

# Weakly Supervised Co-saliency Detection via Class Excitation Mapping

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Quantitative comparisons of F-measure scores between our method (based on ResNet-50) and state-of-the-art methods based on the Cosal2015 dataset, the MSRC dataset and the iCoseg dataset. Note that the best and the second best results are highlighted with **boldface** and underline, respectively.

	Metric	CBCS-S	CBCS-C	CSHS	SACS	DW	DRFI	OURS
Aeroplane	F-measure	0.747	0.696	0.714	0.696	0.750	<u>0.837</u>	<b>0.873</b>
	AP-score	0.778	0.745	0.764	0.867	0.842	<u>0.878</u>	<b>0.910</b>
Apple	F-measure	0.718	0.712	0.705	0.712	<u>0.804</u>	0.774	<b>0.870</b>
	AP-score	0.783	0.813	0.709	0.840	<u>0.898</u>	0.864	<b>0.914</b>
Axe	F-measure	0.441	0.383	0.411	0.383	0.448	<u>0.467</u>	<b>0.585</b>
	AP-score	0.398	0.378	0.363	<u>0.513</u>	0.423	0.465	<b>0.597</b>
Babycrib	F-measure	0.436	0.435	0.660	0.435	<u>0.738</u>	0.516	<b>0.761</b>
	AP-score	0.548	0.564	0.712	0.640	<u>0.791</u>	0.635	<b>0.806</b>
Banana	F-measure	0.678	0.741	0.683	0.741	<b>0.791</b>	0.679	<u>0.768</u>
	AP-score	0.702	0.793	0.713	0.723	<b>0.865</b>	0.650	<u>0.805</u>
Baseball	F-measure	0.326	0.374	0.322	0.374	<u>0.513</u>	0.434	<b>0.588</b>
	AP-score	0.294	0.316	0.264	0.364	<u>0.578</u>	0.411	<b>0.649</b>
Bear	F-measure	0.520	0.542	0.712	0.542	<u>0.779</u>	0.731	<b>0.841</b>
	AP-score	0.529	0.554	0.819	0.721	<b>0.886</b>	0.812	<u>0.863</u>
Billiardtable	F-measure	0.564	0.566	0.368	0.566	<u>0.586</u>	0.515	<b>0.731</b>
	AP-score	0.548	0.596	0.339	<u>0.604</u>	0.583	0.515	<b>0.773</b>
Bird	F-measure	0.483	0.433	0.451	0.433	<u>0.577</u>	0.570	<b>0.689</b>
	AP-score	0.493	0.431	0.508	0.653	<u>0.677</u>	0.618	<b>0.842</b>
Boat	F-measure	0.536	0.521	0.597	0.521	0.647	<u>0.662</u>	<b>0.674</b>
	AP-score	0.532	0.523	0.601	0.643	<u>0.676</u>	0.672	<b>0.690</b>
Bowl	F-measure	0.550	0.556	0.534	<u>0.678</u>	0.659	0.628	<b>0.748</b>
	AP-score	0.636	0.611	0.562	<u>0.745</u>	0.706	0.705	<b>0.788</b>
Butterfly	F-measure	0.697	0.653	<b>0.858</b>	0.773	0.841	0.840	<u>0.865</u>
	AP-score	0.699	0.730	0.896	0.759	<u>0.899</u>	0.882	<b>0.923</b>

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046	Camel	F-measure	0.644	0.628	0.746	0.792	<u>0.838</u>	0.790	<b>0.847</b>	046
047		AP-score	0.674	0.712	0.780	0.811	<u>0.885</u>	0.818	<b>0.889</b>	047
048	Car	F-measure	0.431	0.447	0.606	0.595	<u>0.683</u>	0.676	<b>0.788</b>	048
049		AP-score	0.424	0.474	0.685	0.653	0.748	<u>0.780</u>	<b>0.876</b>	049
050	Cat	F-measure	0.373	0.388	0.401	0.516	0.569	<u>0.584</u>	<b>0.694</b>	051
052		AP-score	0.372	0.380	0.393	0.523	0.546	<u>0.554</u>	<b>0.728</b>	052
053	Chook	F-measure	0.644	0.595	0.655	0.726	<u>0.750</u>	0.710	<b>0.780</b>	053
054		AP-score	0.670	0.705	0.706	0.750	<b>0.803</b>	0.755	<u>0.796</u>	054
055	Coffeecup	F-measure	0.614	0.603	0.504	0.656	<u>0.699</u>	0.677	<b>0.755</b>	056
056		AP-score	0.642	0.667	0.501	0.715	<u>0.754</u>	0.730	<b>0.778</b>	057
058	Cow	F-measure	0.715	0.758	0.751	0.795	<u>0.840</u>	0.801	<b>0.894</b>	058
059		AP-score	0.717	0.741	0.708	0.853	<u>0.880</u>	0.820	<b>0.919</b>	059
060	Deer	F-measure	0.578	0.553	0.676	0.732	0.750	<u>0.765</u>	<b>0.845</b>	061
062		AP-score	0.568	0.540	0.698	0.759	<u>0.831</u>	0.785	<b>0.866</b>	062
063	Dog	F-measure	0.653	0.623	0.598	0.703	0.677	<u>0.754</u>	<b>0.820</b>	063
064		AP-score	0.665	0.604	0.613	0.746	0.741	<u>0.852</u>	<b>0.922</b>	064
065	Frenchhorn	F-measure	0.602	0.576	0.684	0.597	<u>0.704</u>	0.640	<b>0.748</b>	066
067		AP-score	0.672	0.686	0.736	0.656	<u>0.755</u>	0.702	<b>0.787</b>	067
068	Frog	F-measure	0.623	0.587	0.662	0.756	0.739	<u>0.770</u>	<b>0.856</b>	068
069		AP-score	0.632	0.628	0.680	0.818	0.790	<u>0.840</u>	<b>0.906</b>	069
070	Goldenfish	F-measure	0.760	0.725	0.764	<u>0.816</u>	0.813	0.761	<b>0.845</b>	071
072		AP-score	0.795	0.827	0.846	<u>0.889</u>	<b>0.904</b>	0.801	<u>0.890</u>	072
073	Guitar	F-measure	0.605	0.575	0.660	0.669	0.680	<b>0.723</b>	<u>0.698</u>	073
074		AP-score	0.662	0.691	0.689	0.745	0.769	<u>0.787</u>	<b>0.788</b>	074
075	Hammer	F-measure	0.255	0.245	0.278	0.294	<u>0.315</u>	0.300	<b>0.416</b>	075
076		AP-score	0.220	0.211	0.219	0.272	<u>0.298</u>	0.291	<b>0.450</b>	076
077	Helmet	F-measure	0.580	0.527	0.597	<u>0.686</u>	0.653	0.673	<b>0.770</b>	078
079		AP-score	0.618	0.612	0.621	0.731	0.696	<u>0.733</u>	<b>0.804</b>	079
080	Horse	F-measure	0.573	0.605	0.573	0.698	<u>0.724</u>	0.680	<b>0.770</b>	080
081		AP-score	0.569	0.602	0.561	0.691	<u>0.769</u>	0.651	<b>0.805</b>	081
082	Ladybird	F-measure	0.356	<u>0.445</u>	0.419	0.434	0.411	0.409	<b>0.563</b>	083
084		AP-score	0.351	0.527	<u>0.741</u>	0.523	0.700	0.592	<b>0.812</b>	084
085	Lemon	F-measure	0.663	0.725	0.663	0.710	<u>0.830</u>	0.679	<b>0.855</b>	085
086		AP-score	0.646	0.776	0.624	0.724	<b>0.909</b>	0.671	<u>0.889</u>	086
087	Lizard	F-measure	0.552	0.462	0.637	<u>0.655</u>	0.582	0.651	<b>0.751</b>	088
089		AP-score	0.544	0.506	0.612	<u>0.621</u>	0.541	0.672	<b>0.767</b>	089

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091	Mobulidae	F-measure	0.558	0.457	0.631	<u>0.708</u>	0.692	0.679	<b>0.787</b>	091
092		AP-score	0.525	0.485	0.562	<u>0.670</u>	0.648	<u>0.670</u>	<b>0.777</b>	092
093	Monkey	F-measure	0.406	0.419	0.543	0.593	<u>0.724</u>	0.634	<b>0.770</b>	093
094		AP-score	0.411	0.422	0.550	0.612	<u>0.778</u>	0.625	<b>0.789</b>	094
095	Motorbike	F-measure	0.471	0.520	0.597	0.617	0.639	<u>0.700</u>	<b>0.799</b>	096
096		AP-score	0.467	0.550	0.601	0.720	0.789	<u>0.819</u>	<b>0.884</b>	097
098	Mouse	F-measure	0.514	0.523	0.597	0.575	<u>0.650</u>	0.586	<b>0.689</b>	098
099		AP-score	0.552	0.558	0.606	0.616	<u>0.707</u>	0.615	<b>0.709</b>	099
100	Mushroom	F-measure	0.643	0.661	0.654	0.757	0.704	<u>0.769</u>	<b>0.825</b>	101
101		AP-score	0.659	0.667	0.663	0.769	0.756	<u>0.794</u>	<b>0.848</b>	102
103	Penguin	F-measure	0.585	0.551	0.669	0.671	0.712	<u>0.730</u>	<b>0.772</b>	103
104		AP-score	0.641	0.637	0.700	0.728	0.770	<u>0.808</u>	<b>0.817</b>	104
105	Pepper	F-measure	0.750	0.729	0.656	<u>0.836</u>	0.818	0.811	<b>0.874</b>	106
106		AP-score	0.817	0.839	0.753	<u>0.901</u>	0.892	0.863	<b>0.912</b>	107
108	Piano	F-measure	0.397	0.324	<u>0.535</u>	0.422	0.516	0.456	<b>0.542</b>	108
109		AP-score	0.629	0.618	<u>0.719</u>	0.635	0.702	0.666	<b>0.765</b>	109
110	Pig	F-measure	0.714	0.670	0.650	0.785	0.788	<u>0.815</u>	<b>0.859</b>	111
111		AP-score	0.747	0.729	0.639	0.841	0.823	<u>0.862</u>	<b>0.903</b>	112
113	Pineapple	F-measure	0.460	0.424	0.471	0.566	<u>0.721</u>	0.658	<b>0.808</b>	113
114		AP-score	0.499	0.504	0.526	0.590	<u>0.768</u>	0.655	<b>0.846</b>	114
115	Rabbit	F-measure	0.439	0.450	0.546	0.578	<u>0.647</u>	0.618	<b>0.727</b>	116
116		AP-score	0.436	0.441	0.492	0.555	<u>0.671</u>	0.616	<b>0.721</b>	117
118	Sealion	F-measure	0.486	0.492	0.585	0.612	0.645	<u>0.676</u>	<b>0.733</b>	118
119		AP-score	0.467	0.491	0.561	0.623	<u>0.694</u>	0.675	<b>0.798</b>	119
120	Snail	F-measure	0.506	0.516	0.660	0.676	<u>0.737</u>	0.709	<b>0.825</b>	121
121		AP-score	0.506	0.508	0.711	0.725	<u>0.819</u>	0.762	<b>0.875</b>	122
123	Snake	F-measure	0.697	0.706	0.756	<u>0.758</u>	0.739	0.692	<b>0.813</b>	123
124		AP-score	0.693	0.752	0.756	<u>0.791</u>	0.772	0.725	<b>0.843</b>	124
125	Sofa	F-measure	0.409	0.398	0.459	<u>0.549</u>	0.540	0.528	<b>0.701</b>	126
126		AP-score	0.442	0.431	0.437	0.561	<u>0.565</u>	0.545	<b>0.730</b>	127
128	Starfish	F-measure	0.819	0.795	0.760	<u>0.879</u>	0.786	0.873	<b>0.903</b>	128
129		AP-score	0.833	0.825	0.735	<u>0.911</u>	0.837	0.906	<b>0.931</b>	129
130	Tiger	F-measure	0.462	0.488	0.663	0.618	<u>0.751</u>	0.627	<b>0.780</b>	131
131		AP-score	0.498	0.540	0.678	0.661	<u>0.785</u>	0.663	<b>0.808</b>	132
133	Train	F-measure	0.373	0.412	0.389	0.544	0.539	<u>0.563</u>	<b>0.606</b>	133
134		AP-score	0.372	0.394	0.336	0.532	0.532	<u>0.559</u>	<b>0.584</b>	134

Turtle	F-measure	0.558	0.479	0.659	0.714	<u>0.776</u>	0.749	<b>0.832</b>	
	AP-score	0.622	0.594	0.674	0.736	<u>0.829</u>	0.788	<b>0.872</b>	
Viola	F-measure	0.674	0.733	0.703	0.742	<b>0.825</b>	0.700	<u>0.800</u>	
	AP-score	0.701	0.798	0.768	0.789	<b>0.932</b>	0.700	<u>0.848</u>	
Overall	F-measure	0.572	0.564	0.618	0.564	<u>0.705</u>	0.681	<b>0.780</b>	
	AP-score	0.581	0.598	0.616	0.691	<u>0.706</u>	0.703	<b>0.806</b>	
	Metric	CBCS-S	CBCS-C	CSHS	SACS	DW	DRFI	SP-MIL	OURS
Cattle	F-measure	0.834	0.795	0.870	0.867	0.861	0.877	<u>0.887</u>	<b>0.920</b>
	AP-score	0.868	0.874	0.867	0.911	0.872	0.919	<b>0.939</b>	<u>0.925</u>
Tree	F-measure	0.535	0.479	0.553	0.712	0.727	0.728	<u>0.745</u>	<b>0.868</b>
	AP-score	0.722	0.751	0.787	0.877	0.903	0.910	<b>0.934</b>	<u>0.926</u>
House	F-measure	0.568	0.527	<u>0.830</u>	0.737	0.785	0.805	0.781	<b>0.884</b>
	AP-score	0.681	0.690	0.925	0.879	0.905	<u>0.931</u>	0.913	<b>0.933</b>
Airplane	F-measure	0.525	0.472	0.579	0.673	0.639	<u>0.739</u>	0.704	<b>0.782</b>
	AP-score	0.549	0.526	0.597	0.685	0.670	0.756	<u>0.818</u>	<b>0.838</b>
Face	F-measure	0.505	0.576	0.751	0.767	0.837	0.800	<b>0.889</b>	<u>0.844</u>
	AP-score	0.469	0.599	0.787	0.735	<u>0.884</u>	0.819	<b>0.944</b>	0.863
Bike	F-measure	0.493	0.463	0.511	0.613	0.628	0.616	<u>0.651</u>	<b>0.691</b>
	AP-score	0.614	0.643	0.653	0.719	0.715	<u>0.726</u>	<b>0.740</b>	0.701
Car	F-measure	0.613	0.589	0.701	0.726	0.792	0.762	<u>0.805</u>	<b>0.891</b>
	AP-score	0.774	0.787	0.837	0.900	0.920	0.917	<b>0.952</b>	<u>0.934</u>
Overall	F-measure	0.619	0.594	0.719	0.754	0.772	0.783	<u>0.803</u>	<b>0.850</b>
	AP-score	0.692	0.709	0.788	0.826	0.844	0.860	<b>0.897</b>	<u>0.879</u>
	Metric	CBCS-S	CBCS-C	CSHS	SACS	DW	DRFI	SP-MIL	OURS
1	F-measure	0.538	0.504	0.695	0.716	<u>0.817</u>	0.785	0.792	<b>0.889</b>
	AP-score	0.541	0.543	0.688	0.748	<u>0.876</u>	0.808	0.852	<b>0.929</b>
2	F-measure	0.792	0.832	<u>0.861</u>	0.838	0.857	<b>0.863</b>	0.852	0.843
	AP-score	0.831	0.870	0.912	<b>0.925</b>	0.900	<u>0.922</u>	0.919	0.910
3	F-measure	0.591	0.270	<b>0.874</b>	0.810	0.834	0.654	0.810	<u>0.864</u>
	AP-score	0.583	0.364	<b>0.954</b>	0.921	0.928	<u>0.940</u>	0.929	0.895
4	F-measure	0.339	0.370	0.499	<u>0.710</u>	<b>0.766</b>	0.654	0.690	0.572
	AP-score	0.507	0.564	0.682	0.808	<b>0.906</b>	0.814	<u>0.874</u>	0.733

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181	5	F-measure	0.620	0.662	0.689	0.664	0.666	0.631	<u>0.728</u>	<b>0.714</b>	181
182		AP-score	0.631	0.697	<b>0.877</b>	0.733	0.787	0.595	<u>0.870</u>	0.776	182
183	6	F-measure	0.811	0.810	0.777	0.856	<u>0.860</u>	0.770	0.855	<b>0.881</b>	183
184		AP-score	0.852	0.883	0.909	0.930	<b>0.954</b>	0.821	<u>0.949</u>	<u>0.949</u>	184
185											185
186	7	F-measure	0.737	<b>0.870</b>	<u>0.866</u>	0.772	0.806	0.629	0.742	0.849	186
187		AP-score	0.857	0.894	<b>0.941</b>	0.886	<u>0.927</u>	0.697	0.895	0.910	187
188	8	F-measure	0.340	0.326	0.634	0.473	<u>0.754</u>	0.577	0.702	<b>0.831</b>	188
189		AP-score	0.396	0.373	0.631	0.410	<u>0.858</u>	0.559	0.707	<b>0.903</b>	189
190											190
191	9	F-measure	0.307	0.342	0.418	0.499	<b>0.806</b>	0.641	0.590	<u>0.706</u>	191
192		AP-score	0.411	0.358	0.422	0.439	<b>0.809</b>	0.524	0.513	<u>0.734</u>	192
193	10	F-measure	0.493	0.532	0.627	0.782	0.673	<u>0.875</u>	0.837	<b>0.916</b>	193
194		AP-score	0.518	0.569	0.751	0.862	0.712	0.890	<u>0.921</u>	<b>0.944</b>	194
195											195
196	11	F-measure	0.796	0.739	<u>0.803</u>	0.767	0.776	0.785	<b>0.936</b>	0.759	196
197		AP-score	0.925	<u>0.938</u>	0.912	0.899	0.929	0.882	<b>0.970</b>	0.804	197
198	12	F-measure	0.733	0.709	0.731	0.735	<u>0.819</u>	0.749	<b>0.849</b>	<u>0.819</u>	198
199		AP-score	0.828	0.867	0.895	0.849	<u>0.953</u>	0.912	<b>0.978</b>	0.892	199
200											200
201	13	F-measure	0.868	0.891	0.838	0.893	<u>0.895</u>	0.882	0.867	<b>0.896</b>	201
202		AP-score	0.926	0.910	0.903	<b>0.965</b>	0.942	<u>0.961</u>	0.931	0.934	202
203	14	F-measure	0.554	<b>0.723</b>	0.486	0.508	0.563	0.595	0.579	<u>0.716</u>	203
204		AP-score	0.734	<u>0.796</u>	0.815	0.690	0.679	0.776	0.687	<b>0.869</b>	204
205											205
206	15	F-measure	0.625	<b>0.739</b>	0.420	0.468	0.568	0.581	0.474	<u>0.696</u>	206
207		AP-score	0.903	<b>0.942</b>	0.885	0.836	0.861	0.937	0.778	<u>0.938</u>	207
208	16	F-measure	0.648	0.614	0.711	0.784	0.843	0.797	<b>0.868</b>	<u>0.859</u>	208
209		AP-score	0.718	0.760	0.774	0.850	<u>0.949</u>	0.913	<b>0.966</b>	0.911	209
210											210
211	17	F-measure	0.730	0.679	0.691	0.725	0.740	0.694	<u>0.756</u>	<b>0.763</b>	211
212		AP-score	0.869	0.887	0.860	0.900	<u>0.920</u>	0.895	<b>0.955</b>	0.895	212
213	18	F-measure	0.925	<b>0.933</b>	0.839	0.922	0.924	0.871	<u>0.927</u>	0.913	213
214		AP-score	<u>0.986</u>	0.977	0.953	<b>0.987</b>	0.951	0.960	0.957	0.961	214
215											215
216	19	F-measure	0.720	0.681	0.750	0.707	0.713	<u>0.782</u>	0.742	<b>0.838</b>	216
217		AP-score	0.832	0.856	0.891	0.869	0.885	<b>0.937</b>	<u>0.928</u>	0.895	217
218	20	F-measure	0.747	0.733	0.811	0.748	0.861	<u>0.887</u>	0.851	<b>0.934</b>	218
219		AP-score	0.828	0.892	0.932	0.927	<b>0.981</b>	0.958	<u>0.973</u>	0.944	219
220											220
221	21	F-measure	0.777	<b>0.896</b>	0.763	0.833	0.832	0.770	0.774	<u>0.834</u>	221
222		AP-score	0.862	0.944	0.938	<u>0.967</u>	<u>0.967</u>	0.955	0.901	<b>0.968</b>	222
223	22	F-measure	0.803	0.845	0.901	0.945	0.946	<u>0.949</u>	<b>0.961</b>	0.869	223
224		AP-score	0.864	0.897	0.960	<b>0.985</b>	0.968	<u>0.980</u>	0.979	0.966	224

225											225
226	23	F-measure	0.775	0.771	0.736	<u>0.891</u>	0.869	0.820	<b>0.913</b>	0.788	226
227		AP-score	0.820	0.825	0.905	<u>0.945</u>	0.922	0.929	<b>0.952</b>	0.878	227
228	24	F-measure	0.843	0.820	0.918	0.918	0.939	0.937	<b>0.952</b>	<u>0.943</u>	228
229		AP-score	0.901	0.897	0.958	<b>0.973</b>	0.961	<u>0.972</u>	0.968	0.957	229
230	25	F-measure	0.805	0.724	<u>0.833</u>	0.770	0.741	0.806	0.795	<b>0.836</b>	231
232		AP-score	0.875	0.923	<u>0.961</u>	0.921	0.866	0.861	<b>0.962</b>	0.864	232
233	26	F-measure	0.866	<b>0.946</b>	0.740	<u>0.945</u>	0.764	0.915	<b>0.946</b>	0.913	233
234		AP-score	0.948	<b>0.982</b>	0.964	<u>0.981</u>	0.943	<u>0.981</u>	0.956	0.966	234
235	27	F-measure	0.737	0.788	0.778	0.785	0.788	0.751	<b>0.879</b>	<u>0.789</u>	236
237		AP-score	0.833	0.849	<u>0.910</u>	0.871	0.842	0.791	<b>0.936</b>	0.823	237
238	28	F-measure	0.596	0.543	0.618	0.592	<u>0.654</u>	0.652	0.618	<b>0.700</b>	238
239		AP-score	0.491	0.461	0.489	0.455	<u>0.748</u>	0.661	0.451	<b>0.810</b>	239
240	29	F-measure	0.841	0.846	0.830	0.862	<u>0.885</u>	0.798	<b>0.890</b>	0.871	241
242		AP-score	0.885	0.946	0.930	0.945	<u>0.968</u>	0.861	<b>0.978</b>	0.896	242
243	30	F-measure	0.684	0.846	0.709	0.820	<u>0.908</u>	0.818	0.840	<b>0.930</b>	243
244		AP-score	0.729	0.946	0.935	0.950	<u>0.977</u>	0.976	0.938	<b>0.984</b>	244
245	31	F-measure	0.901	0.831	0.905	<u>0.920</u>	0.882	0.878	<b>0.938</b>	0.856	246
247		AP-score	0.956	0.976	0.979	<b>0.988</b>	<u>0.983</u>	0.975	<b>0.988</b>	0.900	247
248	32	F-measure	0.812	0.725	0.866	0.829	0.824	<u>0.868</u>	0.834	<b>0.894</b>	248
249		AP-score	0.875	0.826	<b>0.953</b>	0.875	0.894	<u>0.936</u>	0.877	0.927	249
250	33	F-measure	0.397	0.467	0.437	0.556	0.538	<u>0.627</u>	0.454	<b>0.678</b>	251
252		AP-score	0.446	0.488	0.739	0.790	0.841	<u>0.868</u>	0.718	<b>0.886</b>	252
253	34	F-measure	0.492	0.460	0.655	0.596	0.620	<u>0.728</u>	0.583	<b>0.772</b>	253
254		AP-score	0.554	0.528	0.717	0.692	0.678	<u>0.784</u>	0.672	<b>0.827</b>	254
255	35	F-measure	0.488	0.460	0.609	0.593	0.527	<u>0.640</u>	0.498	<b>0.644</b>	256
257		AP-score	0.555	0.506	0.670	0.563	0.577	<u>0.671</u>	0.539	<b>0.720</b>	257
258	36	F-measure	0.946	0.944	0.948	<u>0.955</u>	<u>0.955</u>	0.925	<b>0.963</b>	0.949	258
259		AP-score	0.973	<u>0.979</u>	0.959	<b>0.984</b>	0.971	0.959	0.975	0.963	259
260	37	F-measure	0.849	0.829	0.922	0.908	0.804	0.910	<b>0.968</b>	<u>0.925</u>	261
262		AP-score	0.949	0.975	0.960	<u>0.976</u>	0.896	0.971	<b>0.983</b>	0.969	262
263	38	F-measure	0.473	0.556	0.751	0.702	0.685	0.721	<u>0.758</u>	<b>0.857</b>	263
264		AP-score	0.609	0.655	0.862	0.764	0.803	<u>0.899</u>	0.880	<b>0.911</b>	264
265	Overall	F-measure	0.720	0.737	0.754	0.781	0.798	0.789	<u>0.814</u>	<b>0.832</b>	266
267		AP-score	0.773	0.800	0.839	0.841	<b>0.876</b>	0.846	<u>0.874</u>	0.870	267
268											268
269											269