.04642736	-19.91260786	570279	-195476	6
56.98918626	-19.76990903	565935	-194619	6
56.90111195	-19.82248249	565407	-194935	6
56.64595985	-20.08910548	563876	-200535	6
56.47834863	-20.28813347	562870	-201729	6
56.38906976	-20.48340575	562334	-202900	6
56.38906976	-20.64488052	562334	-203869	6
56.49700878	-20.85893006	562982	-205154	6
56.58603717	-20.87770601	563516	-205266	6
56.84159513	-20.37450312	565050	-202247	6
57.19320929	-20.37450312	571159	-202247	6
57.23184813	-20.55475516	571391	-203329	6
57.57776705	-20.57353111	573467	-203441	6
57.76853782	-20.39328038	574611	-202360	6
57.86454643	-20.17923085	575187	-201075	6
57.86454643	-19.84125845	575187	-195048	6

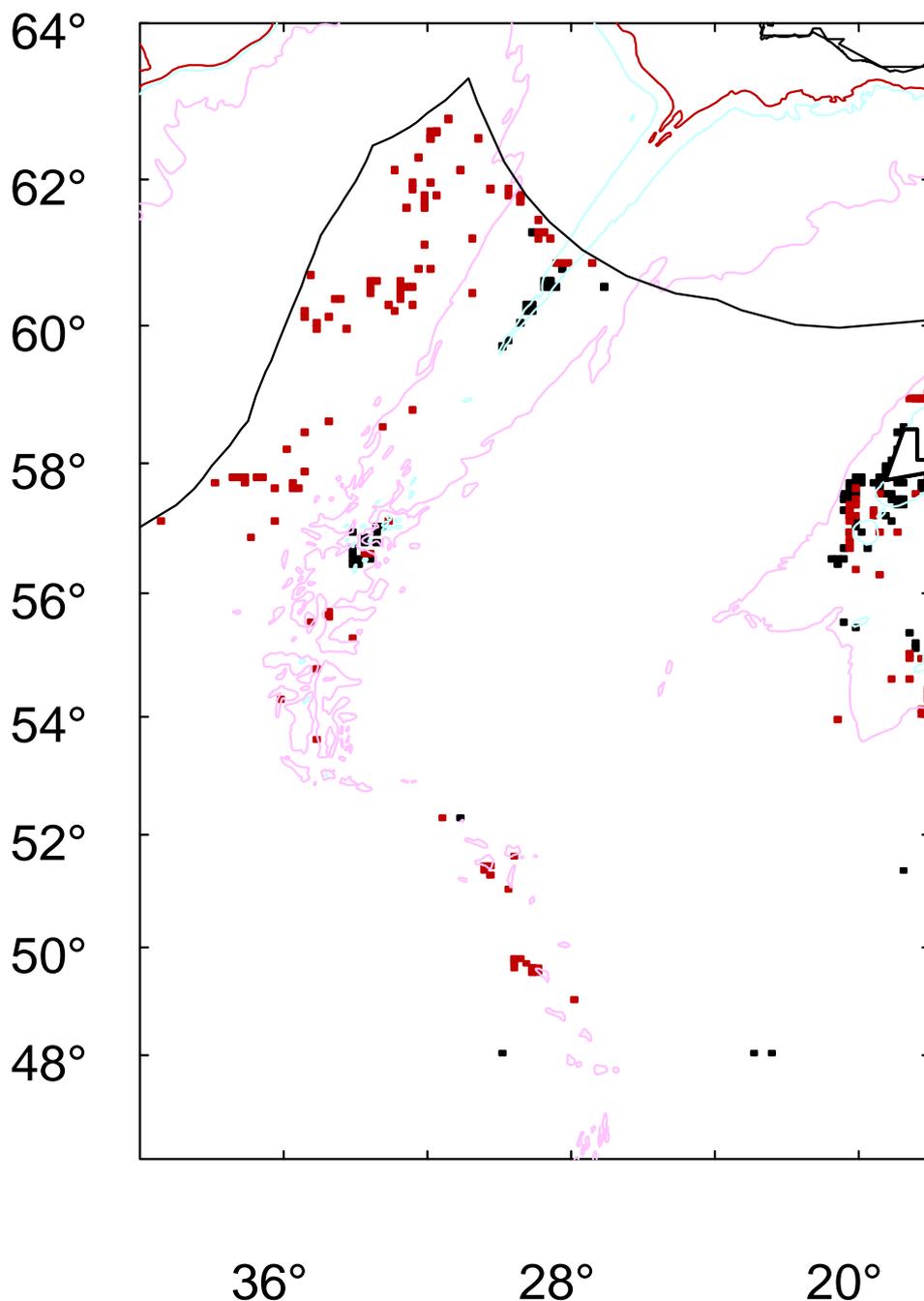


Fig. 3. Reykjanes Ridge area. Russian database (1987-2007). Black = longline; red= bottom trawl. Based on these information it is impossible to identify “existing fishing areas” Note that there are reasons to believe that some of the bottom trawl data east of Greenland EEZ is wrong – should probably be as pelagic fishery (redfish). The depth in that area is more than 2000.

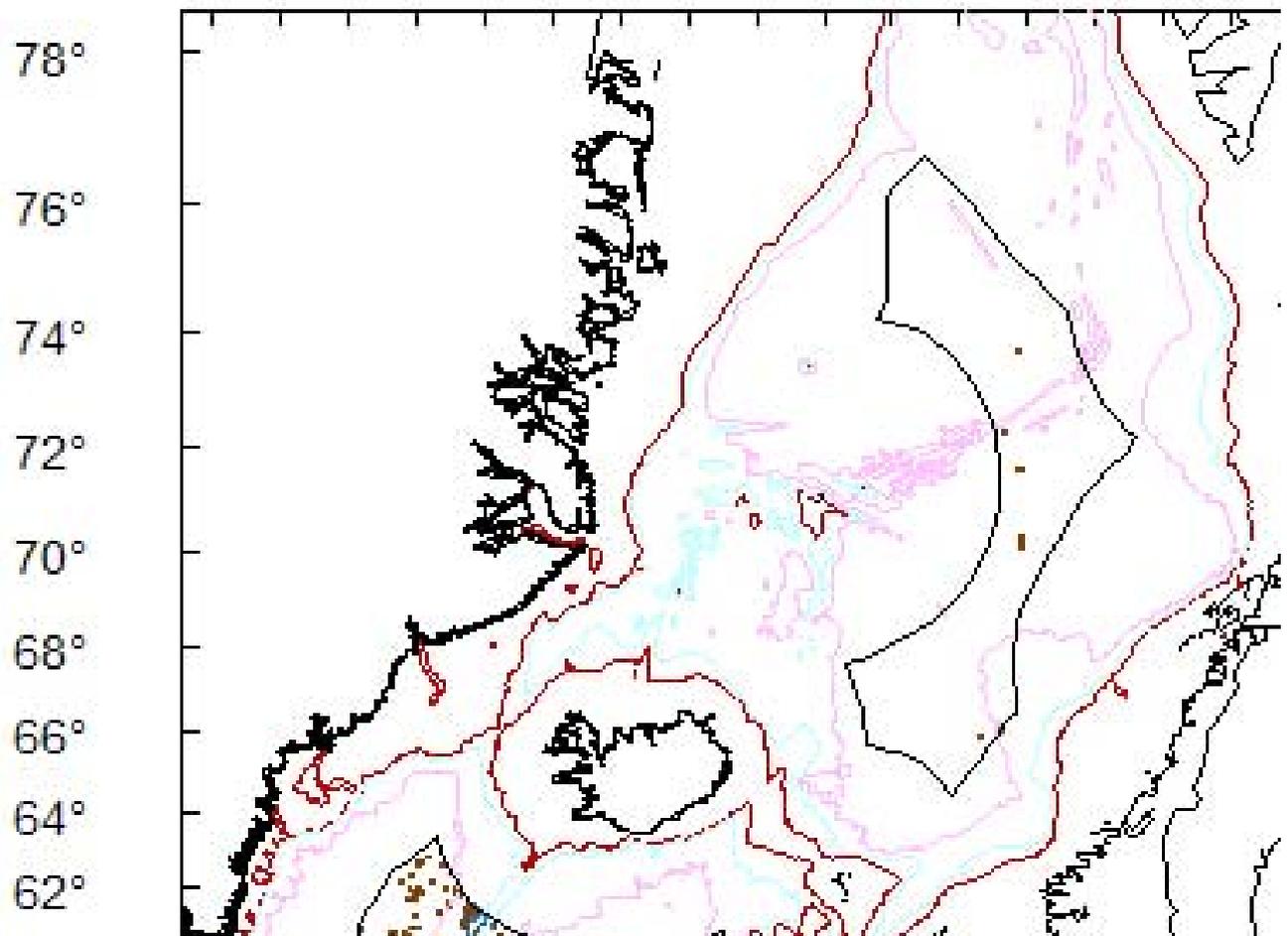


Fig.4. The figure shows that the Regulatory Area in the Norwegian Sea is a new fishing area to bottom fishing.

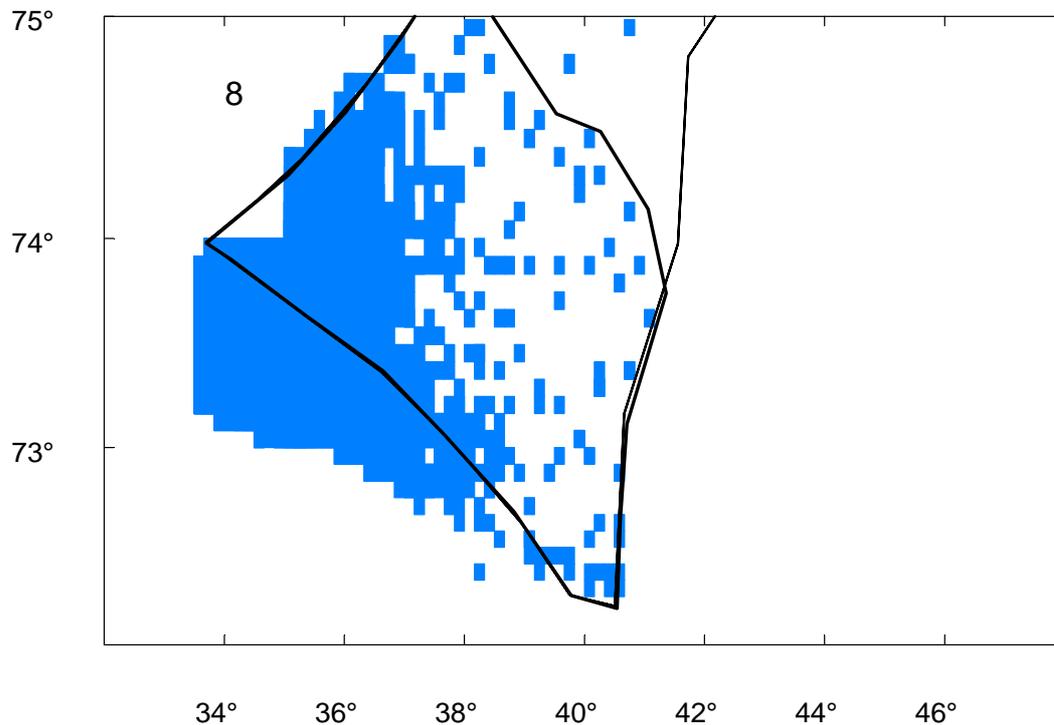


Fig.5. Barents Sea “loophole”. Existing fishing areas based on data from Russia (1997-2007). Coordinates are given below:

Nr.	lat	lon	LAT	LON
1	74.99818	38.47080	745989	382825
2	74.56951	39.53374	743417	393202
3	74.48959	40.26836	742938	401610
4	74.13562	41.06043	740814	410363
5	73.74394	41.36002	734464	412160
6	73.42735	41.03170	732564	410190
7	73.11431	40.70748	730686	404245
8	72.64069	40.59668	723844	403580
9	72.18813	40.54333	721129	403260
10	72.25455	39.77998	721527	394680
11	72.68105	38.82375	724086	384942
12	73.07492	37.62538	730450	373752
13	73.37342	36.64452	732241	363867
14	73.63676	35.36408	733821	352184
15	73.90287	34.11235	735417	340674
16	73.97780	33.70196	735867	334212
17	74.29082	35.06448	741745	350387
18	74.57606	36.02072	743456	360124
19	74.90655	36.94412	745439	365665
20	75.04062	37.27244	750244	371635
21	75.06179	38.47080	750371	382825



Mapping Existing Fisheries Areas in the NEAFC Regulatory Area

Note on the mapping.

The data have been mapped by Þorsteinn Sigurðsson, Hafrannsóknastofnunin, Iceland

NEAFC DATA

The data had a lot of different errors. The latitude and longitude were in different format, sometimes with N or W before the position and few thousands records with no latitude and longitude. Those with no positions were deleted, but other problems fixed. One problem with the NEAFC data, is that the only way "deep sea bottom vessels" could be defined was to look at their catch reports. These are incomplete in many cases and there may be errors in the process.

ICELANDIC AND RUSSIAN DATA

The positions used are NW corner of a box on 5X10 minutes.

Presentation

By the way of presentation it is specified in the NEAFC bottom fishing measure:

1. NEAFC shall proceed to map existing bottom fishing areas within the Regulatory Area for bottom fishing activities. Mapping of bottom trawling activity shall be given priority.

The maps that show all 5 * 10 minutes squares fished, should be to guide the fishing industry and managers about existing fishing areas or new fishing areas. This is in effect defining areas closed to fisheries, unless agreed and adequate protocols are followed.

This final version of the maps are based on discussions at the Meeting of PECMAS 28-29 October 2008.