

Supplement materials

Robustness of radiomic features in magnetic resonance imaging for patients with glioblastoma: multi-center study

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Table S1: Intraclass correlation coefficient for shape features and different normalizations. FBN - fixed bin number, FBS1 - fixed bin size linear interpolation with using eye and brain, FBS2 - fixed bin size linear interpolation with using eye and contrast-enhanced region, HM brain - histogram matching based on brain mask, HM VOI - histogram matching based on tumor mask, ZS brain - z-score based on brain mask, ZS VOI - z-score based on tumor mask.

Shape features	FBN	FBS1	FBS2	HM_brain	HM_VOI	ZS_brain	ZS_VOI
volume	0.954	0.954	0.954	0.954	0.954	0.954	0.954
surface	0.979	0.979	0.979	0.979	0.979	0.979	0.979
compactness_1	0.916	0.916	0.916	0.916	0.916	0.916	0.916
compactness_2	0.901	0.901	0.901	0.901	0.901	0.901	0.901
spherical disproportion	0.933	0.933	0.933	0.933	0.933	0.933	0.933
sphericity	0.920	0.920	0.920	0.920	0.920	0.920	0.920
asphericity	0.933	0.933	0.933	0.933	0.933	0.933	0.933
surface to volume ratio	0.913	0.913	0.913	0.913	0.913	0.913	0.913
median thickness	0.912	0.912	0.912	0.912	0.912	0.912	0.912
standard deviation thickness	0.905	0.905	0.905	0.905	0.905	0.905	0.905
euclidian distance	0.981	0.981	0.981	0.981	0.981	0.981	0.981
major axis length	0.991	0.991	0.991	0.991	0.991	0.991	0.991
minor axis length	0.984	0.984	0.984	0.984	0.984	0.984	0.984
least axis length	0.961	0.961	0.961	0.961	0.961	0.961	0.961
elongation	0.922	0.922	0.922	0.922	0.922	0.922	0.922
flatness	0.960	0.960	0.960	0.960	0.960	0.960	0.960
fractal dimension	0.552	0.552	0.552	0.529	0.552	0.552	0.552
center of mass shift	0.660	0.047	0.068	0.602	0.857	0.217	0.143

Table S2: Intraclass correlation coefficient for intensity features and different normalizations. FBN - fixed bin number, FBS1 - fixed bin size linear interpolation with using eye and brain, FBS2 - fixed bin size linear interpolation with using eye and contrast-enhanced region, HM brain - histogram matching based on brain mask, HM VOI - histogram matching based on tumor mask, ZS brain - z-score based on brain mask, ZS VOI - z-score based on tumor mask.

Intensity features	FBN	FBS1	FBS2	HM_brain	HM_VOI	ZS_brain	ZS_VOI
mean	0.248	0.760	0.609	0.685	0.592	0.665	0.000
standard deviation	0.000	0.422	0.553	0.849	0.163	0.690	0.000
coefficient of variation	0.304	0.081	0.133	0.703	0.100	0.651	0.000
skewness	0.494	0.494	0.494	0.821	0.933	0.494	0.494
kurtosis	0.539	0.539	0.539	0.652	0.036	0.539	0.539
variance	0.000	0.378	0.520	0.895	0.163	0.670	0.000
median	0.287	0.658	0.584	0.530	0.000	0.557	0.466
percentile 10th	0.438	0.773	0.683	0.352	0.098	0.477	0.501
percentile 90th	0.110	0.197	0.149	0.819	0.000	0.769	0.650
interquartile range	0.000	0.450	0.638	0.916	0.173	0.648	0.726
range	0.208	0.095	0.060	0.594	0.980	0.451	0.557
mean absolut deviation	0.000	0.442	0.594	0.894	0.023	0.681	0.746
robust mean absolut deviation	0.000	0.445	0.618	0.907	0.719	0.654	0.708
energy	0.039	0.826	0.767	0.746	0.956	0.650	0.956
entropy	0.502	0.472	0.645	0.715	0.506	0.660	0.486
root mean square	0.214	0.465	0.268	0.747	0.622	0.612	0.000
uniformity	0.477	0.534	0.649	0.788	0.000	0.678	0.481

Table S3: Intraclass correlation coefficient for texture features and different normalizations. FBN - fixed bin number, FBS1 - fixed bin size linear interpolation with using eye and brain, FBS2 - fixed bin size linear interpolation with using eye and contrast-enhanced region, HM brain - histogram matching based on brain mask, HM VOI - histogram matching based on tumor mask, ZS brain - z-score based on brain mask, ZS VOI - z-score based on tumor mask

Texture features	FBN	FBS1	FBS2	HM_brain	HM_VOI	ZS_brain	ZS_VOI
uniformity	0.477	0.534	0.649	0.788	0.000	0.678	0.481
energy	0.421	0.514	0.535	0.827	0.786	0.585	0.582
entropy	0.422	0.509	0.620	0.713	0.902	0.700	0.644
contrast	0.671	0.428	0.558	0.928	0.739	0.643	0.754
correlation	0.739	0.748	0.747	0.712	0.725	0.740	0.747
homogeneity	0.737	0.679	0.788	0.848	0.598	0.801	0.766
homogeneity normalized	0.665	0.673	0.676	0.829	0.753	0.684	0.659
inverse difference	0.738	0.666	0.792	0.850	0.622	0.782	0.786
inverse difference normalized	0.713	0.712	0.717	0.841	0.693	0.727	0.706
variance	0.665	0.416	0.526	0.893	0.641	0.724	0.791
sum of average	0.489	0.017	0.010	0.652	0.641	0.637	0.616
sum of entropy	0.486	0.458	0.603	0.786	0.901	0.672	0.434
sum of variance	0.643	0.420	0.520	0.841	0.682	0.771	0.760
difference entropy	0.715	0.541	0.635	0.870	0.576	0.698	0.803
difference variance	0.635	0.394	0.406	0.904	0.746	0.640	0.313
information measures of correlation 1	0.925	0.853	0.899	0.941	0.849	0.943	0.700

information measures of correlation 2	0.750	0.523	0.555	0.675	0.849	0.703	0.632
maximal correlation coefficient	0.692	0.813	0.769	0.847	0.719	0.885	0.647
joint maximum	0.274	0.575	0.604	0.750	0.574	0.503	0.592
joint average	0.489	0.017	0.010	0.652	0.641	0.637	0.616
difference average	0.702	0.514	0.672	0.887	0.703	0.693	0.844
dissimilarity	0.702	0.514	0.672	0.887	0.703	0.693	0.844
inverse variance	0.787	0.636	0.759	0.857	0.522	0.789	0.759
autocorrelation	0.408	0.007	0.002	0.563	0.627	0.508	0.561
cluster tendency	0.643	0.420	0.520	0.841	0.682	0.771	0.760
cluster shade	0.690	0.635	0.798	0.798	0.399	0.791	0.709
cluster prominence	0.642	0.457	0.534	0.891	0.528	0.876	0.775
energy	0.502	0.532	0.560	0.836	0.630	0.637	0.615
entropy	0.586	0.514	0.692	0.749	0.621	0.690	0.619
contrast	0.663	0.423	0.554	0.925	0.732	0.636	0.746
correlation	0.727	0.735	0.734	0.695	0.713	0.727	0.733
homogeneity	0.736	0.674	0.782	0.847	0.584	0.798	0.759
homogeneity normalized	0.666	0.665	0.670	0.826	0.733	0.678	0.650
inverse difference	0.735	0.662	0.788	0.847	0.612	0.780	0.779
inverse difference normalized	0.711	0.709	0.714	0.839	0.684	0.721	0.700
variance	0.664	0.416	0.525	0.893	0.638	0.724	0.789
sum of average	0.490	0.017	0.012	0.651	0.641	0.637	0.616
sum of entropy	0.582	0.519	0.662	0.817	0.703	0.730	0.314
sum of variance	0.644	0.422	0.519	0.841	0.674	0.772	0.750
difference entropy	0.753	0.574	0.672	0.887	0.655	0.741	0.856
difference variance	0.659	0.406	0.418	0.898	0.758	0.663	0.306
information measures of correlation 1	0.632	0.550	0.582	0.665	0.510	0.675	0.599
information measures of correlation 2	0.701	0.676	0.727	0.788	0.665	0.780	0.617
maximal correlation coefficient	0.739	0.766	0.769	0.791	0.773	0.779	0.744
joint maximum	0.370	0.591	0.621	0.757	0.482	0.532	0.608
joint average	0.490	0.017	0.012	0.651	0.641	0.637	0.616
difference average	0.697	0.513	0.668	0.936	0.694	0.688	0.836
dissimilarity	0.697	0.513	0.668	0.936	0.694	0.688	0.836
inverse variance	0.786	0.636	0.757	0.856	0.509	0.786	0.759
autocorrelation	0.408	0.006	0.002	0.563	0.627	0.509	0.561
cluster tendency	0.644	0.422	0.519	0.841	0.674	0.772	0.750
cluster shade	0.700	0.629	0.793	0.799	0.388	0.788	0.709
cluster prominence	0.645	0.463	0.534	0.891	0.516	0.878	0.774
coarseness	0.913	0.928	0.931	0.892	0.852	0.910	0.927
contrast	0.727	0.513	0.663	0.882	0.779	0.657	0.669
busyness	0.846	0.347	0.057	0.511	0.947	0.840	0.750
complexity	0.509	0.409	0.538	0.837	0.800	0.680	0.445
strength	0.838	0.692	0.707	0.835	0.847	0.878	0.721
grey level non-uniformity	0.818	0.949	0.958	0.951	0.958	0.960	0.978
grey level non-uniformity normalized	0.499	0.518	0.637	0.776	0.487	0.681	0.429
zone size non-uniformity	0.944	0.955	0.960	0.962	0.972	0.959	0.964
zone size non-uniformity normalized	0.739	0.719	0.812	0.836	0.719	0.811	0.791
short runs emphasis	0.732	0.717	0.793	0.862	0.709	0.825	0.797
long runs emphasis	0.683	0.758	0.810	0.893	0.679	0.864	0.809
low grey level run emphasis	0.492	0.537	0.389	0.536	0.894	0.614	0.610
high grey level run emphasis	0.362	0.000	0.000	0.642	0.972	0.568	0.559
short run low grey level emphasis	0.493	0.563	0.427	0.438	0.880	0.598	0.667
short run high grey level emphasis	0.382	0.000	0.000	0.645	0.928	0.580	0.552
long run low grey level emphasis	0.610	0.474	0.304	0.817	0.798	0.646	0.435

long run high grey level emphasis	0.293	0.000	0.007	0.618	0.846	0.519	0.585
run percentage	0.712	0.737	0.815	0.853	0.701	0.835	0.784
grey level variance	0.667	0.381	0.521	0.883	0.465	0.673	0.713
run length variance	0.655	0.790	0.834	0.882	0.675	0.880	0.812
run entropy	0.409	0.372	0.525	0.602	0.845	0.608	0.695
grey level non-uniformity	0.818	0.949	0.958	0.951	0.958	0.961	0.978
grey level non-uniformity normalized	0.497	0.530	0.648	0.776	0.580	0.686	0.421
zone size non-uniformity	0.944	0.954	0.960	0.962	0.972	0.959	0.964
zone size non-uniformity normalized	0.741	0.719	0.812	0.836	0.718	0.812	0.793
short runs emphasis	0.736	0.722	0.800	0.862	0.708	0.825	0.801
long runs emphasis	0.685	0.762	0.815	0.892	0.685	0.865	0.812
low grey level run emphasis	0.500	0.543	0.400	0.543	0.902	0.615	0.604
high grey level run emphasis	0.362	0.000	0.000	0.642	0.972	0.568	0.559
short run low grey level emphasis	0.498	0.563	0.423	0.442	0.906	0.616	0.673
short run high grey level emphasis	0.382	0.000	0.000	0.645	0.930	0.580	0.552
long run low grey level emphasis	0.605	0.457	0.309	0.815	0.797	0.640	0.437
long run high grey level emphasis	0.294	0.000	0.007	0.619	0.850	0.519	0.585
run percentage	0.715	0.738	0.815	0.852	0.704	0.835	0.784
grey level variance	0.667	0.381	0.521	0.883	0.465	0.673	0.710
run length variance	0.657	0.789	0.834	0.882	0.671	0.881	0.812
run entropy	0.433	0.386	0.541	0.620	0.765	0.618	0.625
grey level non-uniformity	0.896	0.944	0.894	0.896	0.936	0.950	0.954
grey level non-uniformity normalized	0.453	0.357	0.421	0.452	0.459	0.579	0.668
zone size non-uniformity	0.738	0.564	0.701	0.762	0.761	0.773	0.942
zone size non-uniformity normalized	0.285	0.332	0.399	0.022	0.632	0.501	0.083
small zone emphasis	0.293	0.361	0.412	0.005	0.625	0.491	0.064
large zone emphasis	0.278	0.737	0.743	0.924	0.663	0.813	0.919
low grey level zone emphasis	0.266	0.521	0.493	0.468	0.789	0.531	0.682
high grey level zone emphasis	0.286	0.000	0.000	0.572	0.669	0.701	0.523
small zone low grey level emphasis	0.000	0.555	0.602	0.476	0.873	0.327	0.485
small zone high grey level emphasis	0.416	0.000	0.020	0.478	0.525	0.705	0.582
large zone low grey level emphasis	0.600	0.000	0.000	0.753	0.407	0.510	0.710
large zone high grey level emphasis	0.828	0.776	0.776	0.613	0.734	0.813	0.829
zone percentage	0.784	0.666	0.829	0.656	0.784	0.753	0.790
grey level variance	0.646	0.334	0.484	0.706	0.333	0.650	0.754
zone size variance	0.257	0.747	0.752	0.927	0.677	0.804	0.915
zone size entropy	0.356	0.587	0.625	0.708	0.894	0.685	0.663
grey level non-uniformity	0.896	0.944	0.894	0.896	0.936	0.950	0.954
grey level non-uniformity normalized	0.459	0.350	0.419	0.464	0.474	0.552	0.672
zone size non-uniformity	0.834	0.919	0.926	0.817	0.908	0.959	0.969
zone size non-uniformity normalized	0.710	0.689	0.794	0.623	0.801	0.767	0.743
small distance emphasis	0.637	0.592	0.735	0.417	0.814	0.694	0.748
large distance emphasis	0.559	0.472	0.693	0.378	0.908	0.536	0.686
low grey level zone emphasis	0.264	0.488	0.480	0.460	0.800	0.534	0.683
high grey level zone emphasis	0.286	0.000	0.000	0.572	0.669	0.701	0.523
small distance low grey level emphasis	0.466	0.413	0.447	0.642	0.889	0.669	0.771
small distance high grey level emphasis	0.125	0.000	0.000	0.546	0.648	0.626	0.580
large distance low grey level emphasis	0.685	0.412	0.388	0.365	0.803	0.339	0.560
large distance high grey level emphasis	0.377	0.080	0.109	0.196	0.865	0.552	0.680
zone percentage	0.784	0.666	0.829	0.656	0.784	0.753	0.791
grey level variance	0.646	0.334	0.484	0.706	0.333	0.650	0.754
zone distance variance	0.612	0.551	0.690	0.593	0.818	0.594	0.644

zone distance entropy	0.413	0.421	0.530	0.527	0.824	0.657	0.765
grey level non-uniformity	0.788	0.946	0.959	0.952	0.955	0.961	0.982
grey level non-uniformity normalized	0.475	0.531	0.647	0.786	0.451	0.668	0.485
dependence count non-uniformity	0.704	0.685	0.893	0.795	0.977	0.827	0.928
dependence count non-uniformity normalized	0.741	0.573	0.838	0.582	0.725	0.685	0.752
low dependence emphasis	0.747	0.595	0.780	0.588	0.768	0.691	0.713
high dependence emphasis	0.634	0.794	0.827	0.881	0.719	0.900	0.800
low grey level count emphasis	0.499	0.549	0.396	0.610	0.906	0.611	0.490
high grey level count emphasis	0.372	0.000	0.000	0.631	0.980	0.562	0.569
low dependence low grey level emphasis	0.419	0.761	0.694	0.425	0.919	0.591	0.538
low dependence high grey level emphasis	0.608	0.174	0.189	0.519	0.573	0.684	0.542
high dependence low grey level emphasis	0.696	0.000	0.000	0.835	0.507	0.787	0.258
high dependence high grey level emphasis	0.574	0.529	0.522	0.578	0.814	0.582	0.713
grey level variance	0.662	0.381	0.521	0.895	0.000	0.671	0.215
dependence count variance	0.567	0.841	0.863	0.809	0.790	0.916	0.756
dependence count entropy	0.769	0.692	0.714	0.749	0.860	0.751	0.812
dependence count energy	0.776	0.652	0.700	0.706	0.880	0.731	0.829

Table S4: Intraclass correlation coefficient for wavelet features and different normalizations. FBN - fixed bin number, FBS1 - fixed bin size linear interpolation with using eye and brain, FBS2 - fixed bin size linear interpolation with using eye and contrast-enhanced region, HM brain - histogram matching based on brain mask, HM VOI - histogram matching based on tumor mask, ZS brain - z-score based on brain mask, ZS VOI - z-score based on tumor mask

Wavelet features	FBN	FBS1	FBS2	HM_brain	HM_VOI	ZS_brain	ZS_VOI
mean	0.751	0.476	0.531	0.495	0.066	0.482	0.715
standard deviation	0.065	0.146	0.000	0.470	0.205	0.115	0.358
coefficient of variation	0.157	0.157	0.194	0.141	0.197	0.157	0.157
skewness	0.034	0.034	0.037	0.232	0.013	0.034	0.034
kurtosis	0.000	0.000	0.000	0.121	0.000	0.000	0.000
variance	0.041	0.201	0.000	0.444	0.168	0.140	0.320
median	0.879	0.655	0.681	0.264	0.000	0.595	0.669
percentile 10th	0.000	0.000	0.000	0.169	0.218	0.000	0.241
percentile 90th	0.032	0.000	0.000	0.474	0.142	0.000	0.295
interquartile range	0.038	0.000	0.000	0.176	0.066	0.000	0.168
range	0.161	0.157	0.000	0.622	0.264	0.173	0.428
mean absolut deviation	0.044	0.085	0.000	0.413	0.120	0.018	0.326
robust mean absolut deviation	0.023	0.000	0.000	0.252	0.172	0.000	0.229
energy	0.000	0.261	0.000	0.636	0.761	0.334	0.519
entropy	0.000	0.000	0.000	0.090	0.255	0.000	0.349
root mean square	0.071	0.143	0.000	0.468	0.188	0.112	0.369
uniformity	0.000	0.000	0.000	0.000	0.043	0.000	0.273
energy	0.113	0.000	0.000	0.000	0.582	0.000	0.114
entropy	0.583	0.000	0.000	0.376	0.729	0.000	0.284
contrast	0.671	0.287	0.051	0.466	0.317	0.221	0.246
correlation	0.263	0.381	0.397	0.242	0.548	0.372	0.000

homogeneity	0.000	0.000	0.000	0.284	0.161	0.000	0.274
homogeneity normalized	0.636	0.466	0.481	0.873	0.704	0.602	0.390
inverse difference	0.026	0.000	0.000	0.301	0.182	0.000	0.265
inverse difference normalized	0.413	0.230	0.253	0.740	0.598	0.290	0.063
variance	0.616	0.275	0.037	0.476	0.331	0.214	0.243
sum of average	0.000	0.232	0.000	0.544	0.205	0.073	0.343
sum of entropy	0.309	0.000	0.000	0.334	0.696	0.000	0.244
sum of variance	0.546	0.262	0.022	0.488	0.321	0.208	0.237
difference entropy	0.054	0.076	0.000	0.319	0.572	0.024	0.216
difference variance	0.734	0.286	0.032	0.462	0.379	0.243	0.189
information measures of correlation 1	0.897	0.722	0.703	0.876	0.808	0.796	0.609
information measures of correlation 2	0.534	0.378	0.322	0.562	0.499	0.467	0.379
maximal correlation coefficient	0.871	0.549	0.588	0.758	0.840	0.651	0.432
joint maximum	0.000	0.000	0.000	0.000	0.326	0.000	0.189
joint average	0.000	0.232	0.000	0.544	0.203	0.073	0.343
difference average	0.509	0.174	0.000	0.478	0.341	0.102	0.285
dissimilarity	0.509	0.174	0.000	0.478	0.341	0.102	0.285
inverse variance	0.220	0.795	0.598	0.542	0.404	0.837	0.000
autocorrelation	0.000	0.338	0.000	0.537	0.157	0.102	0.296
cluster tendency	0.546	0.262	0.022	0.488	0.321	0.208	0.237
cluster shade	0.520	0.703	0.714	0.078	0.000	0.592	0.390
cluster prominence	0.473	0.190	0.000	0.446	0.236	0.126	0.208
energy	0.000	0.000	0.000	0.000	0.038	0.000	0.096
entropy	0.000	0.000	0.000	0.180	0.224	0.000	0.265
contrast	0.657	0.288	0.047	0.471	0.336	0.222	0.245
correlation	0.226	0.349	0.361	0.265	0.530	0.382	0.000
homogeneity	0.000	0.000	0.000	0.287	0.098	0.000	0.272
homogeneity normalized	0.628	0.462	0.474	0.870	0.722	0.597	0.382
inverse difference	0.013	0.000	0.000	0.303	0.123	0.000	0.263
inverse difference normalized	0.401	0.209	0.231	0.740	0.599	0.272	0.052
variance	0.618	0.275	0.036	0.478	0.358	0.215	0.241
sum of average	0.000	0.231	0.000	0.545	0.211	0.075	0.344
sum of entropy	0.000	0.000	0.000	0.380	0.348	0.000	0.211
sum of variance	0.569	0.261	0.023	0.485	0.384	0.207	0.235
difference entropy	0.241	0.091	0.000	0.466	0.344	0.041	0.185
difference variance	0.687	0.287	0.033	0.465	0.334	0.244	0.180
information measures of correlation 1	0.863	0.263	0.443	0.498	0.334	0.183	0.169
information measures of correlation 2	0.703	0.140	0.267	0.416	0.480	0.000	0.295
maximal correlation coefficient	0.738	0.289	0.494	0.056	0.278	0.286	0.118
joint maximum	0.000	0.000	0.000	0.000	0.000	0.000	0.201
joint average	0.000	0.231	0.000	0.545	0.211	0.075	0.344
difference average	0.499	0.176	0.000	0.488	0.328	0.106	0.286
dissimilarity	0.499	0.176	0.000	0.488	0.328	0.106	0.286
inverse variance	0.231	0.766	0.568	0.548	0.424	0.831	0.000
autocorrelation	0.000	0.337	0.000	0.537	0.158	0.103	0.297
cluster tendency	0.569	0.261	0.023	0.485	0.384	0.207	0.235

cluster shade	0.432	0.748	0.761	0.048	0.250	0.642	0.423
cluster prominence	0.481	0.187	0.000	0.450	0.280	0.125	0.213
coarseness	0.888	0.679	0.673	0.699	0.801	0.523	0.672
contrast	0.591	0.551	0.504	0.783	0.330	0.571	0.050
busyness	0.797	0.044	0.000	0.538	0.141	0.019	0.000
complexity	0.000	0.147	0.000	0.390	0.158	0.161	0.392
strength	0.815	0.295	0.244	0.385	0.546	0.359	0.396
grey level non-uniformity	0.717	0.875	0.867	0.850	0.757	0.865	0.887
grey level non-uniformity normalized	0.000	0.000	0.000	0.000	0.116	0.000	0.283
zone size non-uniformity	0.959	0.801	0.797	0.980	0.967	0.900	0.933
zone size non-uniformity normalized	0.013	0.000	0.000	0.306	0.209	0.000	0.337
short runs emphasis	0.000	0.000	0.000	0.248	0.167	0.000	0.170
long runs emphasis	0.000	0.000	0.000	0.177	0.171	0.000	0.075
low grey level run emphasis	0.427	0.000	0.000	0.749	0.273	0.000	0.392
high grey level run emphasis	0.015	0.331	0.000	0.543	0.211	0.115	0.342
short run low grey level emphasis	0.456	0.051	0.000	0.769	0.276	0.000	0.466
short run high grey level emphasis	0.056	0.339	0.000	0.535	0.235	0.055	0.365
long run low grey level emphasis	0.360	0.000	0.000	0.707	0.193	0.000	0.233
long run high grey level emphasis	0.000	0.291	0.000	0.552	0.133	0.283	0.064
run percentage	0.000	0.030	0.000	0.258	0.201	0.000	0.299
grey level variance	0.543	0.184	0.000	0.437	0.182	0.140	0.304
run length variance	0.000	0.104	0.038	0.174	0.192	0.000	0.186
run entropy	0.000	0.289	0.150	0.285	0.633	0.307	0.687
grey level non-uniformity	0.718	0.876	0.867	0.851	0.756	0.866	0.886
grey level non-uniformity normalized	0.000	0.000	0.000	0.000	0.110	0.000	0.279
zone size non-uniformity	0.959	0.798	0.794	0.980	0.967	0.898	0.930
zone size non-uniformity normalized	0.013	0.000	0.000	0.298	0.195	0.000	0.312
short runs emphasis	0.000	0.000	0.000	0.262	0.175	0.000	0.173
long runs emphasis	0.000	0.000	0.000	0.187	0.177	0.000	0.096
low grey level run emphasis	0.425	0.000	0.000	0.755	0.265	0.000	0.393
high grey level run emphasis	0.015	0.331	0.000	0.543	0.211	0.115	0.342
short run low grey level emphasis	0.445	0.051	0.000	0.766	0.275	0.000	0.470
short run high grey level emphasis	0.056	0.339	0.000	0.535	0.235	0.057	0.364
long run low grey level emphasis	0.362	0.000	0.000	0.707	0.189	0.000	0.225
long run high grey level emphasis	0.000	0.291	0.000	0.552	0.138	0.283	0.077
run percentage	0.000	0.028	0.000	0.256	0.208	0.000	0.297
grey level variance	0.542	0.184	0.000	0.437	0.183	0.141	0.304
run length variance	0.000	0.105	0.037	0.178	0.183	0.000	0.184
run entropy	0.000	0.270	0.118	0.275	0.574	0.285	0.643
grey level non-uniformity	0.929	0.725	0.651	0.861	0.924	0.863	0.660
grey level non-uniformity normalized	0.000	0.034	0.000	0.525	0.314	0.057	0.549
zone size non-uniformity	0.709	0.064	0.000	0.703	0.710	0.306	0.361
zone size non-uniformity normalized	0.253	0.000	0.000	0.364	0.000	0.254	0.115
small zone emphasis	0.180	0.200	0.111	0.480	0.165	0.461	0.722
large zone emphasis	0.000	0.343	0.276	0.194	0.246	0.336	0.374
low grey level zone emphasis	0.502	0.000	0.000	0.555	0.467	0.000	0.199

high grey level zone emphasis	0.000	0.356	0.000	0.612	0.247	0.072	0.468
small zone low grey level emphasis	0.029	0.065	0.036	0.426	0.590	0.000	0.194
small zone high grey level emphasis	0.240	0.338	0.000	0.602	0.195	0.027	0.600
large zone low grey level emphasis	0.000	0.000	0.000	0.349	0.128	0.000	0.029
large zone high grey level emphasis	0.000	0.699	0.710	0.266	0.281	0.422	0.880
zone percentage	0.274	0.021	0.000	0.499	0.465	0.000	0.000
grey level variance	0.613	0.107	0.000	0.408	0.204	0.164	0.709
zone size variance	0.000	0.408	0.367	0.231	0.217	0.393	0.571
zone size entropy	0.683	0.078	0.000	0.475	0.830	0.288	0.336
grey level non-uniformity	0.929	0.726	0.651	0.862	0.924	0.863	0.660
grey level non-uniformity normalized	0.000	0.032	0.000	0.524	0.309	0.057	0.549
zone size non-uniformity	0.776	0.207	0.061	0.745	0.976	0.625	0.496
zone size non-uniformity normalized	0.746	0.389	0.304	0.622	0.599	0.257	0.221
small distance emphasis	0.734	0.441	0.345	0.621	0.661	0.257	0.241
large distance emphasis	0.827	0.465	0.345	0.598	0.722	0.136	0.241
low grey level zone emphasis	0.510	0.000	0.000	0.554	0.470	0.000	0.198
high grey level zone emphasis	0.000	0.356	0.000	0.612	0.247	0.072	0.468
small distance low grey level emphasis	0.562	0.000	0.000	0.690	0.424	0.000	0.354
small distance high grey level emphasis	0.041	0.243	0.000	0.554	0.263	0.007	0.575
large distance low grey level emphasis	0.131	0.012	0.000	0.000	0.572	0.000	0.000
large distance high grey level emphasis	0.180	0.631	0.000	0.641	0.275	0.147	0.168
zone percentage	0.274	0.021	0.000	0.497	0.465	0.000	0.000
grey level variance	0.613	0.107	0.000	0.408	0.204	0.164	0.709
zone distance variance	0.849	0.429	0.304	0.513	0.685	0.000	0.221
zone distance entropy	0.431	0.029	0.000	0.667	0.513	0.129	0.500
grey level non-uniformity	0.498	0.710	0.697	0.711	0.682	0.680	0.805
grey level non-uniformity normalized	0.000	0.000	0.000	0.000	0.045	0.000	0.274
dependence count non-uniformity	0.719	0.700	0.701	0.794	0.921	0.715	0.839
dependence count non-uniformity normalized	0.430	0.577	0.618	0.432	0.378	0.475	0.686
low dependence emphasis	0.242	0.000	0.000	0.411	0.269	0.000	0.106
high dependence emphasis	0.000	0.059	0.000	0.178	0.112	0.000	0.206
low grey level count emphasis	0.422	0.000	0.000	0.765	0.249	0.000	0.354
high grey level count emphasis	0.018	0.331	0.000	0.539	0.201	0.123	0.328
low dependence low grey level emphasis	0.637	0.258	0.283	0.922	0.580	0.019	0.133
low dependence high grey level emphasis	0.630	0.328	0.000	0.508	0.265	0.000	0.312
high dependence low grey level emphasis	0.000	0.000	0.000	0.476	0.000	0.000	0.177
high dependence high grey level emphasis	0.000	0.226	0.162	0.279	0.134	0.040	0.000
grey level variance	0.532	0.192	0.000	0.439	0.185	0.141	0.368
dependence count variance	0.000	0.458	0.430	0.240	0.092	0.286	0.265
dependence count entropy	0.944	0.783	0.782	0.877	0.839	0.826	0.820
dependence count energy	0.887	0.734	0.737	0.736	0.685	0.728	0.791
mean	0.022	0.263	0.399	0.164	0.377	0.390	0.372
standard deviation	0.000	0.570	0.661	0.662	0.563	0.679	0.529
coefficient of variation	0.018	0.018	0.017	0.000	0.020	0.018	0.018

skewness	0.000	0.000	0.000	0.000	0.433	0.000	0.000
kurtosis	0.345	0.345	0.343	0.374	0.000	0.345	0.345
variance	0.000	0.631	0.744	0.568	0.677	0.772	0.470
median	0.158	0.426	0.537	0.103	0.670	0.507	0.536
percentile 10th	0.000	0.216	0.416	0.820	0.423	0.576	0.362
percentile 90th	0.000	0.490	0.522	0.391	0.483	0.253	0.456
interquartile range	0.000	0.474	0.579	0.690	0.288	0.484	0.399
range	0.040	0.390	0.348	0.546	0.277	0.537	0.393
mean absolut deviation	0.000	0.525	0.639	0.698	0.560	0.612	0.505
robust mean absolut deviation	0.000	0.440	0.557	0.689	0.524	0.472	0.483
energy	0.000	0.483	0.409	0.687	0.735	0.740	0.516
entropy	0.152	0.371	0.439	0.778	0.384	0.381	0.480
root mean square	0.000	0.570	0.661	0.663	0.545	0.680	0.530
uniformity	0.351	0.297	0.324	0.839	0.272	0.407	0.439
energy	0.572	0.187	0.183	0.771	0.691	0.544	0.482
entropy	0.828	0.378	0.370	0.820	0.838	0.528	0.566
contrast	0.527	0.532	0.647	0.606	0.677	0.716	0.537
correlation	0.146	0.210	0.309	0.000	0.350	0.236	0.000
homogeneity	0.531	0.490	0.548	0.802	0.403	0.654	0.615
homogeneity normalized	0.510	0.450	0.420	0.711	0.670	0.439	0.503
inverese difference	0.530	0.498	0.552	0.795	0.445	0.654	0.633
inverese difference normalized	0.502	0.514	0.502	0.693	0.631	0.485	0.488
variance	0.484	0.548	0.649	0.597	0.639	0.729	0.526
sum of average	0.154	0.356	0.463	0.560	0.242	0.451	0.259
sum of entropy	0.575	0.391	0.394	0.764	0.818	0.598	0.579
sum of variance	0.433	0.565	0.650	0.587	0.591	0.740	0.510
difference entropy	0.235	0.387	0.448	0.692	0.787	0.565	0.547
difference variance	0.496	0.588	0.666	0.591	0.615	0.783	0.451
information measures of correlation 1	0.906	0.880	0.936	0.952	0.788	0.880	0.881
information measures of correlation 2	0.717	0.663	0.702	0.768	0.645	0.694	0.821
maximal correlation coefficient	0.832	0.815	0.846	0.752	0.772	0.831	0.868
joint maximum	0.594	0.229	0.227	0.855	0.697	0.615	0.644
joint average	0.154	0.356	0.463	0.560	0.242	0.451	0.259
difference average	0.506	0.518	0.636	0.707	0.569	0.668	0.608
dissimilarity	0.506	0.518	0.636	0.707	0.569	0.668	0.608
inverse variance	0.489	0.295	0.538	0.799	0.154	0.630	0.696
autocorrelation	0.169	0.371	0.570	0.505	0.209	0.384	0.114
cluster tendency	0.433	0.565	0.650	0.587	0.591	0.740	0.510
cluster shade	0.289	0.675	0.643	0.258	0.483	0.634	0.280
cluster prominence	0.405	0.566	0.577	0.346	0.688	0.803	0.246
energy	0.458	0.235	0.231	0.863	0.384	0.616	0.504
entropy	0.325	0.436	0.490	0.792	0.538	0.494	0.563
contrast	0.540	0.526	0.641	0.614	0.689	0.713	0.539
correlation	0.282	0.321	0.418	0.142	0.000	0.372	0.000
homogeneity	0.555	0.494	0.550	0.815	0.410	0.658	0.625
homogeneity normalized	0.520	0.467	0.431	0.709	0.668	0.460	0.517

inverse difference	0.550	0.500	0.551	0.807	0.447	0.660	0.640
inverse difference normalized	0.512	0.533	0.516	0.696	0.588	0.503	0.496
variance	0.497	0.550	0.650	0.600	0.662	0.730	0.525
sum of average	0.149	0.356	0.463	0.559	0.271	0.450	0.259
sum of entropy	0.329	0.468	0.508	0.784	0.512	0.618	0.559
sum of variance	0.446	0.575	0.659	0.584	0.619	0.745	0.504
difference entropy	0.389	0.453	0.532	0.757	0.447	0.612	0.530
difference variance	0.567	0.581	0.656	0.587	0.679	0.774	0.446
information measures of correlation 1	0.692	0.490	0.630	0.691	0.214	0.409	0.463
information measures of correlation 2	0.650	0.525	0.669	0.730	0.346	0.426	0.365
maximal correlation coefficient	0.330	0.333	0.411	0.192	0.000	0.133	0.291
joint maximum	0.460	0.233	0.232	0.875	0.371	0.636	0.666
joint average	0.149	0.356	0.463	0.559	0.271	0.450	0.259
difference average	0.518	0.519	0.637	0.719	0.574	0.670	0.615
dissimilarity	0.518	0.519	0.637	0.719	0.574	0.670	0.615
inverse variance	0.505	0.303	0.562	0.811	0.230	0.607	0.725
autocorrelation	0.162	0.372	0.570	0.505	0.232	0.384	0.114
cluster tendency	0.446	0.575	0.659	0.584	0.619	0.745	0.504
cluster shade	0.290	0.683	0.650	0.255	0.562	0.626	0.275
cluster prominence	0.412	0.598	0.614	0.319	0.718	0.795	0.229
coarseness	0.956	0.781	0.780	0.913	0.893	0.894	0.865
contrast	0.556	0.772	0.848	0.872	0.810	0.862	0.572
busyness	0.593	0.332	0.154	0.081	0.116	0.461	0.484
complexity	0.000	0.459	0.533	0.578	0.612	0.706	0.275
strength	0.880	0.715	0.774	0.624	0.678	0.778	0.687
grey level non-uniformity	0.882	0.899	0.910	0.903	0.795	0.914	0.937
grey level non-uniformity normalized	0.310	0.288	0.330	0.834	0.290	0.269	0.301
zone size non-uniformity	0.978	0.852	0.860	0.981	0.975	0.951	0.937
zone size non-uniformity normalized	0.692	0.551	0.572	0.787	0.552	0.673	0.678
short runs emphasis	0.673	0.486	0.487	0.777	0.545	0.649	0.638
long runs emphasis	0.641	0.386	0.366	0.770	0.577	0.745	0.664
low grey level run emphasis	0.398	0.313	0.121	0.317	0.505	0.050	0.569
high grey level run emphasis	0.223	0.373	0.562	0.532	0.227	0.432	0.149
short run low grey level emphasis	0.405	0.395	0.209	0.330	0.532	0.079	0.590
short run high grey level emphasis	0.235	0.372	0.565	0.552	0.230	0.451	0.154
long run low grey level emphasis	0.398	0.008	0.000	0.236	0.406	0.000	0.473
long run high grey level emphasis	0.182	0.359	0.541	0.416	0.230	0.340	0.127
run percentage	0.674	0.522	0.526	0.790	0.586	0.714	0.732
grey level variance	0.686	0.594	0.700	0.568	0.691	0.766	0.458
run length variance	0.622	0.398	0.375	0.775	0.619	0.795	0.688
run entropy	0.186	0.200	0.298	0.730	0.605	0.104	0.634
grey level non-uniformity	0.881	0.900	0.911	0.902	0.795	0.914	0.937
grey level non-uniformity normalized	0.310	0.289	0.330	0.832	0.281	0.272	0.295
zone size non-uniformity	0.978	0.851	0.858	0.982	0.975	0.951	0.937
zone size non-uniformity normalized	0.690	0.548	0.568	0.786	0.551	0.677	0.675
short runs emphasis	0.679	0.492	0.496	0.774	0.546	0.655	0.645

long runs emphasis	0.647	0.402	0.384	0.767	0.585	0.726	0.672
low grey level run emphasis	0.407	0.311	0.119	0.311	0.506	0.046	0.567
high grey level run emphasis	0.223	0.373	0.563	0.532	0.227	0.432	0.149
short run low grey level emphasis	0.411	0.396	0.209	0.336	0.530	0.077	0.586
short run high grey level emphasis	0.236	0.374	0.567	0.552	0.229	0.451	0.153
long run low grey level emphasis	0.385	0.007	0.000	0.233	0.409	0.000	0.477
long run high grey level emphasis	0.181	0.355	0.538	0.417	0.231	0.343	0.129
run percentage	0.676	0.520	0.524	0.788	0.583	0.711	0.731
grey level variance	0.686	0.594	0.701	0.568	0.691	0.766	0.459
run length variance	0.624	0.407	0.385	0.771	0.616	0.779	0.691
run entropy	0.182	0.163	0.277	0.734	0.564	0.107	0.572
grey level non-uniformity	0.948	0.892	0.942	0.891	0.924	0.760	0.363
grey level non-uniformity normalized	0.118	0.234	0.195	0.613	0.418	0.160	0.531
zone size non-uniformity	0.801	0.148	0.196	0.861	0.581	0.572	0.261
zone size non-uniformity normalized	0.727	0.409	0.450	0.000	0.011	0.000	0.345
small zone emphasis	0.712	0.412	0.406	0.000	0.037	0.000	0.610
large zone emphasis	0.483	0.494	0.489	0.584	0.209	0.709	0.526
low grey level zone emphasis	0.285	0.059	0.068	0.186	0.545	0.090	0.411
high grey level zone emphasis	0.151	0.273	0.470	0.538	0.244	0.405	0.174
small zone low grey level emphasis	0.295	0.000	0.058	0.198	0.269	0.072	0.000
small zone high grey level emphasis	0.193	0.082	0.313	0.572	0.206	0.395	0.275
large zone low grey level emphasis	0.287	0.064	0.047	0.132	0.000	0.313	0.374
large zone high grey level emphasis	0.460	0.745	0.739	0.193	0.065	0.656	0.681
zone percentage	0.724	0.630	0.809	0.759	0.502	0.658	0.592
grey level variance	0.634	0.419	0.414	0.567	0.684	0.660	0.447
zone size variance	0.477	0.506	0.502	0.585	0.152	0.713	0.561
zone size entropy	0.766	0.563	0.563	0.754	0.886	0.345	0.642
grey level non-uniformity	0.948	0.892	0.942	0.891	0.924	0.760	0.364
grey level non-uniformity normalized	0.131	0.231	0.192	0.616	0.416	0.159	0.532
zone size non-uniformity	0.891	0.431	0.518	0.875	0.963	0.592	0.494
zone size non-uniformity normalized	0.710	0.513	0.472	0.613	0.655	0.613	0.234
small distance emphasis	0.631	0.468	0.412	0.504	0.669	0.475	0.126
large distance emphasis	0.676	0.532	0.552	0.585	0.769	0.631	0.358
low grey level zone emphasis	0.291	0.059	0.071	0.186	0.547	0.091	0.409
high grey level zone emphasis	0.151	0.273	0.470	0.538	0.244	0.405	0.174
small distance low grey level emphasis	0.363	0.181	0.104	0.195	0.577	0.177	0.551
small distance high grey level emphasis	0.015	0.335	0.502	0.502	0.197	0.306	0.124
large distance low grey level emphasis	0.213	0.000	0.062	0.276	0.421	0.149	0.164
large distance high grey level emphasis	0.481	0.110	0.333	0.556	0.375	0.522	0.188
zone percentage	0.724	0.629	0.809	0.759	0.503	0.658	0.594
grey level variance	0.634	0.419	0.414	0.567	0.684	0.660	0.447
zone distance variance	0.716	0.575	0.603	0.731	0.803	0.752	0.566
zone distance entropy	0.597	0.243	0.160	0.717	0.602	0.305	0.660
grey level non-uniformity	0.853	0.795	0.799	0.855	0.761	0.854	0.868
grey level non-uniformity normalized	0.339	0.295	0.323	0.838	0.270	0.407	0.439
dependence count non-uniformity	0.866	0.707	0.727	0.895	0.914	0.883	0.962

dependence count non-uniformity normalized	0.771	0.677	0.762	0.760	0.490	0.818	0.520
low dependence emphasis	0.730	0.536	0.699	0.699	0.368	0.494	0.523
high dependence emphasis	0.599	0.394	0.375	0.782	0.538	0.712	0.728
low grey level count emphasis	0.412	0.336	0.139	0.320	0.495	0.045	0.536
high grey level count emphasis	0.228	0.377	0.567	0.532	0.225	0.432	0.142
low dependence low grey level emphasis	0.464	0.596	0.619	0.553	0.756	0.451	0.370
low dependence high grey level emphasis	0.486	0.309	0.569	0.688	0.273	0.656	0.239
high dependence low grey level emphasis	0.220	0.000	0.000	0.211	0.000	0.106	0.433
high dependence high grey level emphasis	0.422	0.401	0.419	0.064	0.198	0.243	0.244
grey level variance	0.686	0.601	0.709	0.576	0.695	0.773	0.481
dependence count variance	0.590	0.412	0.393	0.809	0.595	0.808	0.824
dependence count entropy	0.849	0.680	0.659	0.800	0.950	0.652	0.647
dependence count energy	0.608	0.464	0.460	0.557	0.970	0.354	0.354
mean	0.141	0.345	0.376	0.311	0.094	0.355	0.322
standard deviation	0.137	0.000	0.000	0.234	0.482	0.000	0.547
coefficient of variation	0.000	0.000	0.000	0.140	0.139	0.000	0.000
skewness	0.700	0.700	0.699	0.640	0.202	0.700	0.700
kurtosis	0.265	0.265	0.264	0.533	0.179	0.265	0.265
variance	0.078	0.042	0.000	0.309	0.636	0.037	0.662
median	0.025	0.246	0.162	0.005	0.356	0.188	0.000
percentile 10th	0.000	0.000	0.000	0.301	0.000	0.000	0.000
percentile 90th	0.093	0.055	0.011	0.000	0.000	0.000	0.444
interquartile range	0.000	0.000	0.000	0.217	0.000	0.000	0.198
range	0.288	0.093	0.000	0.679	0.698	0.186	0.605
mean absolut deviation	0.059	0.000	0.000	0.140	0.219	0.000	0.390
robust mean absolut deviation	0.000	0.000	0.000	0.040	0.000	0.000	0.151
energy	0.011	0.309	0.000	0.814	0.637	0.472	0.618
entropy	0.000	0.000	0.000	0.094	0.204	0.000	0.233
root mean square	0.137	0.000	0.000	0.228	0.510	0.000	0.554
uniformity	0.000	0.000	0.000	0.000	0.000	0.000	0.055
energy	0.465	0.000	0.000	0.071	0.514	0.000	0.029
entropy	0.686	0.043	0.000	0.557	0.729	0.048	0.267
contrast	0.755	0.055	0.000	0.273	0.506	0.036	0.671
correlation	0.338	0.458	0.490	0.218	0.102	0.469	0.000
homogeneity	0.075	0.000	0.000	0.000	0.000	0.000	0.063
homogeneity normalized	0.711	0.728	0.737	0.765	0.682	0.637	0.000
inverese difference	0.141	0.000	0.000	0.000	0.000	0.000	0.034
inverese difference normalized	0.519	0.430	0.449	0.656	0.592	0.245	0.000
variance	0.734	0.043	0.000	0.267	0.447	0.022	0.687
sum of average	0.648	0.262	0.115	0.649	0.616	0.201	0.308
sum of entropy	0.451	0.045	0.000	0.448	0.609	0.000	0.316
sum of variance	0.705	0.031	0.000	0.258	0.375	0.007	0.697
difference entropy	0.096	0.032	0.000	0.339	0.529	0.000	0.353
difference variance	0.826	0.113	0.000	0.436	0.588	0.155	0.737

information measures of correlation 1	0.882	0.476	0.556	0.833	0.769	0.780	0.705
information measures of correlation 2	0.693	0.261	0.237	0.534	0.431	0.532	0.814
maximal correlation coefficient	0.818	0.305	0.286	0.735	0.843	0.614	0.674
joint maximum	0.211	0.061	0.016	0.000	0.373	0.000	0.048
joint average	0.648	0.262	0.115	0.649	0.616	0.201	0.308
difference average	0.599	0.017	0.000	0.143	0.244	0.000	0.331
dissimilarity	0.599	0.017	0.000	0.143	0.244	0.000	0.331
inverse variance	0.347	0.088	0.000	0.295	0.117	0.781	0.007
autocorrelation	0.578	0.274	0.104	0.730	0.646	0.226	0.130
cluster tendency	0.705	0.031	0.000	0.258	0.375	0.007	0.697
cluster shade	0.553	0.236	0.395	0.356	0.718	0.294	0.937
cluster prominence	0.744	0.071	0.000	0.416	0.656	0.121	0.872
energy	0.000	0.000	0.000	0.000	0.016	0.000	0.000
entropy	0.000	0.000	0.000	0.082	0.224	0.000	0.327
contrast	0.754	0.057	0.000	0.274	0.571	0.039	0.670
correlation	0.442	0.600	0.618	0.249	0.010	0.534	0.000
homogeneity	0.087	0.000	0.000	0.000	0.000	0.000	0.060
homogeneity normalized	0.712	0.744	0.752	0.771	0.698	0.662	0.000
inverse difference	0.147	0.000	0.000	0.000	0.000	0.000	0.033
inverse difference normalized	0.521	0.464	0.484	0.651	0.608	0.272	0.000
variance	0.730	0.042	0.000	0.269	0.534	0.024	0.688
sum of average	0.647	0.263	0.116	0.649	0.618	0.200	0.308
sum of entropy	0.205	0.000	0.000	0.002	0.131	0.000	0.214
sum of variance	0.697	0.030	0.000	0.262	0.487	0.006	0.700
difference entropy	0.456	0.000	0.000	0.128	0.110	0.000	0.250
difference variance	0.863	0.105	0.000	0.370	0.703	0.138	0.725
information measures of correlation 1	0.680	0.000	0.000	0.378	0.423	0.010	0.000
information measures of correlation 2	0.644	0.000	0.000	0.361	0.445	0.048	0.138
maximal correlation coefficient	0.000	0.000	0.000	0.369	0.194	0.000	0.000
joint maximum	0.000	0.066	0.029	0.000	0.000	0.000	0.057
joint average	0.647	0.263	0.116	0.649	0.618	0.200	0.308
difference average	0.602	0.020	0.000	0.148	0.284	0.000	0.326
dissimilarity	0.602	0.020	0.000	0.148	0.284	0.000	0.326
inverse variance	0.349	0.064	0.000	0.336	0.124	0.787	0.028
autocorrelation	0.576	0.274	0.104	0.729	0.655	0.226	0.130
cluster tendency	0.697	0.030	0.000	0.262	0.487	0.006	0.700
cluster shade	0.574	0.248	0.393	0.335	0.635	0.292	0.943
cluster prominence	0.766	0.072	0.000	0.419	0.763	0.124	0.885
coarseness	0.930	0.895	0.898	0.664	0.712	0.913	0.750
contrast	0.609	0.237	0.342	0.210	0.739	0.082	0.325
busyness	0.663	0.000	0.000	0.516	0.087	0.000	0.008
complexity	0.000	0.295	0.000	0.551	0.680	0.412	0.477
strength	0.882	0.131	0.024	0.210	0.513	0.219	0.775
grey level non-uniformity	0.702	0.822	0.827	0.862	0.786	0.868	0.897
grey level non-uniformity normalized	0.000	0.000	0.000	0.000	0.000	0.000	0.072
zone size non-uniformity	0.964	0.897	0.925	0.988	0.956	0.939	0.956

zone size non-uniformity normalized	0.046	0.056	0.052	0.000	0.239	0.000	0.038
short runs emphasis	0.002	0.000	0.000	0.000	0.190	0.000	0.000
long runs emphasis	0.000	0.095	0.056	0.000	0.189	0.000	0.000
low grey level run emphasis	0.677	0.164	0.158	0.317	0.366	0.168	0.348
high grey level run emphasis	0.563	0.250	0.078	0.710	0.664	0.219	0.137
short run low grey level emphasis	0.700	0.213	0.214	0.347	0.413	0.222	0.510
short run high grey level emphasis	0.537	0.207	0.029	0.696	0.657	0.210	0.135
long run low grey level emphasis	0.605	0.026	0.001	0.253	0.248	0.065	0.126
long run high grey level emphasis	0.620	0.471	0.356	0.751	0.689	0.247	0.153
run percentage	0.024	0.112	0.101	0.000	0.232	0.000	0.000
grey level variance	0.663	0.066	0.000	0.310	0.626	0.094	0.688
run length variance	0.000	0.194	0.161	0.000	0.240	0.000	0.131
run entropy	0.243	0.092	0.000	0.440	0.491	0.284	0.577
grey level non-uniformity	0.703	0.822	0.826	0.864	0.786	0.869	0.897
grey level non-uniformity normalized	0.000	0.000	0.000	0.000	0.000	0.000	0.068
zone size non-uniformity	0.964	0.894	0.923	0.988	0.956	0.938	0.955
zone size non-uniformity normalized	0.048	0.036	0.031	0.000	0.239	0.000	0.000
short runs emphasis	0.026	0.020	0.000	0.000	0.213	0.000	0.000
long runs emphasis	0.000	0.134	0.103	0.000	0.214	0.000	0.000
low grey level run emphasis	0.680	0.162	0.156	0.321	0.364	0.168	0.349
high grey level run emphasis	0.563	0.250	0.078	0.710	0.664	0.219	0.137
short run low grey level emphasis	0.700	0.215	0.214	0.342	0.410	0.219	0.485
short run high grey level emphasis	0.537	0.208	0.030	0.696	0.656	0.210	0.134
long run low grey level emphasis	0.607	0.028	0.003	0.254	0.252	0.067	0.152
long run high grey level emphasis	0.621	0.459	0.342	0.751	0.691	0.247	0.158
run percentage	0.022	0.113	0.100	0.000	0.241	0.000	0.000
grey level variance	0.662	0.066	0.000	0.310	0.626	0.094	0.687
run length variance	0.000	0.208	0.178	0.000	0.235	0.000	0.034
run entropy	0.225	0.065	0.000	0.443	0.392	0.296	0.598
grey level non-uniformity	0.884	0.708	0.819	0.858	0.875	0.706	0.807
grey level non-uniformity normalized	0.361	0.000	0.000	0.310	0.195	0.153	0.112
zone size non-uniformity	0.682	0.312	0.379	0.833	0.846	0.550	0.596
zone size non-uniformity normalized	0.488	0.335	0.197	0.000	0.280	0.133	0.000
small zone emphasis	0.439	0.164	0.154	0.000	0.501	0.167	0.304
large zone emphasis	0.019	0.369	0.380	0.443	0.182	0.374	0.337
low grey level zone emphasis	0.891	0.102	0.195	0.350	0.620	0.040	0.210
high grey level zone emphasis	0.543	0.130	0.000	0.732	0.632	0.268	0.229
small zone low grey level emphasis	0.261	0.000	0.000	0.717	0.000	0.240	0.457
small zone high grey level emphasis	0.550	0.101	0.000	0.698	0.506	0.173	0.307
large zone low grey level emphasis	0.000	0.037	0.035	0.077	0.026	0.000	0.000
large zone high grey level emphasis	0.109	0.613	0.626	0.872	0.263	0.539	0.646
zone percentage	0.364	0.025	0.183	0.187	0.481	0.084	0.240
grey level variance	0.744	0.245	0.000	0.401	0.488	0.331	0.664
zone size variance	0.002	0.414	0.424	0.479	0.141	0.462	0.450
zone size entropy	0.766	0.194	0.172	0.545	0.666	0.274	0.448
grey level non-uniformity	0.884	0.708	0.819	0.859	0.875	0.706	0.807

grey level non-uniformity normalized	0.350	0.000	0.000	0.308	0.193	0.154	0.114
zone size non-uniformity	0.688	0.136	0.206	0.859	0.926	0.531	0.702
zone size non-uniformity normalized	0.484	0.377	0.364	0.604	0.796	0.396	0.651
small distance emphasis	0.429	0.305	0.281	0.550	0.777	0.376	0.572
large distance emphasis	0.405	0.294	0.284	0.538	0.750	0.294	0.483
low grey level zone emphasis	0.892	0.102	0.195	0.350	0.618	0.038	0.210
high grey level zone emphasis	0.543	0.130	0.000	0.732	0.632	0.268	0.229
small distance low grey level emphasis	0.909	0.203	0.299	0.406	0.664	0.125	0.163
small distance high grey level emphasis	0.529	0.038	0.000	0.697	0.650	0.232	0.195
large distance low grey level emphasis	0.180	0.000	0.000	0.176	0.305	0.000	0.324
large distance high grey level emphasis	0.636	0.278	0.058	0.815	0.562	0.318	0.208
zone percentage	0.364	0.024	0.183	0.188	0.482	0.085	0.240
grey level variance	0.744	0.245	0.000	0.402	0.488	0.331	0.664
zone distance variance	0.497	0.348	0.357	0.533	0.727	0.191	0.383
zone distance entropy	0.744	0.274	0.198	0.665	0.550	0.456	0.559
grey level non-uniformity	0.621	0.797	0.801	0.751	0.739	0.744	0.817
grey level non-uniformity normalized	0.000	0.000	0.000	0.000	0.000	0.000	0.056
dependence count non-uniformity	0.650	0.663	0.753	0.839	0.890	0.721	0.930
dependence count non-uniformity normalized	0.393	0.393	0.470	0.160	0.370	0.101	0.458
low dependence emphasis	0.428	0.000	0.085	0.031	0.398	0.000	0.290
high dependence emphasis	0.000	0.196	0.180	0.000	0.179	0.000	0.000
low grey level count emphasis	0.648	0.167	0.156	0.326	0.344	0.163	0.364
high grey level count emphasis	0.565	0.253	0.082	0.709	0.664	0.217	0.134
low dependence low grey level emphasis	0.778	0.301	0.249	0.760	0.509	0.801	0.475
low dependence high grey level emphasis	0.418	0.050	0.000	0.568	0.474	0.202	0.327
high dependence low grey level emphasis	0.087	0.000	0.000	0.000	0.028	0.000	0.062
high dependence high grey level emphasis	0.279	0.497	0.475	0.557	0.712	0.275	0.183
grey level variance	0.638	0.062	0.000	0.293	0.632	0.058	0.673
dependence count variance	0.000	0.506	0.495	0.093	0.316	0.000	0.108
dependence count entropy	0.924	0.678	0.686	0.884	0.915	0.686	0.649
dependence count energy	0.825	0.487	0.501	0.735	0.853	0.392	0.399
mean	0.158	0.918	0.918	0.837	0.672	0.953	0.851
standard deviation	0.000	0.604	0.754	0.885	0.729	0.757	0.243
coefficient of variation	0.000	0.000	0.000	0.000	0.000	0.000	0.000
skewness	0.573	0.573	0.571	0.604	0.451	0.573	0.573
kurtosis	0.511	0.511	0.505	0.680	0.814	0.511	0.511
variance	0.000	0.657	0.797	0.903	0.655	0.771	0.245
median	0.000	0.503	0.525	0.406	0.481	0.428	0.284
percentile 10th	0.078	0.725	0.789	0.932	0.492	0.923	0.717
percentile 90th	0.000	0.847	0.884	0.723	0.908	0.809	0.707
interquartile range	0.000	0.680	0.751	0.736	0.704	0.787	0.547
range	0.000	0.164	0.439	0.605	0.672	0.369	0.365
mean absolut deviation	0.000	0.699	0.802	0.888	0.832	0.847	0.566
robust mean absolut deviation	0.007	0.734	0.813	0.811	0.855	0.866	0.670

energy	0.000	0.219	0.407	0.687	0.912	0.530	0.651
entropy	0.496	0.512	0.641	0.769	0.302	0.662	0.376
root mean square	0.000	0.617	0.757	0.887	0.813	0.778	0.279
uniformity	0.466	0.549	0.615	0.738	0.123	0.688	0.536
energy	0.619	0.494	0.474	0.667	0.675	0.652	0.634
entropy	0.828	0.511	0.530	0.867	0.872	0.696	0.623
contrast	0.649	0.720	0.825	0.901	0.416	0.839	0.456
correlation	0.761	0.752	0.749	0.599	0.429	0.759	0.695
homogeneity	0.709	0.691	0.743	0.840	0.653	0.810	0.786
homogeneity normalized	0.721	0.784	0.784	0.740	0.793	0.746	0.649
inverse difference	0.738	0.698	0.756	0.850	0.716	0.816	0.783
inverse difference normalized	0.782	0.806	0.804	0.780	0.860	0.800	0.725
variance	0.695	0.692	0.826	0.914	0.455	0.814	0.434
sum of average	0.715	0.125	0.412	0.637	0.590	0.531	0.508
sum of entropy	0.661	0.381	0.452	0.740	0.797	0.563	0.520
sum of variance	0.765	0.647	0.820	0.911	0.469	0.773	0.430
difference entropy	0.444	0.471	0.593	0.627	0.777	0.573	0.293
difference variance	0.907	0.564	0.779	0.910	0.336	0.678	0.000
information measures of correlation 1	0.928	0.895	0.923	0.937	0.912	0.920	0.878
information measures of correlation 2	0.854	0.673	0.732	0.786	0.738	0.778	0.842
maximal correlation coefficient	0.953	0.778	0.863	0.912	0.876	0.847	0.783
joint maximum	0.599	0.475	0.418	0.865	0.514	0.667	0.782
joint average	0.715	0.125	0.412	0.637	0.589	0.531	0.508
difference average	0.751	0.732	0.820	0.890	0.607	0.860	0.657
dissimilarity	0.751	0.732	0.820	0.890	0.607	0.860	0.657
inverse variance	0.752	0.697	0.764	0.765	0.395	0.800	0.465
autocorrelation	0.708	0.177	0.432	0.518	0.646	0.445	0.394
cluster tendency	0.765	0.647	0.820	0.911	0.469	0.773	0.430
cluster shade	0.557	0.037	0.014	0.529	0.486	0.365	0.432
cluster prominence	0.432	0.503	0.661	0.721	0.260	0.498	0.110
energy	0.535	0.635	0.624	0.770	0.187	0.817	0.736
entropy	0.502	0.554	0.668	0.742	0.482	0.681	0.557
contrast	0.667	0.719	0.830	0.908	0.369	0.841	0.476
correlation	0.783	0.795	0.795	0.593	0.183	0.781	0.724
homogeneity	0.723	0.693	0.745	0.846	0.629	0.812	0.818
homogeneity normalized	0.740	0.803	0.804	0.753	0.817	0.764	0.663
inverse difference	0.752	0.700	0.757	0.857	0.689	0.819	0.819
inverse difference normalized	0.802	0.822	0.821	0.795	0.865	0.820	0.748
variance	0.693	0.694	0.827	0.912	0.430	0.817	0.436
sum of average	0.717	0.126	0.413	0.637	0.587	0.531	0.507
sum of entropy	0.807	0.599	0.713	0.833	0.385	0.761	0.621
sum of variance	0.728	0.662	0.822	0.907	0.500	0.786	0.415
difference entropy	0.845	0.642	0.761	0.855	0.484	0.791	0.510
difference variance	0.756	0.615	0.801	0.922	0.220	0.751	0.007
information measures of correlation 1	0.884	0.838	0.881	0.804	0.792	0.821	0.440
information measures of correlation 2	0.850	0.714	0.812	0.801	0.748	0.746	0.361

maximal correlation coefficient	0.499	0.504	0.646	0.150	0.361	0.561	0.520
joint maximum	0.460	0.512	0.505	0.910	0.105	0.625	0.828
joint average	0.717	0.126	0.413	0.637	0.587	0.531	0.507
difference average	0.772	0.728	0.822	0.899	0.567	0.858	0.686
dissimilarity	0.772	0.728	0.822	0.899	0.567	0.858	0.686
inverse variance	0.752	0.692	0.768	0.778	0.400	0.796	0.457
autocorrelation	0.716	0.179	0.433	0.517	0.645	0.445	0.393
cluster tendency	0.728	0.662	0.822	0.907	0.500	0.786	0.415
cluster shade	0.528	0.058	0.037	0.498	0.567	0.327	0.418
cluster prominence	0.455	0.491	0.633	0.757	0.274	0.482	0.100
coarseness	0.882	0.920	0.909	0.813	0.563	0.942	0.937
contrast	0.354	0.805	0.834	0.600	0.492	0.937	0.430
busyness	0.663	0.021	0.016	0.699	0.000	0.518	0.011
complexity	0.635	0.377	0.595	0.843	0.421	0.574	0.071
strength	0.917	0.645	0.804	0.847	0.690	0.735	0.249
grey level non-uniformity	0.928	0.911	0.912	0.938	0.819	0.941	0.932
grey level non-uniformity normalized	0.442	0.512	0.613	0.703	0.139	0.644	0.302
zone size non-uniformity	0.974	0.970	0.974	0.982	0.950	0.979	0.988
zone size non-uniformity normalized	0.757	0.692	0.748	0.861	0.713	0.763	0.883
short runs emphasis	0.752	0.680	0.726	0.841	0.705	0.749	0.875
long runs emphasis	0.727	0.714	0.722	0.785	0.710	0.754	0.875
low grey level run emphasis	0.873	0.085	0.094	0.535	0.445	0.746	0.793
high grey level run emphasis	0.751	0.231	0.488	0.518	0.568	0.432	0.377
short run low grey level emphasis	0.888	0.112	0.123	0.548	0.470	0.755	0.810
short run high grey level emphasis	0.738	0.260	0.514	0.525	0.551	0.427	0.377
long run low grey level emphasis	0.811	0.000	0.000	0.508	0.382	0.721	0.708
long run high grey level emphasis	0.777	0.124	0.375	0.465	0.619	0.473	0.416
run percentage	0.748	0.709	0.742	0.831	0.718	0.769	0.891
grey level variance	0.716	0.633	0.789	0.902	0.655	0.753	0.099
run length variance	0.709	0.728	0.718	0.752	0.723	0.765	0.878
run entropy	0.220	0.356	0.546	0.733	0.503	0.567	0.448
grey level non-uniformity	0.929	0.911	0.912	0.938	0.819	0.941	0.932
grey level non-uniformity normalized	0.438	0.512	0.613	0.704	0.136	0.642	0.311
zone size non-uniformity	0.973	0.969	0.973	0.982	0.950	0.979	0.988
zone size non-uniformity normalized	0.757	0.690	0.746	0.860	0.710	0.763	0.877
short runs emphasis	0.755	0.692	0.738	0.848	0.713	0.757	0.875
long runs emphasis	0.732	0.722	0.730	0.784	0.723	0.758	0.874
low grey level run emphasis	0.870	0.087	0.096	0.529	0.445	0.744	0.792
high grey level run emphasis	0.751	0.231	0.488	0.518	0.568	0.432	0.377
short run low grey level emphasis	0.883	0.107	0.118	0.537	0.462	0.754	0.807
short run high grey level emphasis	0.737	0.260	0.514	0.525	0.551	0.427	0.377
long run low grey level emphasis	0.815	0.000	0.000	0.506	0.383	0.723	0.712
long run high grey level emphasis	0.778	0.124	0.375	0.465	0.621	0.473	0.420
run percentage	0.744	0.711	0.744	0.831	0.721	0.767	0.893
grey level variance	0.715	0.633	0.788	0.902	0.656	0.753	0.100
run length variance	0.711	0.728	0.719	0.752	0.726	0.766	0.876

run entropy	0.259	0.365	0.545	0.729	0.558	0.566	0.326
grey level non-uniformity	0.932	0.912	0.956	0.925	0.944	0.931	0.808
grey level non-uniformity normalized	0.120	0.551	0.477	0.743	0.272	0.721	0.000
zone size non-uniformity	0.880	0.529	0.670	0.787	0.846	0.698	0.624
zone size non-uniformity normalized	0.614	0.627	0.667	0.758	0.545	0.284	0.000
small zone emphasis	0.607	0.560	0.607	0.697	0.390	0.269	0.000
large zone emphasis	0.599	0.702	0.687	0.484	0.568	0.852	0.796
low grey level zone emphasis	0.824	0.103	0.377	0.751	0.499	0.574	0.764
high grey level zone emphasis	0.679	0.173	0.465	0.499	0.522	0.307	0.363
small zone low grey level emphasis	0.078	0.000	0.379	0.668	0.594	0.314	0.368
small zone high grey level emphasis	0.404	0.233	0.543	0.387	0.424	0.176	0.171
large zone low grey level emphasis	0.348	0.083	0.010	0.659	0.077	0.671	0.334
large zone high grey level emphasis	0.648	0.835	0.832	0.163	0.513	0.897	0.865
zone percentage	0.786	0.755	0.838	0.827	0.678	0.790	0.825
grey level variance	0.869	0.310	0.535	0.832	0.472	0.520	0.168
zone size variance	0.559	0.731	0.714	0.440	0.507	0.867	0.800
zone size entropy	0.904	0.359	0.465	0.934	0.878	0.718	0.488
grey level non-uniformity	0.932	0.912	0.956	0.925	0.944	0.931	0.808
grey level non-uniformity normalized	0.150	0.550	0.480	0.736	0.262	0.716	0.000
zone size non-uniformity	0.964	0.512	0.676	0.880	0.943	0.733	0.788
zone size non-uniformity normalized	0.699	0.534	0.515	0.698	0.420	0.476	0.450
small distance emphasis	0.768	0.545	0.530	0.709	0.405	0.441	0.512
large distance emphasis	0.673	0.509	0.514	0.696	0.430	0.417	0.621
low grey level zone emphasis	0.830	0.103	0.374	0.747	0.501	0.577	0.767
high grey level zone emphasis	0.679	0.173	0.465	0.499	0.522	0.307	0.363
small distance low grey level emphasis	0.862	0.208	0.411	0.811	0.528	0.758	0.811
small distance high grey level emphasis	0.636	0.121	0.421	0.540	0.495	0.308	0.316
large distance low grey level emphasis	0.743	0.059	0.358	0.340	0.325	0.088	0.535
large distance high grey level emphasis	0.700	0.260	0.520	0.406	0.581	0.245	0.488
zone percentage	0.786	0.755	0.838	0.828	0.679	0.791	0.825
grey level variance	0.870	0.310	0.535	0.832	0.472	0.520	0.168
zone distance variance	0.487	0.448	0.471	0.660	0.460	0.424	0.637
zone distance entropy	0.845	0.509	0.437	0.867	0.630	0.787	0.316
grey level non-uniformity	0.901	0.901	0.901	0.903	0.809	0.925	0.916
grey level non-uniformity normalized	0.462	0.549	0.613	0.737	0.127	0.686	0.535
dependence count non-uniformity	0.837	0.619	0.729	0.872	0.925	0.824	0.967
dependence count non-uniformity normalized	0.574	0.726	0.771	0.898	0.767	0.724	0.749
low dependence emphasis	0.725	0.773	0.843	0.860	0.632	0.751	0.777
high dependence emphasis	0.715	0.703	0.695	0.753	0.738	0.723	0.884
low grey level count emphasis	0.839	0.085	0.090	0.505	0.434	0.729	0.771
high grey level count emphasis	0.753	0.233	0.488	0.519	0.573	0.440	0.379
low dependence low grey level emphasis	0.685	0.442	0.471	0.792	0.748	0.861	0.869
low dependence high grey level emphasis	0.487	0.517	0.706	0.496	0.381	0.311	0.184
high dependence low grey level emphasis	0.166	0.000	0.000	0.677	0.040	0.758	0.340

high dependence high grey level emphasis	0.753	0.345	0.373	0.272	0.773	0.724	0.610
grey level variance	0.699	0.651	0.796	0.907	0.662	0.771	0.226
dependence count variance	0.692	0.655	0.628	0.737	0.755	0.681	0.879
dependence count entropy	0.892	0.762	0.767	0.871	0.912	0.864	0.841
dependence count energy	0.806	0.619	0.617	0.835	0.850	0.755	0.797
mean	0.241	0.069	0.018	0.000	0.482	0.052	0.235
standard deviation	0.009	0.027	0.000	0.491	0.183	0.033	0.454
coefficient of variation	0.006	0.006	0.005	0.493	0.001	0.006	0.006
skewness	0.000	0.000	0.000	0.000	0.000	0.000	0.000
kurtosis	0.115	0.115	0.114	0.721	0.402	0.115	0.115
variance	0.000	0.076	0.000	0.533	0.183	0.063	0.489
median	0.016	0.292	0.353	0.509	0.453	0.267	0.193
percentile 10th	0.045	0.001	0.000	0.525	0.451	0.011	0.476
percentile 90th	0.000	0.000	0.049	0.301	0.137	0.000	0.164
interquartile range	0.000	0.281	0.264	0.466	0.222	0.234	0.516
range	0.075	0.000	0.000	0.583	0.274	0.082	0.479
mean absolut deviation	0.000	0.071	0.012	0.478	0.204	0.045	0.471
robust mean absolut deviation	0.000	0.112	0.095	0.406	0.165	0.034	0.433
energy	0.000	0.364	0.096	0.859	0.688	0.581	0.638
entropy	0.150	0.000	0.000	0.390	0.271	0.001	0.284
root mean square	0.010	0.037	0.000	0.503	0.157	0.046	0.453
uniformity	0.046	0.000	0.000	0.232	0.086	0.000	0.105
energy	0.329	0.000	0.000	0.294	0.568	0.000	0.000
entropy	0.653	0.000	0.000	0.657	0.761	0.074	0.234
contrast	0.824	0.099	0.000	0.599	0.219	0.128	0.357
correlation	0.559	0.410	0.390	0.574	0.859	0.561	0.584
homogeneity	0.370	0.033	0.000	0.515	0.182	0.035	0.190
homogeneity normalized	0.811	0.727	0.743	0.809	0.660	0.831	0.534
inverese difference	0.428	0.004	0.000	0.522	0.190	0.016	0.169
inverese difference normalized	0.692	0.569	0.575	0.824	0.650	0.684	0.434
variance	0.826	0.112	0.000	0.614	0.232	0.154	0.379
sum of average	0.000	0.071	0.000	0.337	0.282	0.000	0.481
sum of entropy	0.529	0.000	0.000	0.522	0.759	0.045	0.269
sum of variance	0.820	0.127	0.000	0.635	0.262	0.183	0.415
difference entropy	0.367	0.000	0.000	0.497	0.674	0.019	0.204
difference variance	0.888	0.100	0.000	0.620	0.234	0.174	0.307
information measures of correlation 1	0.882	0.844	0.879	0.882	0.824	0.847	0.866
information measures of correlation 2	0.852	0.437	0.462	0.603	0.471	0.553	0.391
maximal correlation coefficient	0.919	0.667	0.675	0.772	0.769	0.713	0.373
joint maximum	0.000	0.000	0.000	0.394	0.343	0.000	0.061
joint average	0.000	0.071	0.000	0.337	0.282	0.000	0.481
difference average	0.740	0.056	0.000	0.583	0.289	0.060	0.274
dissimilarity	0.740	0.056	0.000	0.583	0.289	0.060	0.274
inverse variance	0.543	0.451	0.455	0.626	0.417	0.381	0.088
autocorrelation	0.000	0.136	0.000	0.341	0.285	0.084	0.431
cluster tendency	0.820	0.127	0.000	0.635	0.262	0.183	0.415

cluster shade	0.185	0.406	0.015	0.645	0.000	0.331	0.000
cluster prominence	0.804	0.205	0.000	0.815	0.090	0.331	0.284
energy	0.000	0.000	0.000	0.276	0.056	0.000	0.000
entropy	0.118	0.000	0.000	0.469	0.359	0.029	0.217
contrast	0.841	0.099	0.000	0.592	0.250	0.124	0.358
correlation	0.597	0.312	0.292	0.523	0.000	0.560	0.557
homogeneity	0.369	0.034	0.000	0.505	0.171	0.026	0.182
homogeneity normalized	0.822	0.745	0.759	0.825	0.687	0.839	0.557
inverse difference	0.428	0.004	0.000	0.508	0.175	0.007	0.164
inverse difference normalized	0.700	0.570	0.577	0.830	0.658	0.685	0.438
variance	0.823	0.113	0.000	0.618	0.224	0.155	0.380
sum of average	0.000	0.070	0.000	0.337	0.272	0.000	0.481
sum of entropy	0.553	0.000	0.000	0.511	0.291	0.001	0.231
sum of variance	0.800	0.129	0.000	0.647	0.194	0.189	0.413
difference entropy	0.674	0.000	0.000	0.540	0.353	0.009	0.179
difference variance	0.903	0.093	0.000	0.611	0.199	0.160	0.293
information measures of correlation 1	0.874	0.538	0.491	0.487	0.163	0.705	0.171
information measures of correlation 2	0.857	0.281	0.299	0.364	0.299	0.498	0.202
maximal correlation coefficient	0.796	0.513	0.284	0.205	0.334	0.392	0.189
joint maximum	0.000	0.000	0.000	0.455	0.000	0.043	0.079
joint average	0.000	0.070	0.000	0.337	0.272	0.000	0.481
difference average	0.748	0.055	0.000	0.573	0.304	0.054	0.269
dissimilarity	0.748	0.055	0.000	0.573	0.304	0.054	0.269
inverse variance	0.526	0.450	0.452	0.634	0.348	0.394	0.093
autocorrelation	0.000	0.134	0.000	0.342	0.275	0.085	0.430
cluster tendency	0.800	0.129	0.000	0.647	0.194	0.189	0.413
cluster shade	0.179	0.415	0.040	0.617	0.000	0.340	0.000
cluster prominence	0.768	0.199	0.000	0.814	0.048	0.322	0.274
coarseness	0.921	0.667	0.664	0.614	0.700	0.866	0.799
contrast	0.846	0.196	0.260	0.457	0.504	0.259	0.380
busyness	0.740	0.086	0.165	0.005	0.000	0.281	0.000
complexity	0.383	0.197	0.000	0.725	0.255	0.279	0.437
strength	0.899	0.188	0.155	0.621	0.440	0.171	0.407
grey level non-uniformity	0.843	0.883	0.885	0.895	0.769	0.885	0.933
grey level non-uniformity normalized	0.083	0.000	0.000	0.246	0.125	0.000	0.168
zone size non-uniformity	0.953	0.802	0.829	0.995	0.962	0.925	0.941
zone size non-uniformity normalized	0.312	0.072	0.058	0.520	0.054	0.154	0.360
short runs emphasis	0.253	0.000	0.000	0.475	0.030	0.056	0.193
long runs emphasis	0.155	0.000	0.000	0.356	0.044	0.000	0.041
low grey level run emphasis	0.593	0.141	0.183	0.420	0.287	0.000	0.163
high grey level run emphasis	0.000	0.123	0.000	0.358	0.254	0.069	0.436
short run low grey level emphasis	0.609	0.250	0.268	0.442	0.306	0.000	0.332
short run high grey level emphasis	0.000	0.117	0.000	0.373	0.242	0.053	0.431
long run low grey level emphasis	0.512	0.000	0.000	0.294	0.212	0.000	0.000
long run high grey level emphasis	0.000	0.223	0.001	0.318	0.309	0.195	0.466
run percentage	0.250	0.044	0.024	0.461	0.064	0.103	0.243

grey level variance	0.805	0.057	0.000	0.535	0.186	0.104	0.494
run length variance	0.136	0.000	0.000	0.343	0.081	0.000	0.081
run entropy	0.246	0.266	0.242	0.549	0.550	0.398	0.718
grey level non-uniformity	0.843	0.883	0.886	0.896	0.769	0.886	0.933
grey level non-uniformity normalized	0.083	0.000	0.000	0.244	0.121	0.000	0.163
zone size non-uniformity	0.953	0.798	0.826	0.995	0.962	0.924	0.939
zone size non-uniformity normalized	0.311	0.057	0.043	0.525	0.053	0.147	0.340
short runs emphasis	0.267	0.000	0.000	0.484	0.040	0.074	0.207
long runs emphasis	0.165	0.000	0.000	0.366	0.061	0.000	0.058
low grey level run emphasis	0.589	0.144	0.185	0.413	0.286	0.000	0.161
high grey level run emphasis	0.000	0.123	0.000	0.358	0.253	0.069	0.436
short run low grey level emphasis	0.598	0.249	0.267	0.438	0.302	0.000	0.323
short run high grey level emphasis	0.000	0.117	0.000	0.373	0.242	0.054	0.431
long run low grey level emphasis	0.527	0.000	0.000	0.292	0.215	0.000	0.000
long run high grey level emphasis	0.000	0.215	0.000	0.319	0.309	0.191	0.466
run percentage	0.248	0.042	0.020	0.459	0.071	0.104	0.242
grey level variance	0.805	0.057	0.000	0.535	0.186	0.104	0.492
run length variance	0.138	0.000	0.000	0.345	0.085	0.000	0.084
run entropy	0.262	0.276	0.253	0.525	0.523	0.403	0.745
grey level non-uniformity	0.932	0.884	0.874	0.969	0.894	0.930	0.802
grey level non-uniformity normalized	0.106	0.199	0.314	0.600	0.481	0.118	0.040
zone size non-uniformity	0.716	0.662	0.127	0.900	0.733	0.562	0.629
zone size non-uniformity normalized	0.384	0.339	0.000	0.310	0.000	0.000	0.015
small zone emphasis	0.311	0.660	0.430	0.357	0.000	0.000	0.257
large zone emphasis	0.019	0.499	0.501	0.576	0.058	0.526	0.531
low grey level zone emphasis	0.276	0.111	0.080	0.429	0.338	0.000	0.516
high grey level zone emphasis	0.000	0.049	0.000	0.391	0.295	0.035	0.440
small zone low grey level emphasis	0.263	0.066	0.033	0.510	0.000	0.277	0.396
small zone high grey level emphasis	0.000	0.215	0.000	0.506	0.137	0.000	0.362
large zone low grey level emphasis	0.000	0.000	0.000	0.000	0.000	0.000	0.000
large zone high grey level emphasis	0.242	0.502	0.501	0.356	0.139	0.960	0.959
zone percentage	0.559	0.312	0.175	0.608	0.390	0.226	0.434
grey level variance	0.767	0.099	0.000	0.606	0.257	0.110	0.425
zone size variance	0.000	0.524	0.526	0.618	0.056	0.559	0.564
zone size entropy	0.743	0.082	0.158	0.694	0.859	0.462	0.350
grey level non-uniformity	0.932	0.884	0.874	0.969	0.894	0.930	0.802
grey level non-uniformity normalized	0.085	0.200	0.314	0.604	0.482	0.119	0.041
zone size non-uniformity	0.766	0.397	0.380	0.922	0.916	0.669	0.812
zone size non-uniformity normalized	0.871	0.670	0.686	0.941	0.556	0.839	0.516
small distance emphasis	0.855	0.660	0.685	0.942	0.552	0.788	0.412
large distance emphasis	0.856	0.616	0.637	0.940	0.668	0.896	0.320
low grey level zone emphasis	0.269	0.111	0.082	0.425	0.333	0.000	0.515
high grey level zone emphasis	0.000	0.049	0.000	0.391	0.295	0.035	0.440
small distance low grey level emphasis	0.331	0.045	0.000	0.527	0.386	0.000	0.552
small distance high grey level emphasis	0.000	0.000	0.000	0.284	0.259	0.000	0.525
large distance low grey level emphasis	0.051	0.231	0.210	0.000	0.118	0.038	0.350

large distance high grey level emphasis	0.000	0.262	0.000	0.565	0.477	0.271	0.132
zone percentage	0.558	0.313	0.176	0.609	0.390	0.224	0.434
grey level variance	0.767	0.099	0.000	0.606	0.257	0.110	0.425
zone distance variance	0.808	0.551	0.558	0.881	0.752	0.855	0.330
zone distance entropy	0.522	0.227	0.036	0.801	0.522	0.407	0.344
grey level non-uniformity	0.761	0.694	0.701	0.843	0.716	0.738	0.777
grey level non-uniformity normalized	0.044	0.000	0.000	0.234	0.089	0.000	0.105
dependence count non-uniformity	0.720	0.647	0.753	0.927	0.887	0.808	0.950
dependence count non-uniformity normalized	0.658	0.558	0.639	0.631	0.342	0.769	0.716
low dependence emphasis	0.582	0.177	0.000	0.496	0.155	0.000	0.362
high dependence emphasis	0.067	0.000	0.000	0.432	0.009	0.013	0.145
low grey level count emphasis	0.609	0.164	0.205	0.420	0.274	0.000	0.145
high grey level count emphasis	0.000	0.126	0.000	0.357	0.257	0.064	0.436
low dependence low grey level emphasis	0.568	0.295	0.264	0.694	0.686	0.628	0.562
low dependence high grey level emphasis	0.161	0.250	0.000	0.583	0.020	0.000	0.318
high dependence low grey level emphasis	0.000	0.000	0.000	0.000	0.000	0.000	0.000
high dependence high grey level emphasis	0.235	0.230	0.197	0.392	0.154	0.459	0.493
grey level variance	0.804	0.053	0.000	0.532	0.182	0.087	0.472
dependence count variance	0.043	0.131	0.114	0.601	0.023	0.112	0.310
dependence count entropy	0.890	0.811	0.821	0.897	0.963	0.807	0.875
dependence count energy	0.875	0.720	0.730	0.837	0.935	0.755	0.887
mean	0.011	0.500	0.552	0.480	0.346	0.467	0.580
standard deviation	0.000	0.478	0.686	0.774	0.261	0.721	0.430
coefficient of variation	0.000	0.000	0.000	0.006	0.000	0.000	0.000
skewness	0.083	0.083	0.083	0.004	0.629	0.083	0.083
kurtosis	0.472	0.472	0.474	0.705	0.336	0.472	0.472
variance	0.000	0.416	0.688	0.746	0.231	0.686	0.396
median	0.089	0.574	0.579	0.423	0.189	0.495	0.330
percentile 10th	0.000	0.356	0.708	0.698	0.197	0.733	0.587
percentile 90th	0.000	0.548	0.711	0.706	0.513	0.579	0.238
interquartile range	0.000	0.419	0.519	0.808	0.384	0.624	0.807
range	0.000	0.257	0.325	0.603	0.017	0.488	0.302
mean absolut deviation	0.000	0.508	0.707	0.808	0.413	0.741	0.614
robust mean absolut deviation	0.000	0.489	0.668	0.823	0.407	0.683	0.738
energy	0.000	0.390	0.480	0.774	0.848	0.772	0.742
entropy	0.502	0.538	0.654	0.731	0.394	0.741	0.518
root mean square	0.000	0.492	0.694	0.778	0.364	0.732	0.465
uniformity	0.564	0.542	0.591	0.773	0.175	0.752	0.659
energy	0.590	0.381	0.394	0.668	0.724	0.567	0.669
entropy	0.867	0.540	0.599	0.854	0.866	0.738	0.630
contrast	0.486	0.458	0.719	0.745	0.219	0.708	0.346
correlation	0.000	0.000	0.000	0.000	0.422	0.000	0.000
homogeneity	0.764	0.640	0.746	0.895	0.341	0.786	0.737
homogeneity normalized	0.531	0.545	0.552	0.692	0.767	0.480	0.613

inverse difference	0.761	0.628	0.743	0.889	0.364	0.777	0.739
inverse difference normalized	0.653	0.665	0.677	0.771	0.731	0.593	0.745
variance	0.627	0.472	0.750	0.746	0.207	0.729	0.408
sum of average	0.041	0.051	0.369	0.531	0.343	0.371	0.021
sum of entropy	0.697	0.437	0.531	0.777	0.836	0.630	0.551
sum of variance	0.743	0.483	0.775	0.727	0.196	0.734	0.443
difference entropy	0.583	0.421	0.553	0.698	0.810	0.647	0.518
difference variance	0.437	0.400	0.639	0.785	0.067	0.691	0.186
information measures of correlation 1	0.929	0.806	0.868	0.883	0.778	0.898	0.784
information measures of correlation 2	0.799	0.751	0.797	0.608	0.709	0.856	0.826
maximal correlation coefficient	0.904	0.832	0.872	0.710	0.751	0.882	0.816
joint maximum	0.573	0.506	0.526	0.861	0.725	0.597	0.836
joint average	0.041	0.051	0.369	0.531	0.343	0.371	0.021
difference average	0.611	0.529	0.742	0.800	0.374	0.745	0.553
dissimilarity	0.611	0.529	0.742	0.800	0.374	0.745	0.553
inverse variance	0.681	0.593	0.772	0.879	0.477	0.751	0.226
autocorrelation	0.000	0.000	0.327	0.552	0.223	0.337	0.000
cluster tendency	0.743	0.483	0.775	0.727	0.196	0.734	0.443
cluster shade	0.191	0.769	0.738	0.513	0.670	0.669	0.328
cluster prominence	0.687	0.412	0.757	0.607	0.000	0.698	0.133
energy	0.708	0.439	0.440	0.749	0.224	0.636	0.752
entropy	0.600	0.552	0.664	0.768	0.580	0.739	0.571
contrast	0.499	0.452	0.715	0.747	0.262	0.703	0.343
correlation	0.000	0.000	0.000	0.000	0.279	0.000	0.000
homogeneity	0.767	0.636	0.738	0.892	0.382	0.781	0.734
homogeneity normalized	0.539	0.548	0.557	0.688	0.790	0.474	0.611
inverse difference	0.759	0.623	0.734	0.887	0.413	0.773	0.736
inverse difference normalized	0.646	0.661	0.673	0.760	0.758	0.592	0.741
variance	0.637	0.474	0.752	0.753	0.267	0.732	0.417
sum of average	0.039	0.051	0.370	0.531	0.336	0.370	0.019
sum of entropy	0.715	0.557	0.690	0.803	0.303	0.746	0.570
sum of variance	0.747	0.494	0.784	0.742	0.278	0.745	0.471
difference entropy	0.626	0.518	0.661	0.809	0.356	0.731	0.412
difference variance	0.445	0.404	0.647	0.779	0.022	0.701	0.160
information measures of correlation 1	0.777	0.574	0.743	0.602	0.294	0.578	0.000
information measures of correlation 2	0.677	0.549	0.723	0.490	0.356	0.638	0.018
maximal correlation coefficient	0.085	0.326	0.463	0.000	0.380	0.135	0.071
joint maximum	0.646	0.525	0.552	0.915	0.007	0.616	0.863
joint average	0.039	0.051	0.370	0.531	0.336	0.370	0.019
difference average	0.610	0.525	0.738	0.803	0.415	0.741	0.549
dissimilarity	0.610	0.525	0.738	0.803	0.415	0.741	0.549
inverse variance	0.681	0.592	0.769	0.878	0.511	0.755	0.203
autocorrelation	0.000	0.000	0.330	0.551	0.222	0.336	0.000
cluster tendency	0.747	0.494	0.784	0.742	0.278	0.745	0.471
cluster shade	0.136	0.776	0.739	0.464	0.698	0.642	0.281
cluster prominence	0.674	0.437	0.775	0.630	0.016	0.724	0.142

coarseness	0.879	0.836	0.838	0.961	0.823	0.964	0.930
contrast	0.347	0.726	0.855	0.619	0.896	0.817	0.598
busyness	0.552	0.406	0.413	0.116	0.527	0.460	0.330
complexity	0.160	0.323	0.446	0.623	0.099	0.646	0.324
strength	0.908	0.615	0.703	0.806	0.348	0.693	0.387
grey level non-uniformity	0.877	0.911	0.920	0.916	0.824	0.966	0.933
grey level non-uniformity normalized	0.535	0.534	0.592	0.758	0.220	0.757	0.475
zone size non-uniformity	0.976	0.937	0.951	0.984	0.973	0.979	0.977
zone size non-uniformity normalized	0.838	0.645	0.707	0.863	0.430	0.732	0.810
short runs emphasis	0.835	0.597	0.640	0.841	0.414	0.687	0.792
long runs emphasis	0.843	0.593	0.609	0.833	0.439	0.622	0.896
low grey level run emphasis	0.477	0.461	0.497	0.348	0.629	0.081	0.191
high grey level run emphasis	0.074	0.000	0.337	0.576	0.187	0.387	0.000
short run low grey level emphasis	0.486	0.472	0.518	0.384	0.640	0.091	0.214
short run high grey level emphasis	0.114	0.012	0.353	0.579	0.177	0.408	0.000
long run low grey level emphasis	0.443	0.422	0.456	0.231	0.592	0.047	0.092
long run high grey level emphasis	0.002	0.000	0.318	0.582	0.240	0.345	0.102
run percentage	0.844	0.656	0.703	0.862	0.435	0.711	0.865
grey level variance	0.597	0.400	0.663	0.729	0.209	0.686	0.295
run length variance	0.839	0.642	0.654	0.848	0.463	0.627	0.918
run entropy	0.458	0.468	0.598	0.638	0.711	0.674	0.662
grey level non-uniformity	0.877	0.912	0.920	0.916	0.824	0.966	0.933
grey level non-uniformity normalized	0.523	0.535	0.594	0.758	0.214	0.757	0.477
zone size non-uniformity	0.976	0.936	0.951	0.984	0.973	0.979	0.977
zone size non-uniformity normalized	0.838	0.643	0.706	0.863	0.422	0.731	0.802
short runs emphasis	0.840	0.609	0.654	0.846	0.416	0.697	0.807
long runs emphasis	0.842	0.616	0.635	0.837	0.435	0.638	0.898
low grey level run emphasis	0.486	0.458	0.499	0.351	0.631	0.078	0.190
high grey level run emphasis	0.074	0.000	0.337	0.576	0.188	0.387	0.000
short run low grey level emphasis	0.493	0.474	0.516	0.377	0.638	0.089	0.220
short run high grey level emphasis	0.114	0.012	0.354	0.579	0.176	0.408	0.000
long run low grey level emphasis	0.452	0.426	0.462	0.239	0.596	0.050	0.087
long run high grey level emphasis	0.003	0.000	0.312	0.582	0.240	0.345	0.104
run percentage	0.840	0.654	0.701	0.864	0.438	0.714	0.865
grey level variance	0.598	0.400	0.663	0.728	0.210	0.686	0.298
run length variance	0.836	0.654	0.669	0.848	0.458	0.632	0.916
run entropy	0.439	0.478	0.613	0.638	0.753	0.693	0.597
grey level non-uniformity	0.953	0.841	0.882	0.880	0.973	0.958	0.929
grey level non-uniformity normalized	0.277	0.485	0.480	0.528	0.497	0.636	0.288
zone size non-uniformity	0.913	0.369	0.472	0.791	0.907	0.597	0.401
zone size non-uniformity normalized	0.407	0.302	0.291	0.335	0.000	0.000	0.247
small zone emphasis	0.368	0.314	0.319	0.310	0.000	0.000	0.405
large zone emphasis	0.786	0.677	0.676	0.609	0.290	0.916	0.813
low grey level zone emphasis	0.433	0.461	0.529	0.298	0.600	0.185	0.000
high grey level zone emphasis	0.010	0.142	0.358	0.577	0.211	0.350	0.027
small zone low grey level emphasis	0.481	0.377	0.461	0.425	0.701	0.411	0.050

small zone high grey level emphasis	0.213	0.221	0.386	0.564	0.130	0.341	0.145
large zone low grey level emphasis	0.353	0.374	0.374	0.067	0.000	0.213	0.343
large zone high grey level emphasis	0.865	0.603	0.596	0.766	0.857	0.780	0.793
zone percentage	0.830	0.628	0.806	0.766	0.384	0.773	0.561
grey level variance	0.346	0.304	0.437	0.638	0.103	0.494	0.535
zone size variance	0.784	0.700	0.699	0.612	0.281	0.925	0.835
zone size entropy	0.799	0.379	0.384	0.783	0.904	0.677	0.522
grey level non-uniformity	0.953	0.841	0.882	0.880	0.972	0.958	0.929
grey level non-uniformity normalized	0.259	0.486	0.481	0.524	0.492	0.641	0.293
zone size non-uniformity	0.922	0.232	0.232	0.898	0.982	0.730	0.505
zone size non-uniformity normalized	0.752	0.469	0.434	0.788	0.587	0.632	0.794
small distance emphasis	0.668	0.356	0.328	0.768	0.604	0.553	0.770
large distance emphasis	0.605	0.338	0.311	0.731	0.575	0.506	0.658
low grey level zone emphasis	0.442	0.462	0.530	0.298	0.600	0.183	0.000
high grey level zone emphasis	0.010	0.141	0.358	0.577	0.211	0.350	0.027
small distance low grey level emphasis	0.572	0.444	0.538	0.557	0.601	0.283	0.108
small distance high grey level emphasis	0.000	0.017	0.115	0.550	0.184	0.288	0.008
large distance low grey level emphasis	0.642	0.414	0.402	0.207	0.590	0.146	0.000
large distance high grey level emphasis	0.362	0.364	0.709	0.626	0.243	0.559	0.550
zone percentage	0.831	0.628	0.807	0.766	0.385	0.774	0.561
grey level variance	0.346	0.304	0.437	0.638	0.103	0.494	0.534
zone distance variance	0.573	0.368	0.342	0.685	0.538	0.495	0.590
zone distance entropy	0.677	0.521	0.561	0.674	0.737	0.622	0.584
grey level non-uniformity	0.860	0.893	0.899	0.900	0.783	0.938	0.944
grey level non-uniformity normalized	0.566	0.543	0.592	0.772	0.169	0.749	0.659
dependence count non-uniformity	0.925	0.746	0.908	0.953	0.923	0.911	0.928
dependence count non-uniformity normalized	0.849	0.681	0.789	0.795	0.410	0.842	0.826
low dependence emphasis	0.805	0.604	0.779	0.738	0.296	0.702	0.424
high dependence emphasis	0.852	0.636	0.639	0.876	0.386	0.581	0.921
low grey level count emphasis	0.486	0.450	0.488	0.353	0.632	0.077	0.207
high grey level count emphasis	0.077	0.000	0.336	0.575	0.187	0.390	0.000
low dependence low grey level emphasis	0.631	0.490	0.498	0.648	0.772	0.579	0.066
low dependence high grey level emphasis	0.651	0.187	0.502	0.595	0.056	0.516	0.000
high dependence low grey level emphasis	0.182	0.431	0.455	0.111	0.048	0.031	0.057
high dependence high grey level emphasis	0.626	0.608	0.636	0.887	0.575	0.668	0.381
grey level variance	0.609	0.412	0.682	0.739	0.222	0.701	0.396
dependence count variance	0.831	0.802	0.821	0.969	0.406	0.544	0.850
dependence count entropy	0.868	0.757	0.756	0.831	0.921	0.772	0.837
dependence count energy	0.669	0.543	0.549	0.712	0.902	0.550	0.704
mean	0.168	0.374	0.464	0.181	0.066	0.328	0.048
standard deviation	0.025	0.258	0.124	0.567	0.431	0.301	0.506
coefficient of variation	0.000	0.000	0.263	0.132	0.230	0.000	0.000
skewness	0.059	0.059	0.057	0.247	0.110	0.059	0.059
kurtosis	0.000	0.000	0.000	0.538	0.208	0.000	0.000

variance	0.002	0.295	0.068	0.609	0.515	0.323	0.629
median	0.023	0.035	0.216	0.000	0.773	0.157	0.071
percentile 10th	0.071	0.176	0.000	0.393	0.466	0.258	0.000
percentile 90th	0.025	0.265	0.256	0.565	0.311	0.243	0.633
interquartile range	0.086	0.323	0.261	0.641	0.777	0.311	0.667
range	0.010	0.218	0.000	0.689	0.230	0.284	0.186
mean absolut deviation	0.041	0.219	0.112	0.524	0.516	0.230	0.541
robust mean absolut deviation	0.071	0.176	0.102	0.417	0.625	0.116	0.539
energy	0.000	0.562	0.200	0.902	0.895	0.725	0.732
entropy	0.050	0.134	0.001	0.414	0.639	0.224	0.441
root mean square	0.026	0.255	0.137	0.553	0.351	0.292	0.469
uniformity	0.086	0.027	0.000	0.327	0.550	0.008	0.305
energy	0.631	0.000	0.000	0.527	0.749	0.096	0.141
entropy	0.774	0.290	0.205	0.855	0.871	0.530	0.443
contrast	0.388	0.266	0.142	0.512	0.573	0.269	0.368
correlation	0.184	0.224	0.210	0.314	0.512	0.253	0.220
homogeneity	0.263	0.276	0.283	0.657	0.797	0.342	0.378
homogeneity normalized	0.348	0.349	0.353	0.841	0.445	0.325	0.387
inverese difference	0.285	0.243	0.238	0.663	0.780	0.303	0.375
inverese difference normalized	0.321	0.359	0.365	0.848	0.439	0.353	0.353
variance	0.334	0.285	0.134	0.546	0.496	0.298	0.419
sum of average	0.000	0.444	0.020	0.582	0.436	0.087	0.000
sum of entropy	0.553	0.216	0.089	0.676	0.842	0.404	0.334
sum of variance	0.272	0.307	0.125	0.582	0.369	0.334	0.463
difference entropy	0.163	0.265	0.195	0.536	0.785	0.436	0.200
difference variance	0.439	0.320	0.082	0.558	0.438	0.348	0.245
information measures of correlation 1	0.837	0.840	0.923	0.892	0.926	0.922	0.853
information measures of correlation 2	0.697	0.712	0.782	0.690	0.831	0.809	0.869
maximal correlation coefficient	0.819	0.748	0.827	0.757	0.847	0.819	0.712
joint maximum	0.439	0.000	0.000	0.390	0.791	0.000	0.189
joint average	0.000	0.443	0.020	0.582	0.436	0.087	0.000
difference average	0.339	0.264	0.246	0.564	0.615	0.293	0.364
dissimilarity	0.339	0.264	0.246	0.564	0.615	0.293	0.364
inverse variance	0.229	0.589	0.710	0.691	0.550	0.666	0.078
autocorrelation	0.000	0.607	0.044	0.549	0.474	0.207	0.000
cluster tendency	0.272	0.307	0.125	0.582	0.369	0.334	0.463
cluster shade	0.099	0.103	0.073	0.365	0.000	0.242	0.000
cluster prominence	0.264	0.394	0.000	0.703	0.579	0.567	0.576
energy	0.000	0.037	0.007	0.439	0.652	0.032	0.100
entropy	0.000	0.180	0.077	0.500	0.734	0.299	0.348
contrast	0.375	0.263	0.141	0.523	0.494	0.271	0.376
correlation	0.400	0.446	0.441	0.385	0.380	0.457	0.512
homogeneity	0.237	0.270	0.277	0.649	0.703	0.323	0.351
homogeneity normalized	0.335	0.331	0.336	0.814	0.483	0.316	0.360
inverese difference	0.258	0.238	0.235	0.654	0.672	0.283	0.336
inverese difference normalized	0.300	0.343	0.350	0.829	0.479	0.331	0.331

variance	0.320	0.283	0.128	0.547	0.508	0.297	0.429
sum of average	0.000	0.444	0.020	0.581	0.434	0.088	0.000
sum of entropy	0.000	0.222	0.151	0.555	0.566	0.324	0.266
sum of variance	0.256	0.306	0.116	0.572	0.508	0.325	0.475
difference entropy	0.194	0.308	0.313	0.568	0.462	0.375	0.180
difference variance	0.469	0.324	0.098	0.582	0.390	0.358	0.275
information measures of correlation 1	0.254	0.525	0.502	0.359	0.724	0.597	0.000
information measures of correlation 2	0.246	0.500	0.556	0.340	0.559	0.655	0.221
maximal correlation coefficient	0.186	0.410	0.371	0.258	0.832	0.329	0.000
joint maximum	0.094	0.034	0.018	0.446	0.598	0.000	0.192
joint average	0.000	0.443	0.020	0.581	0.434	0.088	0.000
difference average	0.321	0.261	0.242	0.566	0.513	0.289	0.361
dissimilarity	0.321	0.261	0.242	0.566	0.513	0.289	0.361
inverse variance	0.225	0.601	0.713	0.694	0.501	0.682	0.186
autocorrelation	0.000	0.607	0.043	0.550	0.468	0.208	0.000
cluster tendency	0.256	0.306	0.116	0.572	0.508	0.325	0.475
cluster shade	0.204	0.077	0.078	0.330	0.000	0.172	0.000
cluster prominence	0.260	0.402	0.000	0.710	0.612	0.561	0.593
coarseness	0.930	0.935	0.936	0.707	0.846	0.681	0.615
contrast	0.572	0.608	0.789	0.745	0.529	0.335	0.292
busyness	0.484	0.148	0.140	0.199	0.000	0.112	0.000
complexity	0.000	0.489	0.000	0.798	0.684	0.621	0.579
strength	0.801	0.345	0.299	0.563	0.000	0.430	0.329
grey level non-uniformity	0.770	0.894	0.898	0.952	0.948	0.930	0.927
grey level non-uniformity normalized	0.120	0.081	0.015	0.326	0.552	0.086	0.347
zone size non-uniformity	0.955	0.921	0.932	0.985	0.954	0.961	0.959
zone size non-uniformity normalized	0.365	0.276	0.279	0.639	0.758	0.296	0.524
short runs emphasis	0.338	0.228	0.226	0.615	0.739	0.248	0.391
long runs emphasis	0.289	0.193	0.173	0.584	0.751	0.171	0.278
low grey level run emphasis	0.595	0.000	0.000	0.514	0.349	0.055	0.002
high grey level run emphasis	0.000	0.581	0.036	0.555	0.449	0.221	0.000
short run low grey level emphasis	0.602	0.000	0.000	0.530	0.364	0.083	0.054
short run high grey level emphasis	0.000	0.567	0.021	0.556	0.440	0.229	0.000
long run low grey level emphasis	0.572	0.000	0.000	0.468	0.306	0.000	0.000
long run high grey level emphasis	0.000	0.648	0.154	0.552	0.483	0.176	0.000
run percentage	0.359	0.284	0.269	0.629	0.765	0.280	0.490
grey level variance	0.081	0.312	0.066	0.607	0.510	0.358	0.561
run length variance	0.283	0.248	0.218	0.587	0.756	0.183	0.354
run entropy	0.253	0.235	0.156	0.461	0.688	0.399	0.654
grey level non-uniformity	0.770	0.895	0.899	0.952	0.948	0.931	0.927
grey level non-uniformity normalized	0.110	0.080	0.018	0.324	0.543	0.087	0.340
zone size non-uniformity	0.955	0.920	0.931	0.985	0.954	0.961	0.958
zone size non-uniformity normalized	0.367	0.275	0.278	0.639	0.757	0.298	0.519
short runs emphasis	0.350	0.245	0.241	0.629	0.757	0.276	0.436
long runs emphasis	0.305	0.231	0.209	0.599	0.772	0.199	0.346
low grey level run emphasis	0.600	0.000	0.000	0.521	0.349	0.058	0.000

high grey level run emphasis	0.000	0.581	0.036	0.555	0.449	0.221	0.000
short run low grey level emphasis	0.610	0.000	0.000	0.534	0.360	0.076	0.052
short run high grey level emphasis	0.000	0.568	0.021	0.556	0.440	0.230	0.000
long run low grey level emphasis	0.571	0.000	0.000	0.475	0.304	0.000	0.000
long run high grey level emphasis	0.000	0.642	0.141	0.551	0.484	0.172	0.000
run percentage	0.347	0.284	0.270	0.624	0.771	0.281	0.491
grey level variance	0.081	0.310	0.065	0.607	0.511	0.357	0.560
run length variance	0.283	0.266	0.237	0.588	0.762	0.204	0.375
run entropy	0.233	0.258	0.176	0.466	0.653	0.403	0.653
grey level non-uniformity	0.920	0.847	0.884	0.925	0.934	0.848	0.695
grey level non-uniformity normalized	0.153	0.068	0.000	0.242	0.468	0.394	0.000
zone size non-uniformity	0.666	0.379	0.602	0.780	0.913	0.521	0.746
zone size non-uniformity normalized	0.263	0.000	0.000	0.059	0.000	0.000	0.252
small zone emphasis	0.262	0.000	0.000	0.000	0.197	0.000	0.242
large zone emphasis	0.087	0.466	0.469	0.856	0.631	0.638	0.470
low grey level zone emphasis	0.640	0.000	0.000	0.451	0.597	0.135	0.296
high grey level zone emphasis	0.000	0.573	0.000	0.569	0.332	0.236	0.070
small zone low grey level emphasis	0.670	0.000	0.000	0.567	0.778	0.294	0.451
small zone high grey level emphasis	0.000	0.498	0.000	0.589	0.224	0.210	0.171
large zone low grey level emphasis	0.000	0.120	0.122	0.119	0.053	0.020	0.000
large zone high grey level emphasis	0.055	0.875	0.880	0.877	0.456	0.467	0.583
zone percentage	0.564	0.381	0.545	0.610	0.628	0.328	0.676
grey level variance	0.000	0.321	0.000	0.581	0.160	0.469	0.286
zone size variance	0.070	0.492	0.493	0.882	0.579	0.670	0.552
zone size entropy	0.840	0.251	0.139	0.726	0.870	0.499	0.592
grey level non-uniformity	0.920	0.847	0.884	0.925	0.934	0.848	0.695
grey level non-uniformity normalized	0.146	0.073	0.000	0.240	0.463	0.389	0.000
zone size non-uniformity	0.830	0.382	0.468	0.844	0.983	0.445	0.768
zone size non-uniformity normalized	0.731	0.707	0.687	0.701	0.815	0.693	0.623
small distance emphasis	0.678	0.609	0.589	0.617	0.835	0.553	0.607
large distance emphasis	0.575	0.581	0.604	0.514	0.766	0.579	0.638
low grey level zone emphasis	0.646	0.000	0.000	0.449	0.596	0.132	0.297
high grey level zone emphasis	0.000	0.573	0.000	0.569	0.332	0.236	0.070
small distance low grey level emphasis	0.735	0.000	0.000	0.461	0.620	0.155	0.364
small distance high grey level emphasis	0.000	0.527	0.006	0.553	0.223	0.228	0.144
large distance low grey level emphasis	0.259	0.073	0.248	0.446	0.299	0.155	0.232
large distance high grey level emphasis	0.657	0.632	0.028	0.577	0.603	0.252	0.003
zone percentage	0.563	0.382	0.545	0.611	0.628	0.328	0.678
grey level variance	0.000	0.321	0.000	0.581	0.160	0.469	0.286
zone distance variance	0.571	0.484	0.524	0.505	0.650	0.666	0.648
zone distance entropy	0.548	0.523	0.484	0.646	0.671	0.784	0.457
grey level non-uniformity	0.708	0.834	0.840	0.938	0.898	0.893	0.897
grey level non-uniformity normalized	0.094	0.028	0.000	0.327	0.548	0.008	0.305
dependence count non-uniformity	0.733	0.679	0.738	0.900	0.965	0.764	0.933
dependence count non-uniformity normalized	0.385	0.462	0.564	0.756	0.579	0.441	0.850
low dependence emphasis	0.495	0.284	0.447	0.536	0.438	0.278	0.605

high dependence emphasis	0.227	0.195	0.169	0.614	0.804	0.186	0.347
low grey level count emphasis	0.599	0.000	0.000	0.520	0.336	0.067	0.007
high grey level count emphasis	0.000	0.579	0.030	0.553	0.456	0.222	0.000
low dependence low grey level emphasis	0.665	0.322	0.346	0.726	0.809	0.393	0.455
low dependence high grey level emphasis	0.205	0.433	0.005	0.587	0.259	0.254	0.212
high dependence low grey level emphasis	0.000	0.000	0.000	0.262	0.001	0.000	0.000
high dependence high grey level emphasis	0.117	0.540	0.409	0.603	0.649	0.092	0.058
grey level variance	0.088	0.303	0.069	0.610	0.538	0.340	0.581
dependence count variance	0.204	0.246	0.226	0.683	0.852	0.222	0.428
dependence count entropy	0.917	0.748	0.783	0.898	0.878	0.847	0.820
dependence count energy	0.919	0.560	0.573	0.812	0.783	0.746	0.513
mean	0.282	0.713	0.482	0.661	0.617	0.650	0.620
standard deviation	0.002	0.462	0.739	0.792	0.705	0.674	0.412
coefficient of variation	0.427	0.425	0.572	0.712	0.706	0.744	0.000
skewness	0.615	0.615	0.615	0.507	0.473	0.615	0.615
kurtosis	0.572	0.572	0.568	0.636	0.000	0.572	0.572
variance	0.000	0.417	0.694	0.835	0.738	0.606	0.457
median	0.277	0.590	0.348	0.622	0.594	0.559	0.420
percentile 10th	0.452	0.801	0.688	0.445	0.635	0.580	0.410
percentile 90th	0.184	0.296	0.181	0.774	0.445	0.752	0.599
interquartile range	0.000	0.178	0.558	0.503	0.473	0.336	0.486
range	0.040	0.339	0.632	0.577	0.386	0.616	0.364
mean absolut deviation	0.000	0.374	0.698	0.771	0.729	0.564	0.545
robust mean absolut deviation	0.000	0.213	0.549	0.545	0.608	0.353	0.482
energy	0.051	0.816	0.697	0.802	0.941	0.600	0.861
entropy	0.458	0.200	0.403	0.601	0.928	0.428	0.287
root mean square	0.260	0.570	0.256	0.691	0.598	0.540	0.357
uniformity	0.428	0.224	0.385	0.535	0.858	0.387	0.215
energy	0.667	0.629	0.635	0.654	0.732	0.612	0.629
entropy	0.908	0.874	0.887	0.924	0.897	0.884	0.846
contrast	0.755	0.535	0.732	0.859	0.590	0.809	0.693
correlation	0.871	0.873	0.873	0.868	0.749	0.867	0.873
homogeneity	0.846	0.734	0.881	0.838	0.167	0.770	0.647
homogeneity normalized	0.763	0.744	0.742	0.772	0.495	0.767	0.764
inverese difference	0.842	0.705	0.880	0.856	0.324	0.774	0.691
inverese difference normalized	0.783	0.764	0.763	0.787	0.461	0.776	0.779
variance	0.588	0.436	0.664	0.859	0.770	0.720	0.620
sum of average	0.667	0.591	0.715	0.597	0.320	0.408	0.362
sum of entropy	0.772	0.673	0.727	0.866	0.881	0.761	0.750
sum of variance	0.349	0.363	0.593	0.783	0.822	0.649	0.703
difference entropy	0.597	0.502	0.643	0.769	0.866	0.654	0.521
difference variance	0.644	0.427	0.615	0.834	0.789	0.717	0.512
information measures of correlation 1	0.938	0.848	0.916	0.890	0.906	0.916	0.898
information measures of correlation 2	0.650	0.719	0.702	0.406	0.107	0.482	0.689

maximal correlation coefficient	0.885	0.796	0.795	0.375	0.950	0.820	0.770
joint maximum	0.680	0.467	0.477	0.470	0.737	0.506	0.467
joint average	0.667	0.591	0.717	0.597	0.320	0.408	0.362
difference average	0.779	0.621	0.832	0.888	0.508	0.823	0.748
dissimilarity	0.779	0.621	0.832	0.888	0.508	0.823	0.748
inverse variance	0.669	0.767	0.877	0.867	0.000	0.825	0.495
autocorrelation	0.580	0.656	0.739	0.444	0.341	0.188	0.251
cluster tendency	0.349	0.363	0.593	0.783	0.822	0.649	0.703
cluster shade	0.543	0.801	0.804	0.803	0.815	0.870	0.738
cluster prominence	0.385	0.459	0.598	0.875	0.850	0.830	0.707
energy	0.474	0.448	0.526	0.476	0.825	0.492	0.231
entropy	0.553	0.357	0.507	0.734	0.885	0.552	0.315
contrast	0.764	0.532	0.739	0.876	0.698	0.793	0.702
correlation	0.871	0.872	0.872	0.879	0.804	0.866	0.874
homogeneity	0.835	0.728	0.874	0.847	0.356	0.770	0.628
homogeneity normalized	0.768	0.744	0.742	0.774	0.541	0.765	0.767
inverse difference	0.831	0.703	0.876	0.859	0.535	0.776	0.679
inverse difference normalized	0.783	0.762	0.762	0.786	0.510	0.769	0.781
variance	0.597	0.439	0.664	0.862	0.782	0.715	0.618
sum of average	0.666	0.591	0.717	0.594	0.308	0.406	0.361
sum of entropy	0.304	0.455	0.642	0.722	0.845	0.673	0.591
sum of variance	0.389	0.368	0.594	0.794	0.800	0.658	0.694
difference entropy	0.745	0.617	0.806	0.800	0.849	0.784	0.641
difference variance	0.673	0.473	0.641	0.835	0.706	0.773	0.504
information measures of correlation 1	0.749	0.608	0.671	0.675	0.318	0.800	0.597
information measures of correlation 2	0.670	0.458	0.564	0.448	0.577	0.637	0.633
maximal correlation coefficient	0.573	0.581	0.608	0.576	0.347	0.742	0.737
joint maximum	0.746	0.568	0.582	0.315	0.679	0.628	0.282
joint average	0.666	0.591	0.717	0.594	0.308	0.406	0.361
difference average	0.781	0.615	0.836	0.893	0.639	0.812	0.756
dissimilarity	0.781	0.615	0.836	0.893	0.639	0.812	0.756
inverse variance	0.660	0.762	0.874	0.863	0.201	0.808	0.462
autocorrelation	0.581	0.655	0.739	0.450	0.330	0.191	0.249
cluster tendency	0.389	0.368	0.594	0.794	0.800	0.658	0.694
cluster shade	0.550	0.788	0.791	0.801	0.817	0.862	0.739
cluster prominence	0.399	0.437	0.572	0.872	0.842	0.801	0.700
coarseness	0.756	0.828	0.840	0.881	0.543	0.823	0.855
contrast	0.850	0.807	0.830	0.509	0.184	0.949	0.946
busyness	0.409	0.263	0.433	0.516	0.473	0.381	0.447
complexity	0.602	0.189	0.606	0.561	0.867	0.540	0.372
strength	0.911	0.749	0.795	0.793	0.446	0.857	0.456
grey level non-uniformity	0.893	0.918	0.943	0.922	0.894	0.881	0.933
grey level non-uniformity normalized	0.418	0.222	0.399	0.556	0.865	0.379	0.256
zone size non-uniformity	0.971	0.955	0.957	0.964	0.940	0.960	0.960
zone size non-uniformity normalized	0.891	0.712	0.869	0.853	0.000	0.741	0.784
short runs emphasis	0.892	0.711	0.862	0.854	0.000	0.739	0.776

long runs emphasis	0.887	0.732	0.862	0.833	0.000	0.775	0.832
low grey level run emphasis	0.864	0.317	0.600	0.493	0.682	0.615	0.676
high grey level run emphasis	0.492	0.583	0.725	0.554	0.423	0.231	0.163
short run low grey level emphasis	0.863	0.339	0.626	0.492	0.693	0.635	0.715
short run high grey level emphasis	0.495	0.577	0.723	0.560	0.419	0.237	0.135
long run low grey level emphasis	0.858	0.250	0.569	0.500	0.637	0.528	0.550
long run high grey level emphasis	0.490	0.605	0.729	0.538	0.437	0.202	0.263
run percentage	0.895	0.728	0.870	0.844	0.000	0.763	0.803
grey level variance	0.614	0.413	0.698	0.828	0.741	0.602	0.472
run length variance	0.872	0.756	0.874	0.808	0.000	0.774	0.858
run entropy	0.584	0.194	0.392	0.612	0.939	0.468	0.650
grey level non-uniformity	0.893	0.919	0.943	0.922	0.895	0.881	0.933
grey level non-uniformity normalized	0.422	0.212	0.393	0.544	0.867	0.392	0.248
zone size non-uniformity	0.971	0.955	0.958	0.964	0.940	0.960	0.959
zone size non-uniformity normalized	0.889	0.711	0.870	0.856	0.000	0.740	0.781
short runs emphasis	0.890	0.716	0.867	0.847	0.000	0.744	0.785
long runs emphasis	0.890	0.738	0.867	0.825	0.000	0.774	0.829
low grey level run emphasis	0.862	0.323	0.611	0.483	0.684	0.613	0.677
high grey level run emphasis	0.492	0.583	0.725	0.554	0.423	0.231	0.163
short run low grey level emphasis	0.864	0.343	0.622	0.483	0.695	0.636	0.713
short run high grey level emphasis	0.501	0.577	0.723	0.560	0.419	0.237	0.135
long run low grey level emphasis	0.858	0.249	0.570	0.496	0.638	0.527	0.552
long run high grey level emphasis	0.491	0.604	0.729	0.538	0.437	0.202	0.264
run percentage	0.896	0.726	0.871	0.845	0.000	0.767	0.808
grey level variance	0.613	0.413	0.698	0.828	0.742	0.602	0.472
run length variance	0.871	0.754	0.871	0.813	0.000	0.779	0.853
run entropy	0.573	0.229	0.408	0.624	0.942	0.467	0.626
grey level non-uniformity	0.964	0.918	0.885	0.903	0.952	0.956	0.915
grey level non-uniformity normalized	0.443	0.260	0.529	0.458	0.941	0.533	0.013
zone size non-uniformity	0.686	0.194	0.609	0.800	0.922	0.543	0.601
zone size non-uniformity normalized	0.717	0.126	0.477	0.835	0.000	0.639	0.555
small zone emphasis	0.653	0.022	0.350	0.819	0.000	0.593	0.563
large zone emphasis	0.843	0.709	0.754	0.801	0.000	0.647	0.512
low grey level zone emphasis	0.823	0.255	0.463	0.455	0.859	0.648	0.798
high grey level zone emphasis	0.352	0.518	0.679	0.537	0.361	0.235	0.031
small zone low grey level emphasis	0.802	0.394	0.419	0.540	0.791	0.835	0.658
small zone high grey level emphasis	0.428	0.387	0.611	0.598	0.331	0.286	0.000
large zone low grey level emphasis	0.804	0.000	0.245	0.716	0.263	0.338	0.476
large zone high grey level emphasis	0.691	0.747	0.754	0.275	0.451	0.611	0.487
zone percentage	0.848	0.569	0.787	0.898	0.000	0.754	0.776
grey level variance	0.698	0.473	0.731	0.801	0.579	0.649	0.153
zone size variance	0.857	0.758	0.764	0.748	0.087	0.635	0.437
zone size entropy	0.855	0.816	0.822	0.796	0.936	0.803	0.810
grey level non-uniformity	0.964	0.918	0.885	0.903	0.952	0.956	0.915
grey level non-uniformity normalized	0.464	0.261	0.523	0.464	0.945	0.528	0.006
zone size non-uniformity	0.885	0.680	0.772	0.934	0.937	0.800	0.848

zone size non-uniformity normalized	0.736	0.746	0.749	0.836	0.799	0.736	0.513
small distance emphasis	0.756	0.744	0.746	0.883	0.791	0.789	0.503
large distance emphasis	0.819	0.754	0.775	0.886	0.778	0.812	0.560
low grey level zone emphasis	0.822	0.250	0.451	0.462	0.861	0.655	0.799
high grey level zone emphasis	0.352	0.518	0.679	0.537	0.361	0.235	0.031
small distance low grey level emphasis	0.837	0.240	0.328	0.419	0.859	0.909	0.866
small distance high grey level emphasis	0.470	0.526	0.693	0.621	0.364	0.288	0.166
large distance low grey level emphasis	0.818	0.078	0.141	0.087	0.811	0.358	0.685
large distance high grey level emphasis	0.349	0.509	0.678	0.330	0.364	0.188	0.033
zone percentage	0.849	0.569	0.787	0.899	0.000	0.754	0.776
grey level variance	0.698	0.473	0.731	0.801	0.579	0.649	0.153
zone distance variance	0.830	0.747	0.749	0.846	0.726	0.777	0.555
zone distance entropy	0.814	0.514	0.654	0.695	0.944	0.698	0.368
grey level non-uniformity	0.889	0.918	0.942	0.921	0.886	0.879	0.928
grey level non-uniformity normalized	0.442	0.224	0.388	0.537	0.858	0.393	0.220
dependence count non-uniformity	0.897	0.697	0.836	0.900	0.911	0.729	0.861
dependence count non-uniformity normalized	0.883	0.664	0.832	0.910	0.000	0.793	0.815
low dependence emphasis	0.829	0.438	0.714	0.893	0.000	0.747	0.775
high dependence emphasis	0.865	0.798	0.871	0.745	0.135	0.808	0.863
low grey level count emphasis	0.861	0.337	0.625	0.484	0.668	0.602	0.657
high grey level count emphasis	0.502	0.587	0.727	0.557	0.429	0.236	0.182
low dependence low grey level emphasis	0.903	0.702	0.731	0.620	0.735	0.927	0.893
low dependence high grey level emphasis	0.675	0.392	0.617	0.658	0.355	0.346	0.000
high dependence low grey level emphasis	0.899	0.104	0.424	0.559	0.029	0.457	0.574
high dependence high grey level emphasis	0.678	0.761	0.781	0.346	0.611	0.451	0.627
grey level variance	0.602	0.411	0.697	0.832	0.747	0.601	0.496
dependence count variance	0.796	0.865	0.877	0.702	0.493	0.868	0.900
dependence count entropy	0.942	0.896	0.898	0.868	0.956	0.916	0.938
dependence count energy	0.910	0.704	0.707	0.705	0.958	0.864	0.933

Table S5: Number of robust features based on Lin's concordance coefficients using different normalization approaches.

Normalization	Stable features, CCC >0.9				
	Shape	Intensity	Texture	Wavelets	All
FBN	14/18	0/17	3/137	52/1232	69/1404 (4.9%)
FBS1	14/18	0/17	8/137	17/1232	39/1404 (2.7%)
FBS2	14/18	0/17	6/137	24/1232	44/1404 (3.1%)
HM_VOI	14/18	9/17	37/137	61/1232	98/1404 (6.9%)
HM_brain	14/18	0/17	11/137	56/1232	81/1404 (5.7%)
ZS_VOI	14/18	3/17	14/137	51/1232	82/1404 (5.8%)
ZS_brain	14/18	1/17	10/137	44/1232	68/1404 (4.8%)

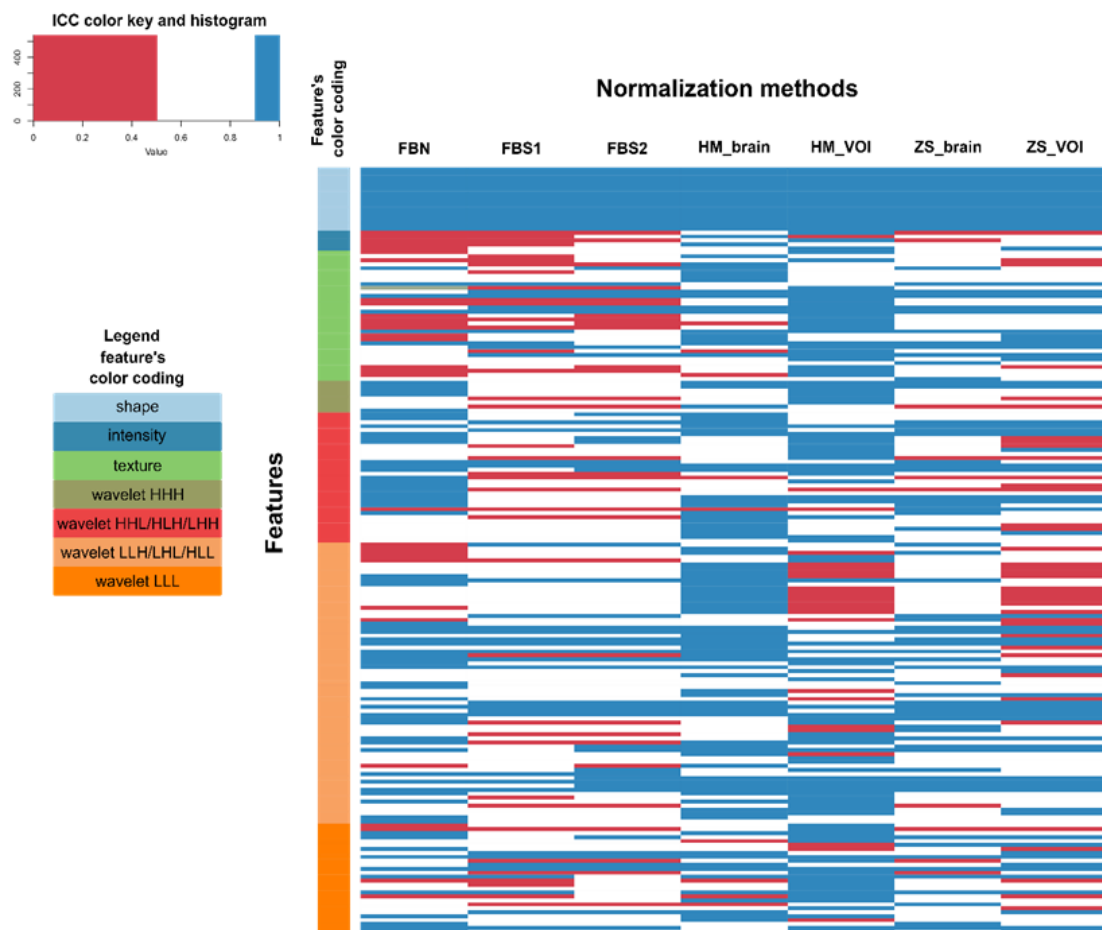


Figure S1: ICC heat map for various intensity normalization types, where red indicates poor agreement, blue stable features and white moderate agreement. The type of features was also color coded to depict impact of different normalization methods on respective feature types.

86	99	103	138	142	111	113	FBN
	54	65	118	130	85	81	FBS1
		61	122	133	88	86	FBS2
			111	169	131	125	HM_brain
				115	143	134	HM_VOI
					81	94	ZS_brain
						75	ZS_VOI
FBN	FBS1	FBS2	HM_brain	HM_VOI	ZS_brain	ZS_VOI	

Figure S2: Amount of stable features which can be achieved by pairwise combination of different normalization methods.