

Task Sizes

Round	Task	Small	Large	Lines
1A	Bullseye	1127	1391	120110
1A	Energy	944	520	87785
1A	Luck	625	246	74241
Qualification	Lawnmower	305	5738	418610
Qualification	Fairsquare	2819	4122	483896
Qualification	Treasure	651	118	90873
		6471	12135	1275515

Naive Bayes Performances

Naive Bayes Accuracy

	Median	Mean	3 Quantiles	10 Quantiles
Bullseye	70.2229	69.6656	71.7357	71.258
Energy	76.9126	75.9563	79.0984	78.5519
Luck	69.8598	69.1589	67.757	67.2897
Lawnmower	94.2072	95.0348	78.4177	64.5482
Fairsquare	83.6264	69.5013	81.3203	79.8501
Treasure	82.9787	81.9149	83.2447	81.383

Naive Bayes Precision

	Median	Mean	3 Quantiles	10 Quantiles
Bullseye	73.1466	74.1197	75	74.7475
Energy	65.8621	65.343	67.5325	66.9935
Luck	52.6718	51.6667	49.3243	48.7342
Lawnmower	95.0234	95.0348	96.8737	97.4183
Fairsquare	85.6659	76.902	85.0882	85.1309
Treasure	49.3671	46.4789	50	46.3918

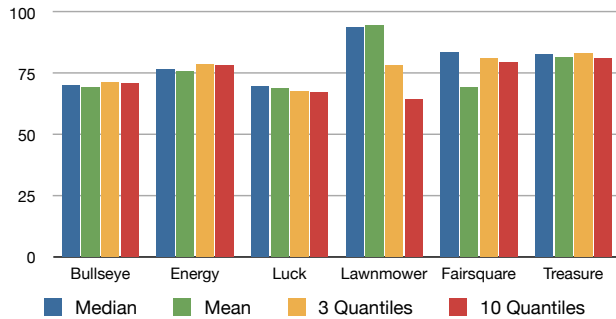
Naive Bayes Recall

	Median	Mean	3 Quantiles	10 Quantiles
Bullseye	67.7863	64.2748	68.7023	67.7863
Energy	73.1801	69.3487	79.6935	78.5441
Luck	50.7353	45.5882	53.6765	56.6176
Lawnmower	99.0944	100	79.8676	64.4026
Fairsquare	86.6732	68.8388	82.7536	79.6668
Treasure	61.9048	52.381	73.0159	71.4286

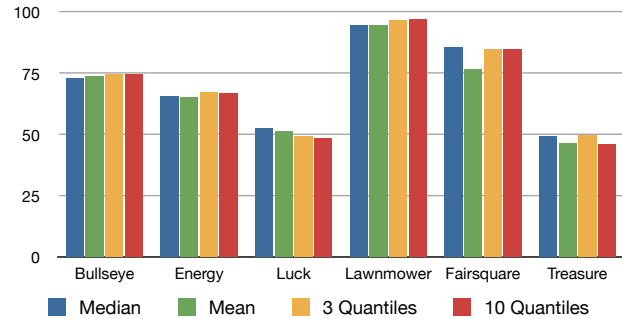
Naive Bayes F1 Measure

	Median	Mean	3 Quantiles	10 Quantiles
Bullseye	70.3645	68.8471	71.7131	71.0969
Energy	69.3285	67.2862	73.1107	72.3104
Luck	51.6854	48.4375	51.4085	52.381
Lawnmower	97.0162	97.4542	87.5525	77.5425
Fairsquare	86.1666	72.6474	83.9046	82.3083
Treasure	54.9296	49.2537	59.3548	56.25

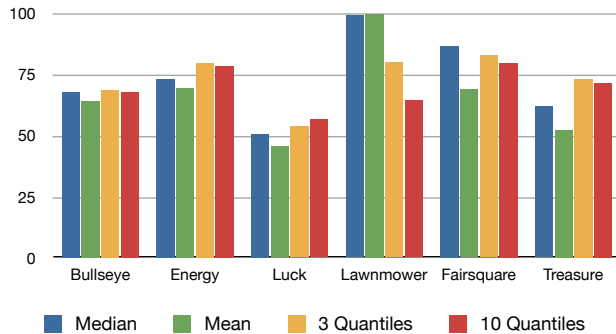
Accuracy



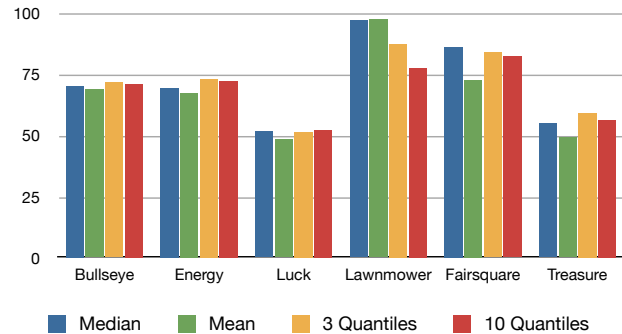
Precision



Recall



F1-Measure



Logistic Regression Performances

Logistic Regression Accuracy

	$\lambda = 10^{-2}$	$\lambda = 10^{-3}$	$\lambda = 10^{-4}$	$\lambda = 10^{-5}$
Bullseye	78.2643	78.5032	77.8662	77.8662
Energy	82.2404	82.5137	82.1038	82.2404
Luck	74.5327	73.8318	73.1308	73.1308
Lawnmower	95.0348	95.0679	94.9355	94.8361
Fairsquare	86.019	85.9902	85.8749	85.8461
Treasure	85.6383	84.5745	81.9149	80.0532

Logistic Regression Precision

	$\lambda = 10^{-2}$	$\lambda = 10^{-3}$	$\lambda = 10^{-4}$	$\lambda = 10^{-5}$
Bullseye	76.9774	77.5393	77.0445	77.0445
Energy	75.6863	75.8755	75.5906	75.6863
Luck	68.4932	63.0435	60.8247	60.8247
Lawnmower	95.0348	95.0961	95.1795	95.1747
Fairsquare	86.9421	87.506	87.4457	87.4396
Treasure	66.6667	55.5556	45.4545	40.3226

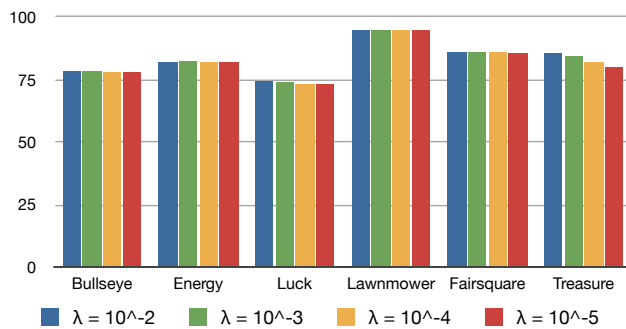
Logistic Regression Recall

	$\lambda = 10^{-2}$	$\lambda = 10^{-3}$	$\lambda = 10^{-4}$	$\lambda = 10^{-5}$
Bullseye	83.2061	82.7481	81.9847	81.9847
Energy	73.9464	74.7126	73.5632	73.9464
Luck	36.7647	42.6471	43.3824	43.3824
Lawnmower	100	99.9652	99.7214	99.6169
Fairsquare	89.7109	88.878	88.731	88.682
Treasure	28.5714	39.6825	39.6825	39.6825

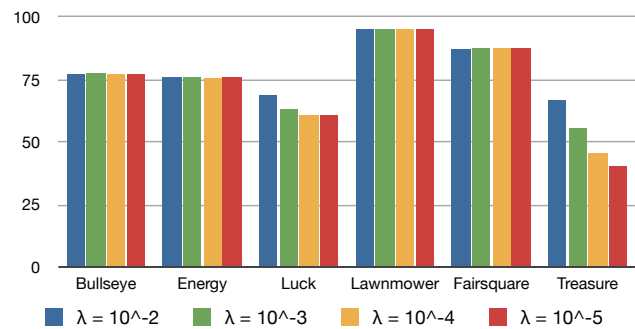
Logistic Regression F1 Measure

	$\lambda = 10^{-2}$	$\lambda = 10^{-3}$	$\lambda = 10^{-4}$	$\lambda = 10^{-5}$
Bullseye	79.9707	80.0591	79.4379	79.4379
Energy	74.8062	75.2896	74.5631	74.8062
Luck	47.8469	50.8772	50.6438	50.6438
Lawnmower	97.4542	97.4699	97.3975	97.3451
Fairsquare	88.3048	88.1867	88.0837	88.0564
Treasure	40	46.2963	42.3729	40

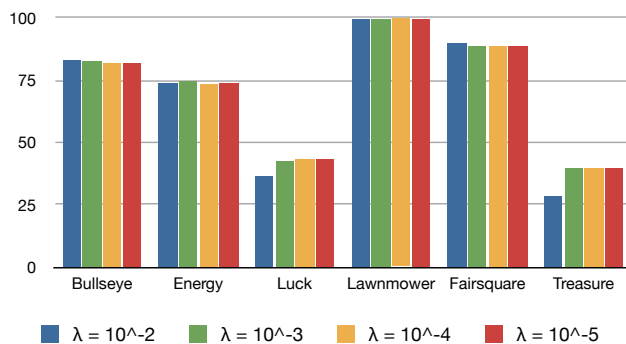
Accuracy



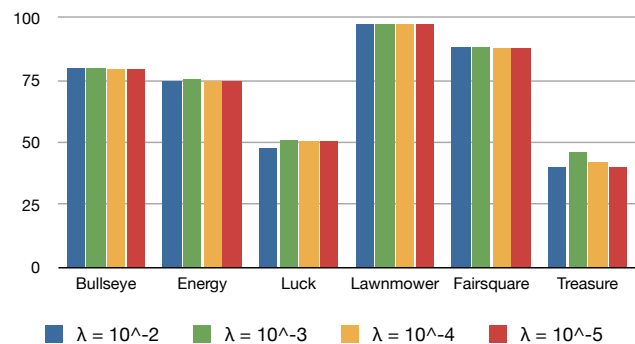
Precision



Recall



F1-Measure



Single-Task Performances

Single Task Accuracy

	NB Median 5 Features	NB Median 35 Features	Log Reg Median	Log Reg 3 Quantiles
Bullseye	59.793	70.2229	75.7962	78.5032
Energy	69.5355	76.9126	76.3661	82.5137
Luck	71.2617	69.8598	69.6262	73.8318
Lawnmower	95.0348	94.2072	94.5382	95.0679
Fairsquare	61.6604	83.6264	84.5489	85.9902
Treasure	80.3191	82.9787	83.5106	84.5745

Single Task Precision

	NB Median 5 Features	NB Median 35 Features	Log Reg Median	Log Reg 3 Quantiles
Bullseye	64.9402	73.1466	74.0082	77.5393
Energy	57.197	65.8621	65.942	75.8755
Luck	56.701	52.6718	53.9474	63.0435
Lawnmower	95.0348	95.0234	95.0399	95.0961
Fairsquare	67.4693	85.6659	86.1953	87.506
Treasure	41.791	49.3671	51.8519	55.5556

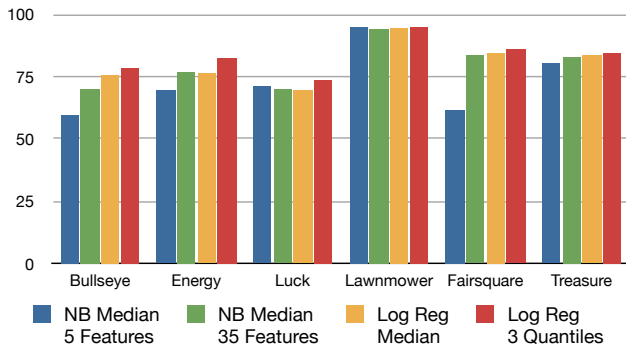
Single Task Recall

	NB Median 5 Features	NB Median 35 Features	Log Reg Median	Log Reg 3 Quantiles
Bullseye	49.771	67.7863	82.5954	82.7481
Energy	57.8544	73.1801	69.7318	74.7126
Luck	40.4412	50.7353	30.1471	42.6471
Lawnmower	100	99.0944	99.4427	99.9652
Fairsquare	67.2709	86.6732	87.8001	88.878
Treasure	44.4444	61.9048	22.2222	39.6825

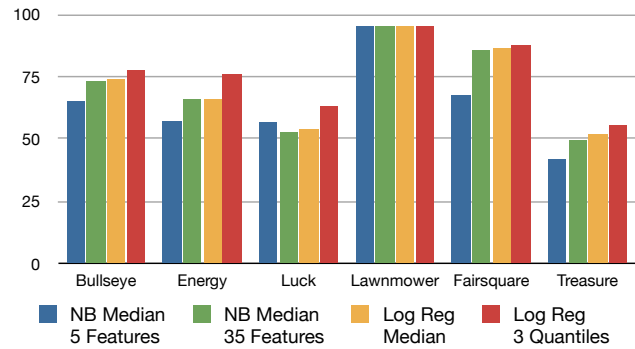
Single Task F1 Measure

	NB Median 5 Features	NB Median 35 Features	Log Reg Median	Log Reg 3 Quantiles
Bullseye	56.3526	70.3645	78.0664	80.0591
Energy	57.5238	69.3285	67.784	75.2896
Luck	47.2103	51.6854	38.6792	50.8772
Lawnmower	97.4542	97.0162	97.1915	97.4699
Fairsquare	67.37	86.1666	86.9903	88.1867
Treasure	43.0769	54.9296	31.1111	46.2963

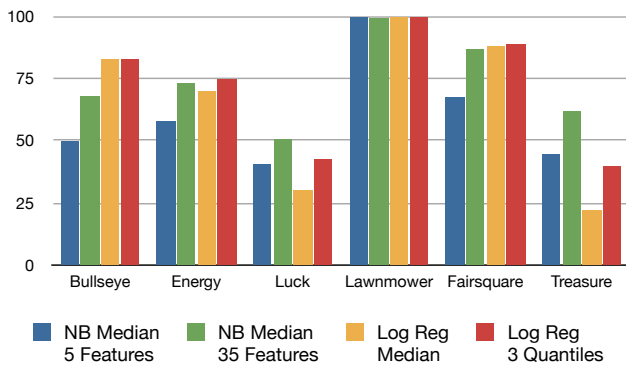
Accuracy



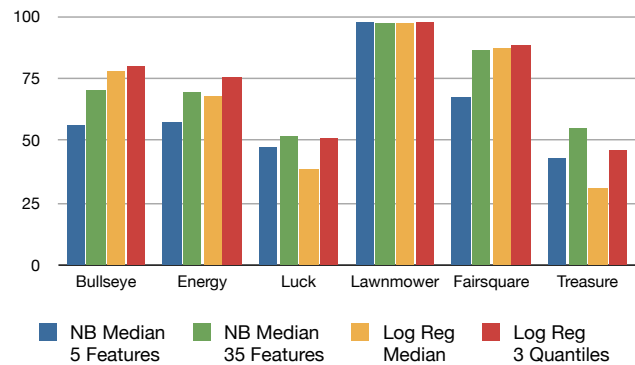
Precision



Recall



F1-Measure



Multi-Task Performances

Multi Task Accuracy

	Naive Bayes	Logistic Regression	Multi-task Log Reg	Reference Log Reg
Bullseye	68.949	58.121	61.3057	78.5032
Energy	57.7869	49.3169	56.5574	82.5137
Luck	60.0467	56.0748	46.729	73.8318

Multi Task Precision

	Naive Bayes	Logistic Regression	Multi-task Log Reg	Reference Log Reg
Bullseye	67.4113	56.196	58.7565	77.5393
Energy	44.8936	40.1434	44.6927	75.8755
Luck	41.8605	38.2883	36.1446	63.0435

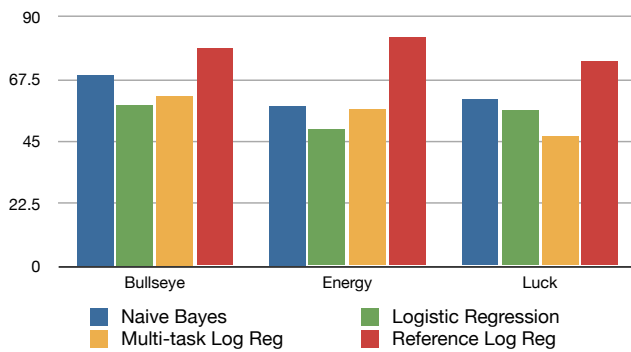
Multi Task Recall

	Naive Bayes	Logistic Regression	Multi-task Log Reg	Reference Log Reg
Bullseye	78.3206	89.313	86.5649	82.7481
Energy	80.8429	85.8238	91.954	74.7126
Luck	66.1765	62.5	88.2353	42.6471

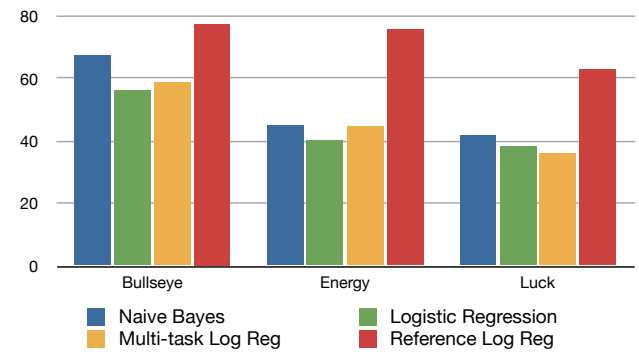
Multi Task F1 Measure

	Naive Bayes	Logistic Regression	Multi-task Log Reg	Reference Log Reg
Bullseye	72.4576	68.9858	70	80.0591
Energy	57.7291	54.7009	60.1504	75.2896
Luck	51.2821	47.486	51.2821	50.8772

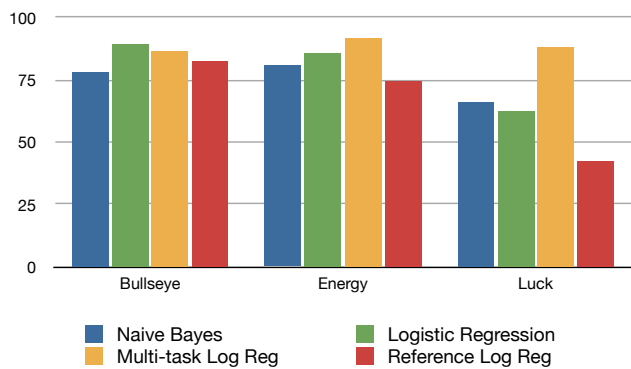
Accuracy



Precision



Recall



F1-Measure

