

Index	Name	Meaning	Type
0	label	Label for classification e.g. of fire and not fire, defined for frame $i^{th}$ , label( $i$ )	nominal
1	iVecCount	Amount of vector found in frame $i^{th}$ , iVecCount( $i$ )	int
2	dRadius	Average radius (length/velocity) of vectors found in frame $i^{th}$ , denoted as dRadius( $i$ )	double
3	dCohIndex	Motion coherence index found in frame $i^{th}$ , dCohIndex( $i$ )	double
4	vardRadius	Absolute difference of two average radius in two consecutive frames, calculated by $\text{abs}( \text{dRadius}(i^{th}-1) - \text{dRadius}(i^{th}) )$	double
5	vardCohIndex	Absolute difference of two coherence indices in two consecutive frames, calculated by $\text{abs}( \text{dCohIndex}(i^{th}-1) - \text{dCohIndex}(i^{th}) )$	double
6	d_varRad	<p>The standardization of vector radius (<math>Z_r(i^{th})</math>)</p> $Z = \frac{x - \mu}{\sigma}$ <p>is calculated by <math>\text{d\_varRad}(i^{th}) = (\text{dRadius}(i^{th}) - \text{d\_AvgRadius}_N) / \text{d\_StdRad}_N</math>, where the <math>\text{d\_AvgRadius}_N</math> was calculated from the prior 30 frames (<math>N=30</math>) found before 360 recorded frames in a series of dataset, and <math>\text{d\_StdRad}_N</math> is standard deviation (<math>\sigma</math>) of radius of samples (<math>N = 30</math> samples)</p> $\sigma = \sqrt{\frac{1}{N} \sum_{i=1}^N (x_i - \mu)^2}, \text{ where } \mu = \frac{1}{N} \sum_{i=1}^N x_i.$	double
7	d_varCoh	<p>The standardization of motion coherence (<math>Z_c(i^{th})</math>)</p> $Z = \frac{x - \mu}{\sigma}$	

		<p>is calculated by  <math>d\_varCoh(i^{th}) = (dCohIndex(i^{th}) - d\_AvgCoh_N) / d\_StdCoh_N</math>, where the <math>d\_AvgCoh_N</math> was calculated from the prior 30 frames (<math>N=30</math>) found before 360 recorded frames in a series of dataset, and <math>d\_StdCoh_N</math> is standard deviation (<math>\sigma</math>) of motion coherence index of samples (<math>N = 30</math> samples)</p> $\sigma = \sqrt{\frac{1}{N} \sum_{i=1}^N (x_i - \mu)^2}, \text{ where } \mu = \frac{1}{N} \sum_{i=1}^N x_i.$	double
8	dCos	Average of Cosine value of vectors found in frame $i^{th}$	double
9	dSin	Average of Sine value of vectors found in frame $i^{th}$	double
10	ia5Radius_v0	1 <sup>st</sup> highest radius value frequently max(ROI(Vr)) found in frame $i^{th}$	int
11	ia5Radius_v1	2 <sup>nd</sup> highest radius value frequently max(ROI(Vr)) found in frame $i^{th}$	int
12	ia5Radius_v2	3 <sup>rd</sup> highest radius value frequently max(ROI(Vr)) found in frame $i^{th}$	int
13	ia5Radius_v3	4 <sup>th</sup> highest radius value frequently max(ROI(Vr)) found in frame $i^{th}$	int
14	ia5Radius_v4	5 <sup>th</sup> highest radius value frequently max(ROI(Vr)) found in frame $i^{th}$	int
15	ia5Radius_f0	frequency of 1 <sup>st</sup> high radius value frequently mode(ROI(Vr)) found in frame $i^{th}$	int
16	ia5Radius_f1	frequency of 2 <sup>nd</sup> high radius value frequently mode(ROI(Vr)) found in frame $i^{th}$	int
17	ia5Radius_f2	frequency of 3 <sup>rd</sup> high radius value frequently mode(ROI(Vr)) found in frame $i^{th}$	int

18	ia5Radius_f3	frequency of 4 <sup>th</sup> high radius value frequently mode(ROI(Vr)) found in frame $i^{th}$	int
19	ia5Radius_f4	frequency of 5 <sup>th</sup> high radius value frequently mode(ROI(Vr)) found in frame $i^{th}$	int
20	da5Radius_%0	% frequency of 1 <sup>st</sup> radius value in top 5 found in frame $i^{th}$	double
21	da5Radius_%1	% frequency of 2 <sup>nd</sup> radius value in top 5 found in frame $i^{th}$	double
22	da5Radius_%2	% frequency of 3 <sup>rd</sup> radius value in top 5 found in frame $i^{th}$	double
23	da5Radius_%3	% frequency of 4 <sup>th</sup> radius value in top 5 found in frame $i^{th}$	double
24	da5Radius_%4	% frequency of 5 <sup>th</sup> radius value in top 5, where sum of da5Radius_%j, $j = 0, 1, 2, 3, 4$ , is equal to 100, found in frame $i^{th}$	double
25	da5Degree_v0	1 <sup>st</sup> high degree of angle of vectors, frequently max(ROI(Va)) found in frame $i^{th}$	double
26	da5Degree_v1	2 <sup>nd</sup> high degree of angle of vectors, frequently max(ROI(Va)) found in frame $i^{th}$	double
27	da5Degree_v2	3 <sup>rd</sup> high degree of angle of vectors, frequently max(ROI(Va)) found in frame $i^{th}$	double
28	da5Degree_v3	4 <sup>th</sup> high degree of angle of vectors, frequently max(ROI(Va)) found in frame $i^{th}$	double
29	da5Degree_v4	5 <sup>th</sup> high degree of angle of vectors, frequently max(ROI(Va)) found in frame $i^{th}$	double
30	da5Degree_f0	frequency of 1 <sup>st</sup> high degree value mode(ROI(Va)) found in frame $i^{th}$	double
31	da5Degree_f1	frequency of 2 <sup>nd</sup> high degree value mode(ROI(Va)) found in frame $i^{th}$	double

32	da5Degree_f2	frequency of 3 <sup>rd</sup> high degree value mode(ROI(Va)) found in frame $i^{th}$	double
33	da5Degree_f3	frequency of 4 <sup>th</sup> high degree value mode(ROI(Va)) found in frame $i^{th}$	double
34	da5Degree_f4	frequency of 5 <sup>th</sup> high degree value mode(ROI(Va)) found in frame $i^{th}$	double
35	da5Degree_%0	% frequency of 1 <sup>st</sup> high degree in top 5 found in frame $i^{th}$	double
36	da5Degree_%1	% frequency of 2 <sup>nd</sup> high degree in top 5 found in frame $i^{th}$	double
37	da5Degree_%2	% frequency of 3 <sup>rd</sup> high degree in top 5 found in frame $i^{th}$	double
38	da5Degree_%3	% frequency of 4 <sup>th</sup> high degree in top 5 found in frame $i^{th}$	double
39	da5Degree_%4	% frequency of 5 <sup>th</sup> high degree in top 5, where sum of da5Degree_% $j, j = 0, 1, 2, 3, 4$ , is equal to 100 found in frame $i^{th}$	double
40	iRGBTotal	Amount of pursued pixels (collected from SBs) found in frame $i^{th}$	int
41	iRMean	Average of red amount calculated from pursued pixels found in frame $i^{th}$	int
42	iGMean	Average of green amount calculated from pursued pixels found in frame $i^{th}$	int
43	iBMean	Average of blue amount calculated from pursued pixels found in frame $i^{th}$	int
44	d_luminance	Average of luminance $d\_luminance = 0.299*iRMean + 0.587*iGMean + 0.114*iBMean$ found in frame $i^{th}$	double
45	ia5R_v0	1 <sup>st</sup> high value of red max(ROI(R)) found in frame $i^{th}$	int

46	ia5R_v1	2 <sup>nd</sup> high value of red max(ROI(R)) found in frame $i^{th}$	int
47	ia5R_v2	3 <sup>rd</sup> high value of red max(ROI(R)) found in frame $i^{th}$	int
48	ia5R_v3	4 <sup>th</sup> high value of red max(ROI(R)) found in frame $i^{th}$	int
49	ia5R_v4	5 <sup>th</sup> high value of red max(ROI(R)) found in frame $i^{th}$	int
50	ia5R_f0	frequency of 1 <sup>st</sup> high value of red mode(ROI(R)) found in frame $i^{th}$	int
51	ia5R_f1	frequency of 2 <sup>nd</sup> high value of red mode(ROI(R)) found in frame $i^{th}$	int
52	ia5R_f2	frequency of 3 <sup>rd</sup> high value of red mode(ROI(R)) found in frame $i^{th}$	int
53	ia5R_f3	frequency of 4 <sup>th</sup> high value of red mode(ROI(R)) found in frame $i^{th}$	int
54	ia5R_f4	frequency of 5 <sup>th</sup> high value of red mode(ROI(R)) found in frame $i^{th}$	int
55	ia5R_%0	% frequency of 1 <sup>st</sup> high value of red found in frame $i^{th}$	int
56	ia5R_%1	% frequency of 2 <sup>nd</sup> high value of red found in frame $i^{th}$	int
57	ia5R_%2	% frequency of 3 <sup>rd</sup> high value of red found in frame $i^{th}$	int
58	ia5R_%3	% frequency of 4 <sup>th</sup> high value of red found in frame $i^{th}$	int
59	ia5R_%4	% frequency of 5 <sup>th</sup> high value of red found in frame $i^{th}$	int
60	ia5G_v0	1 <sup>st</sup> high value of green max(ROI(G)) found in frame $i^{th}$	int

61	ia5G_v1	2 <sup>nd</sup> high value of green max(ROI(G)) found in frame $i^{th}$	int
62	ia5G_v2	3 <sup>rd</sup> high value of green max(ROI(G)) found in frame $i^{th}$	int
63	ia5G_v3	4 <sup>th</sup> high value of green max(ROI(G)) found in frame $i^{th}$	int
64	ia5G_v4	5 <sup>th</sup> high value of green max(ROI(G)) found in frame $i^{th}$	int
65	ia5G_f0	frequency of 1 <sup>st</sup> high value of green mode(ROI(G)) found in frame $i^{th}$	int
66	ia5G_f1	frequency of 2 <sup>nd</sup> high value of green mode(ROI(G)) found in frame $i^{th}$	int
67	ia5G_f2	frequency of 3 <sup>rd</sup> high value of green mode(ROI(G)) found in frame $i^{th}$	int
68	ia5G_f3	frequency of 4 <sup>th</sup> high value of green mode(ROI(G)) found in frame $i^{th}$	int
69	ia5G_f4	frequency of 5 <sup>th</sup> high value of green mode(ROI(G)) found in frame $i^{th}$	int
70	ia5G_%0	% frequency 1 <sup>st</sup> high value of green found in frame $i^{th}$	int
71	ia5G_%1	% frequency of 2 <sup>nd</sup> high value of green found in frame $i^{th}$	int
72	ia5G_%2	% frequency of 3 <sup>rd</sup> high value of green found in frame $i^{th}$	int
73	ia5G_%3	% frequency of 4 <sup>th</sup> high value of green found in frame $i^{th}$	int
74	ia5G_%4	% frequency of 5 <sup>th</sup> high value of green found in frame $i^{th}$	int

75	ia5B_v0	1 <sup>st</sup> high value of blue max(ROI(B)) found in frame $i^{th}$	int
76	ia5B_v1	2 <sup>nd</sup> high value of blue max(ROI(B)) found in frame $i^{th}$	int
77	ia5B_v2	3 <sup>rd</sup> high value of blue max(ROI(B)) found in frame $i^{th}$	int
78	ia5B_v3	4 <sup>th</sup> high value of blue max(ROI(B)) found in frame $i^{th}$	int
79	ia5B_v4	5 <sup>th</sup> high value of blue max(ROI(B)) found in frame $i^{th}$	int
80	ia5B_f0	frequency of 1 <sup>st</sup> high value of blue mode(ROI(B)) found in frame $i^{th}$	int
81	ia5B_f1	frequency of 2 <sup>nd</sup> high value of blue mode(ROI(B)) found in frame $i^{th}$	int
82	ia5B_f2	frequency of 3 <sup>rd</sup> high value of blue mode(ROI(B)) found in frame $i^{th}$	int
83	ia5B_f3	frequency of 4 <sup>th</sup> high value of blue mode(ROI(B)) found in frame $i^{th}$	int
84	ia5B_f4	frequency of 5 <sup>th</sup> high value of blue mode(ROI(B)) found in frame $i^{th}$	int
85	ia5B_%0	% frequency of 1 <sup>st</sup> high value of blue found in frame $i^{th}$	int
86	ia5B_%1	% frequency of 2 <sup>nd</sup> high value of blue found in frame $i^{th}$	int
87	ia5B_%2	% frequency of 3 <sup>rd</sup> high value of blue found in frame $i^{th}$	int
88	ia5B_%3	% frequency of 4 <sup>th</sup> high value of blue found in frame $i^{th}$	int
89	ia5B_%4	% frequency of 5 <sup>th</sup> high value of blue found in frame $i^{th}$	int