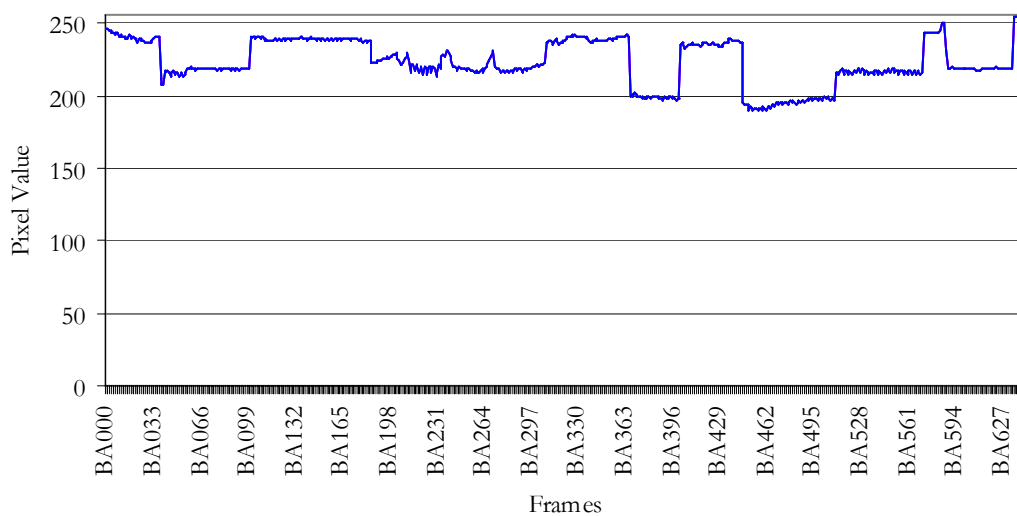# Appendix J

Edge Detection

The value of pixels was used in our work to represent information including: the distribution of participant fixations across a video frame; the existence of an edge / colour contrast in an original image frame; as well the difference between two frames, i.e. the movement. As pixels have a red, green and blue value that lies between 0 (black) and 255 (white), a change in the distribution of pixel values represents a change in the colours used in the video frame. A change over time can be observed by considering the variation in the average pixel value for each video frame. Although rudimentary, analysis of multiple factors provides a good idea of the video contents. The following analysis of pixel values shows the average and standard deviation of pixel values, which represent the number of edges (a pixel value moving towards zero, suggests a greater number of edges).
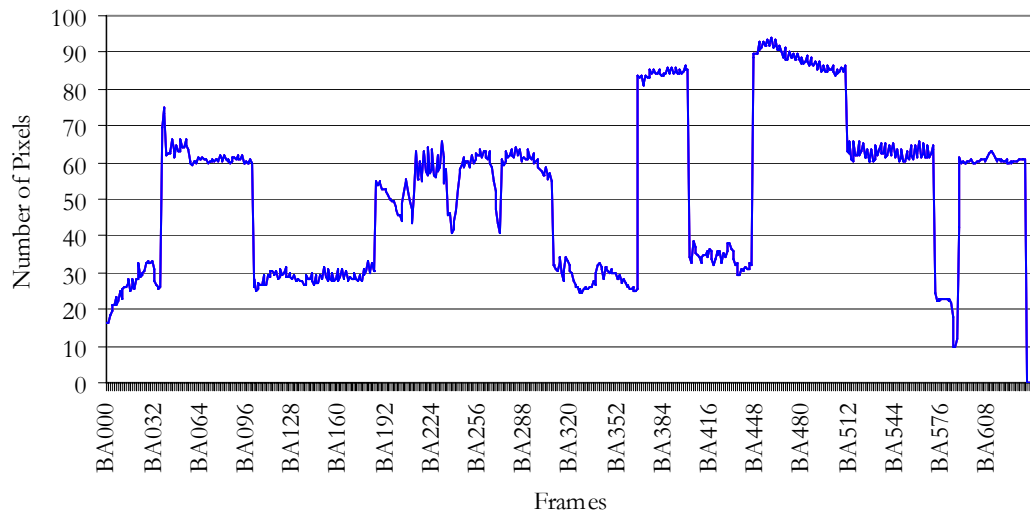
BA – BATH COMMERCIAL

Edge RGB Average Frame Values - BA

BA: The average edge image pixel values – for all frames. (in pixel value)
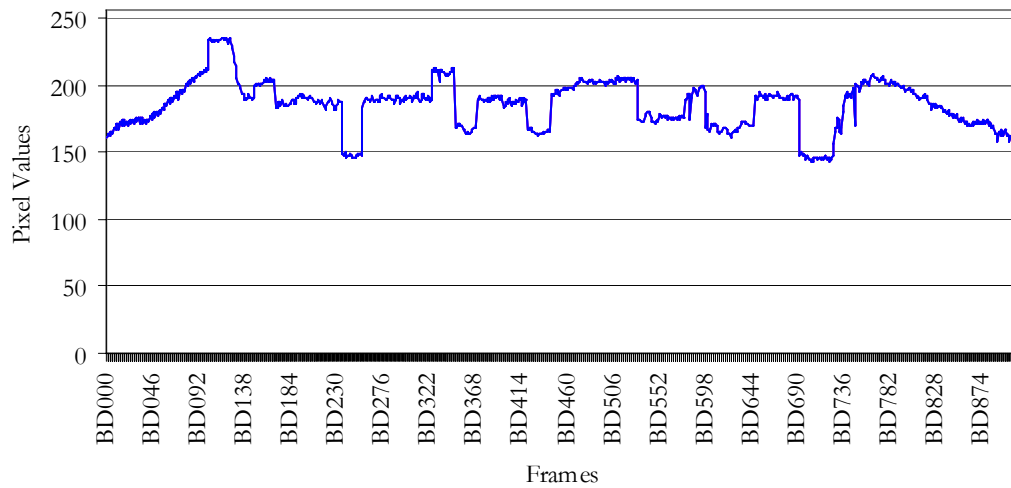
Edge RGB Frame Stand Deviation - BA

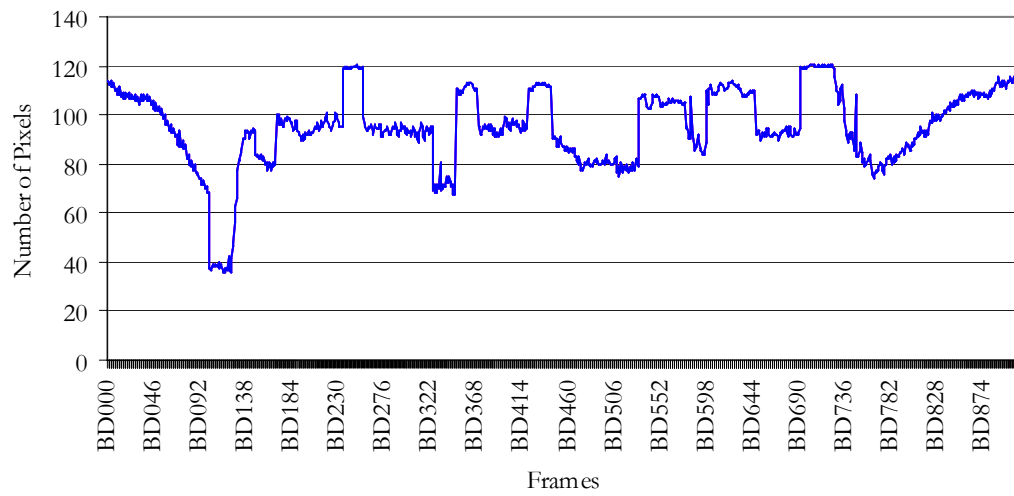BA: The edge image pixel standard deviation values – for all frame. (in pixel value)

BD – BAND

Edge RGB Average Frame Values - BD

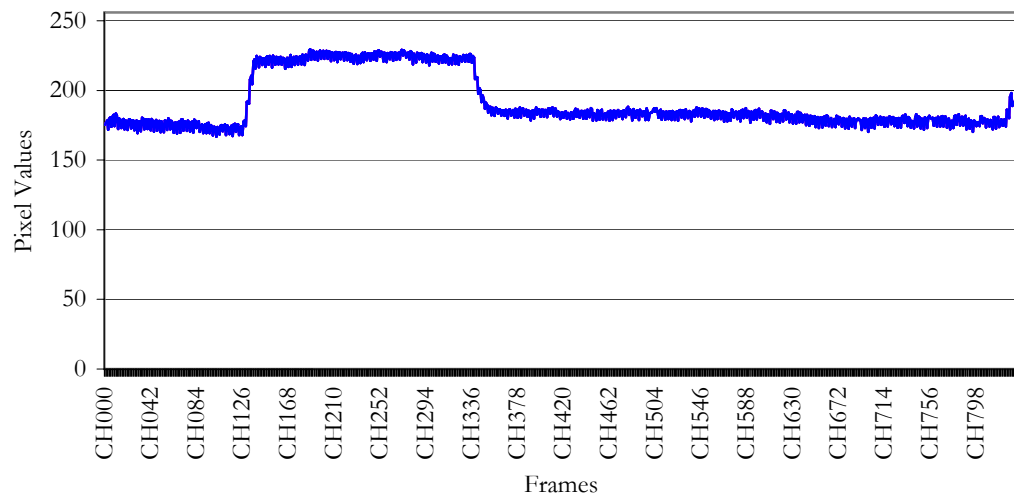BD: The average edge image pixel values – for all frames. (in pixel value)

Edge RGB Frame Stand Deviation - BD

BD: The edge image pixel standard deviation values – for all frame. (in pixel value)
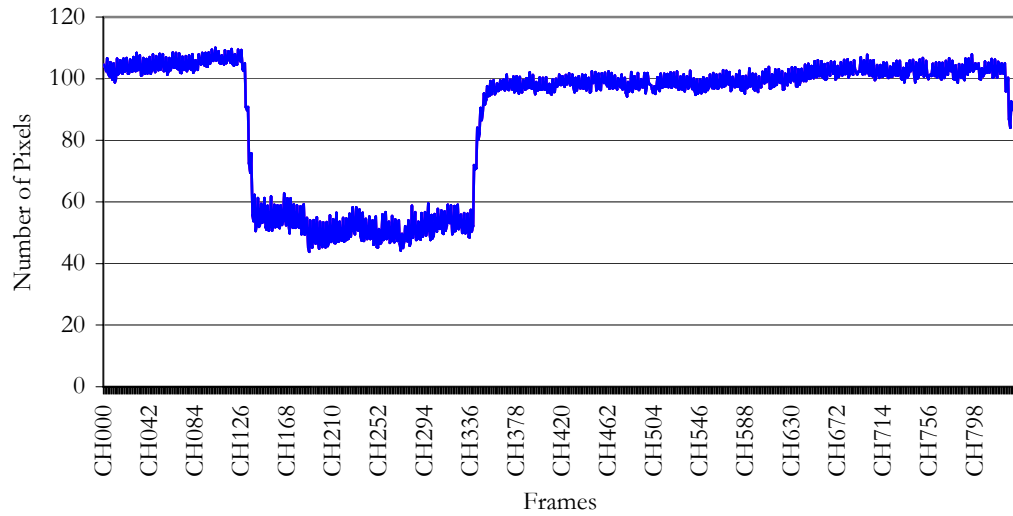
CH – CHORUS

Edge RGB Average Frame Values - CH

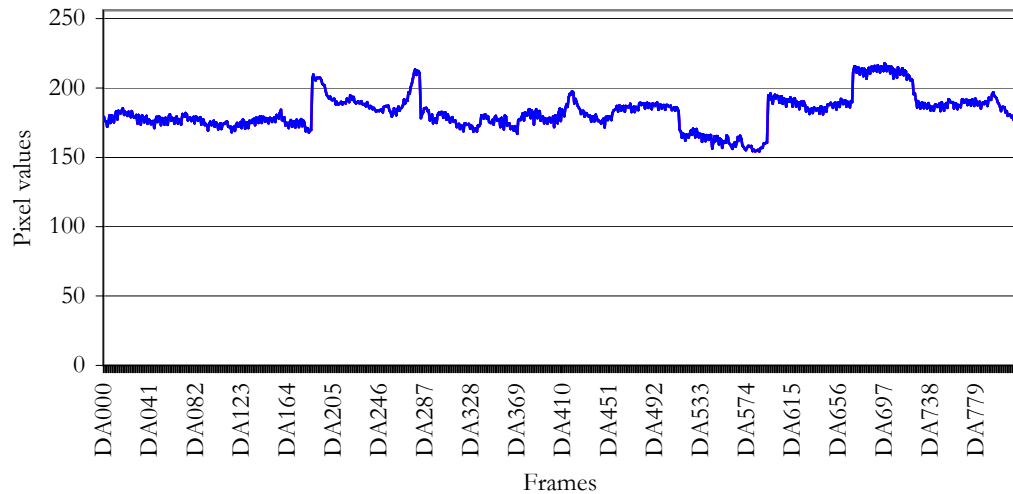CH: The average edge image pixel values – for all frames. (in pixel value)

Edge RGB Frame Standard Deviation - CH

CH: The edge image pixel standard deviation values – for all frame. (in pixel value)
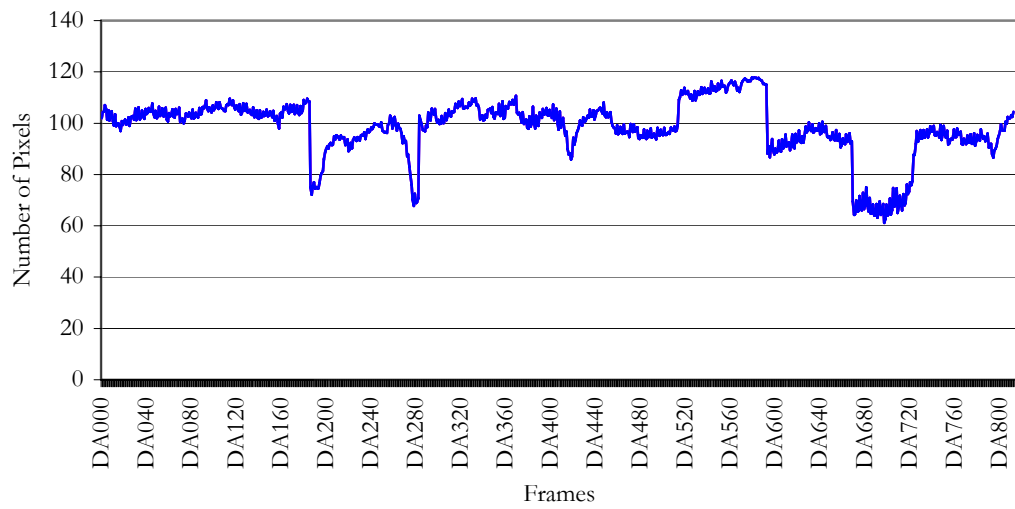
DA – ANIMATION

Edge RGB Average Frame Values - DA

DA: The average edge image pixel values – for all frames. (in pixel value)
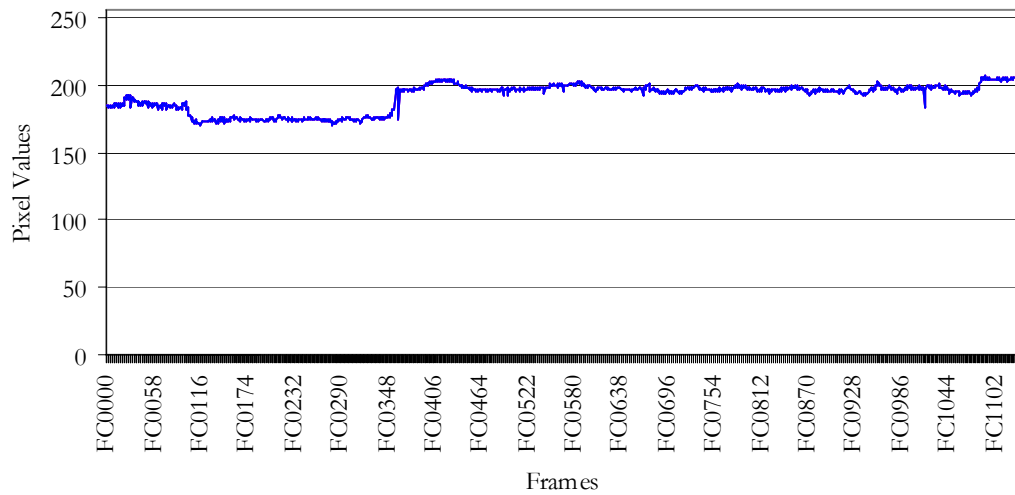
Edge RGB Frame Stand Deviation - DA

DA: The edge image pixel standard deviation values – for all frame. (in pixel value)
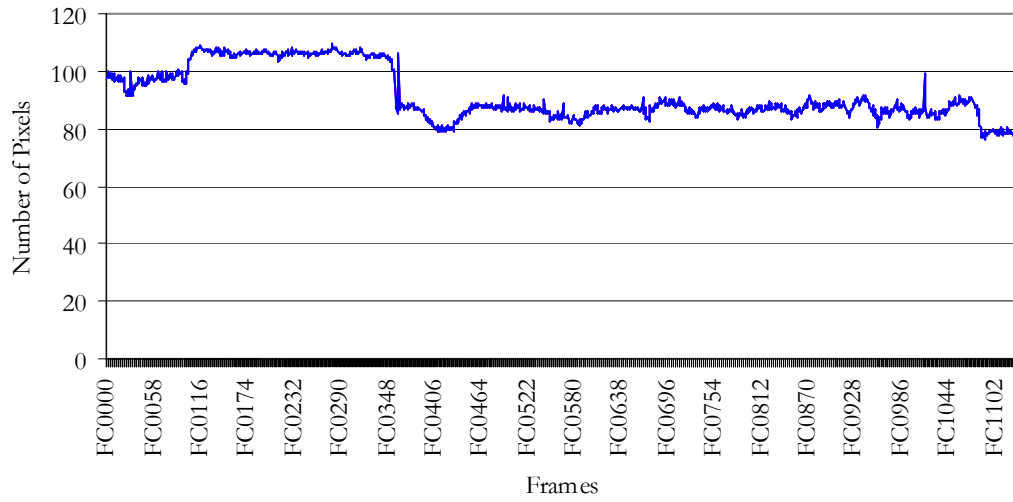
FC – WEATHER FORECAST

Edge RGB Average Frame Values - FC

FC: The average edge image pixel values – for all frames. (in pixel value)
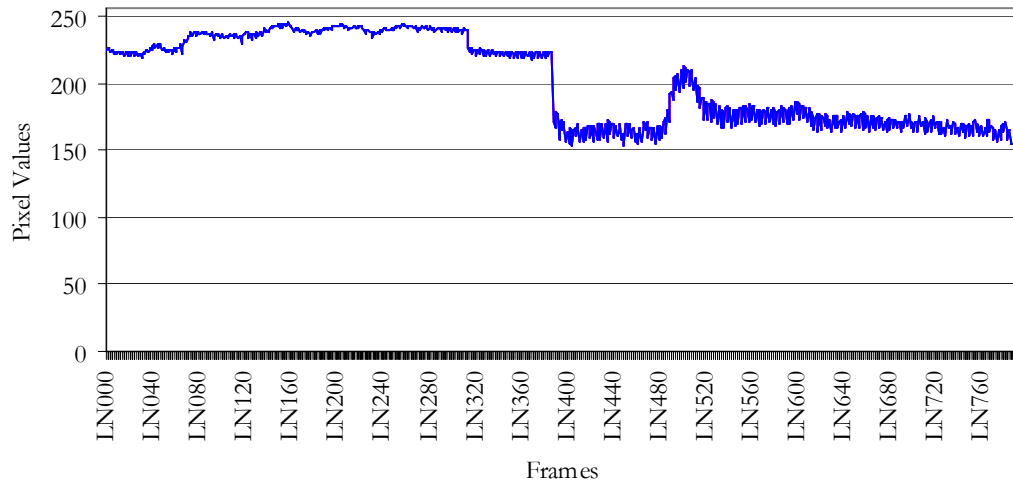
Edge RGB Frame Standard Deviation - FC

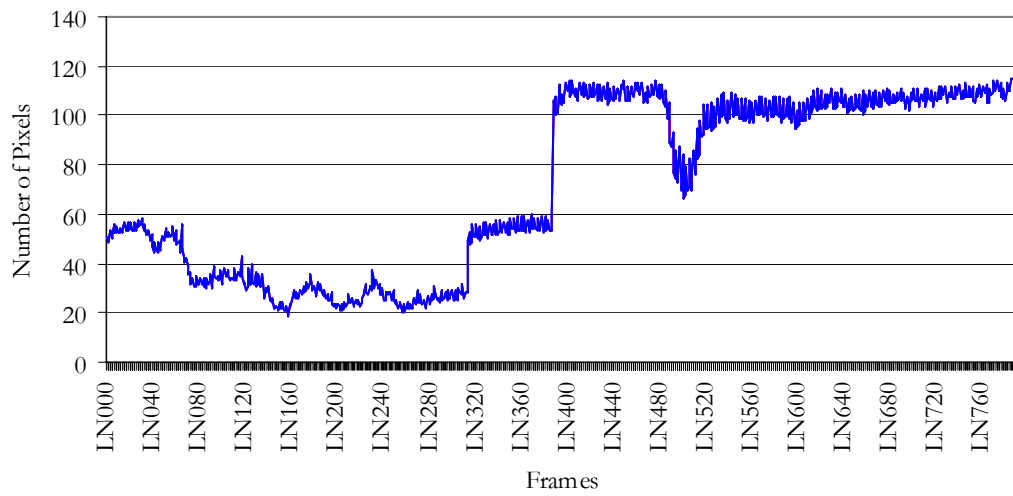FC: The edge image pixel standard deviation values – for all frame. (in pixel value)

LN – INDIAN LIONS

Edge RGB Average Frame Values - LN

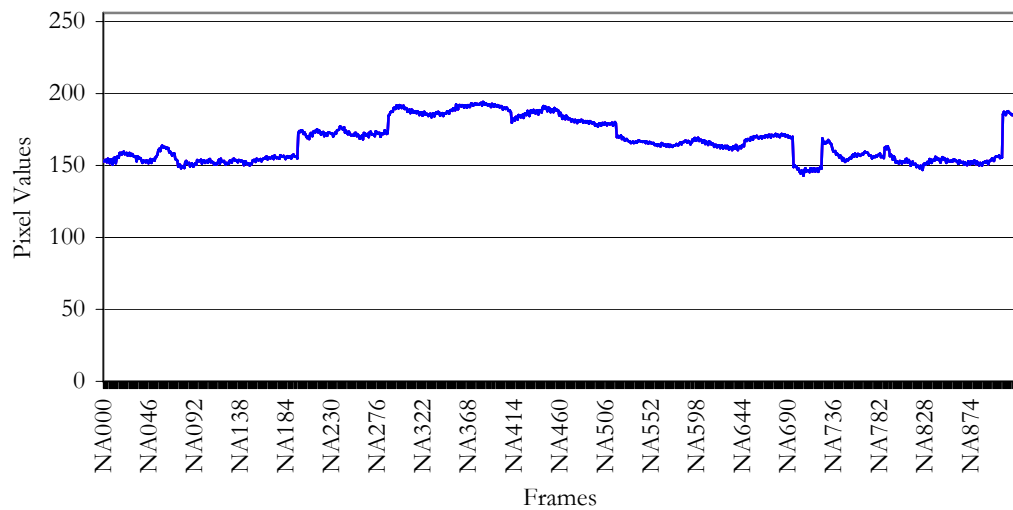LN: The average edge image pixel values – for all frames. (in pixel value)

Edge RGB Frame Standard Deviation - LC

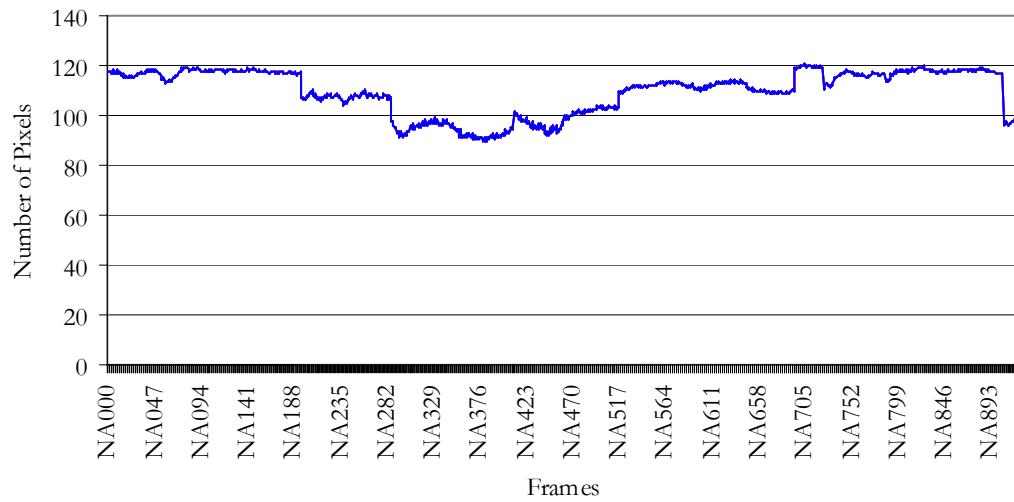LN: The edge image pixel standard deviation values – for all frame. (in pixel value)

NA – NATALIE'S POP VIDEO

Edge RGB Average Frame Values - NA

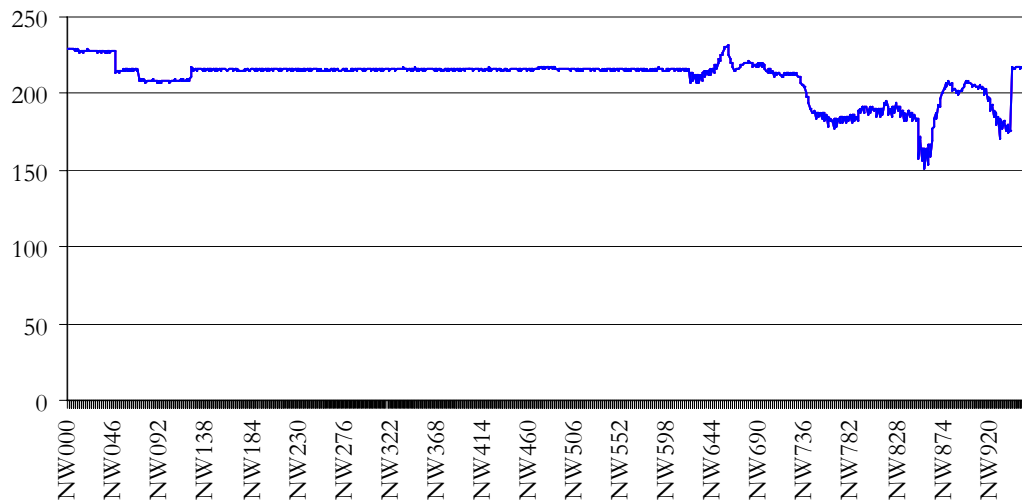NA: The average edge image pixel values – for all frames. (in pixel value)

Edge RGB Frame SD - NA

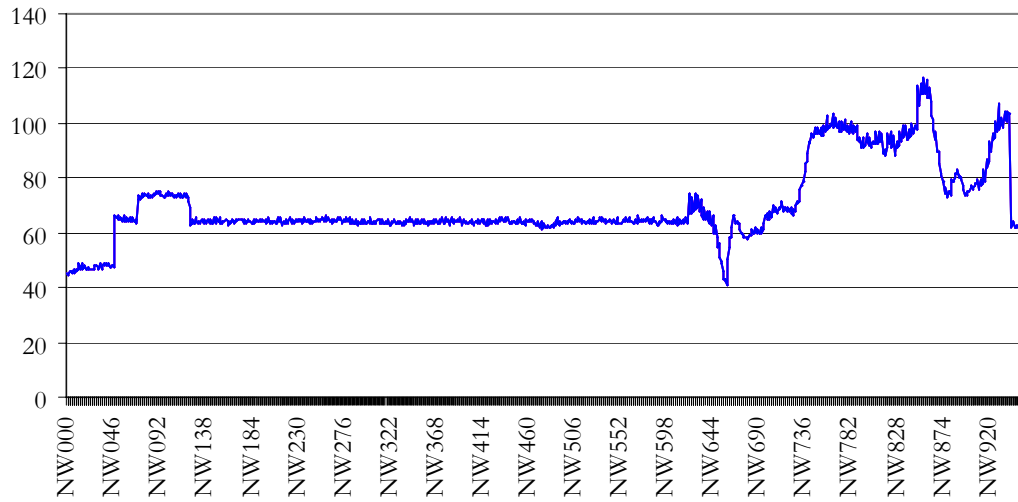NA: The edge image pixel standard deviation values – for all frame. (in pixel value)

NW – NEWS

Edge RGB Average Frame Values - NW

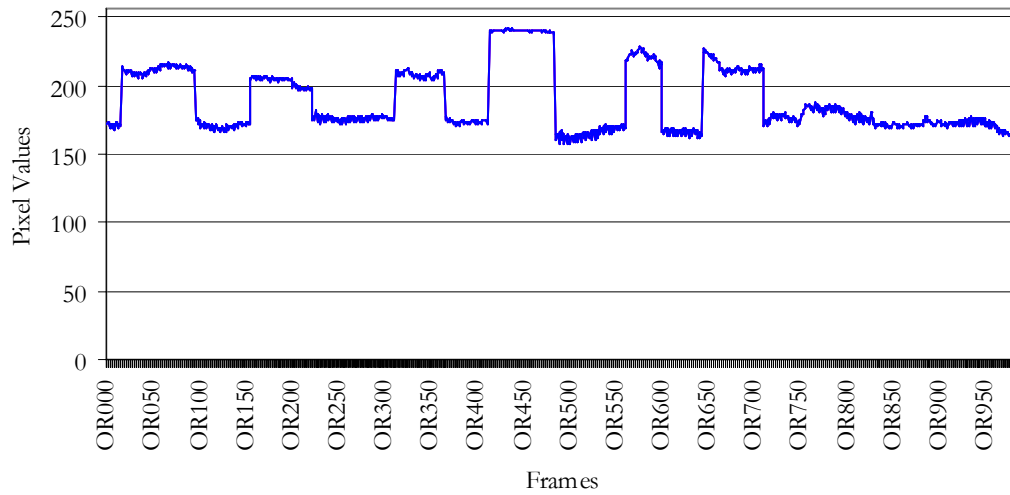NW: The average edge image pixel values – for all frames. (in pixel value)

Edge RGB Frame Standard Deviation - NW

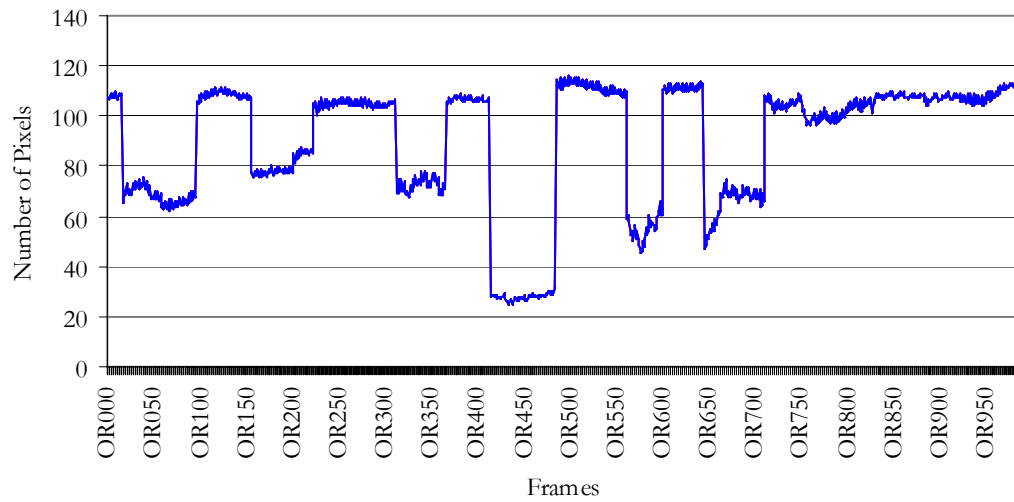NW: The edge image pixel standard deviation values – for all frame. (in pixel value)

OR – OREGANO COOKING

Edge RGB Average Frame Values - OR

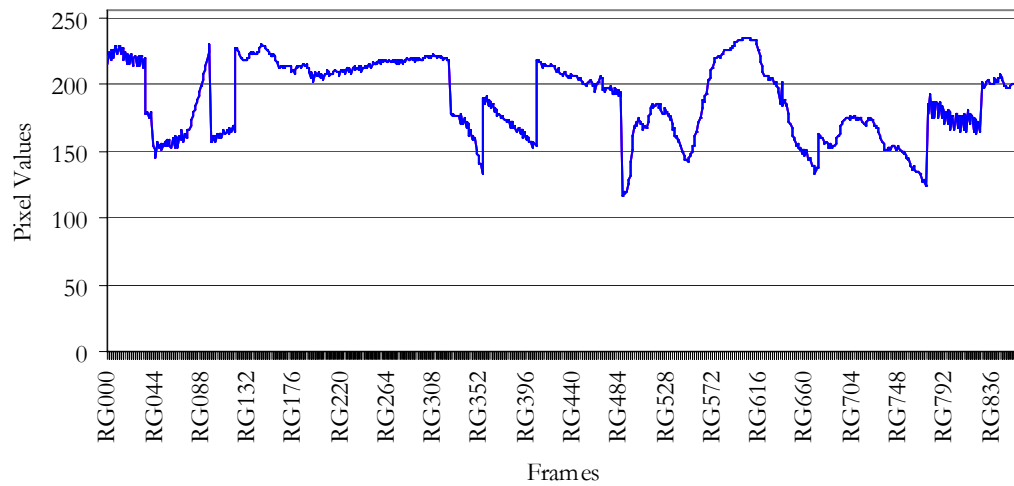OR: The average edge image pixel values – for all frames. (in pixel value)

Edge RGB Frame Standard Deviation - OR

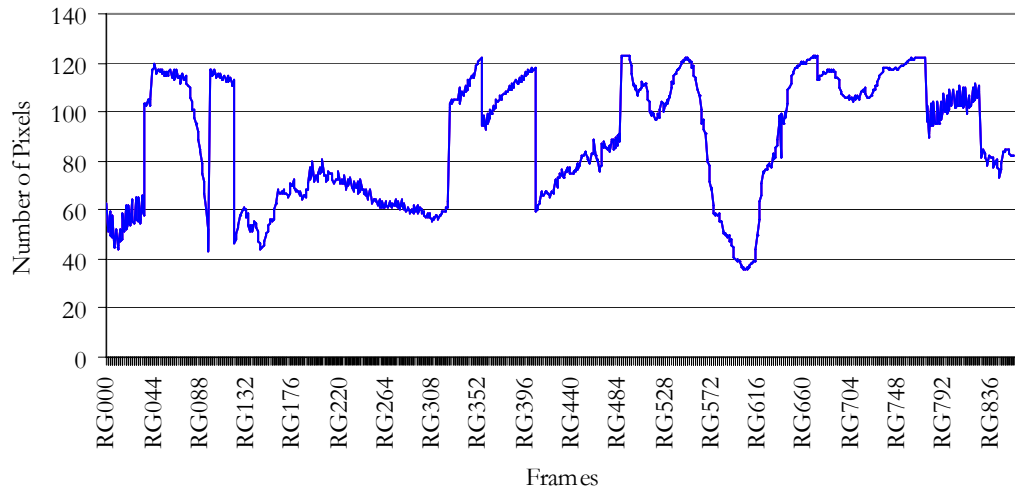OR: The edge image pixel standard deviation values – for all frame. (in pixel value)

RG – RUGBY

Edge RGB Average Frame Values - RG

RG: The average edge image pixel values – for all frames. (in pixel value)
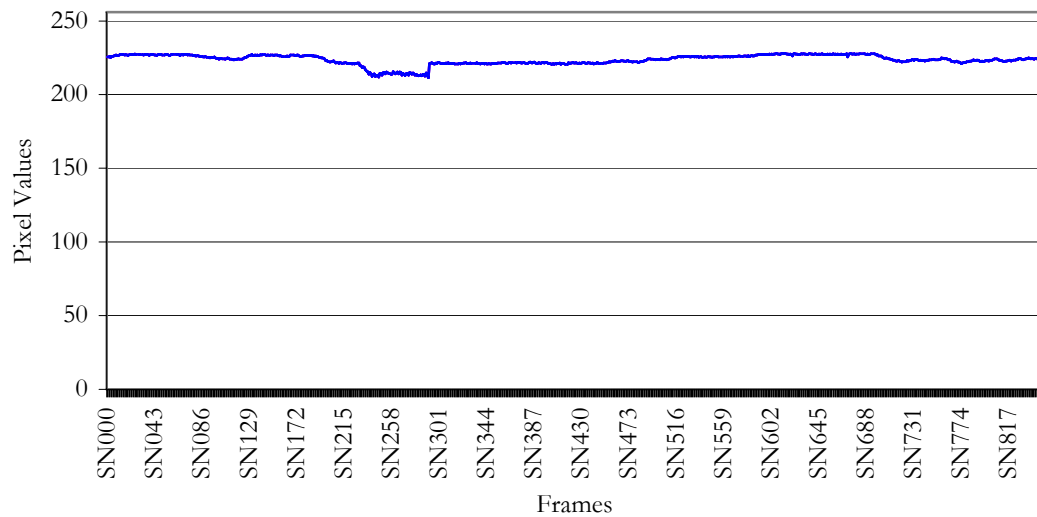
Edge RGB Frame SD - Rugby

RG: The edge image pixel standard deviation values – for all frame. (in pixel value)
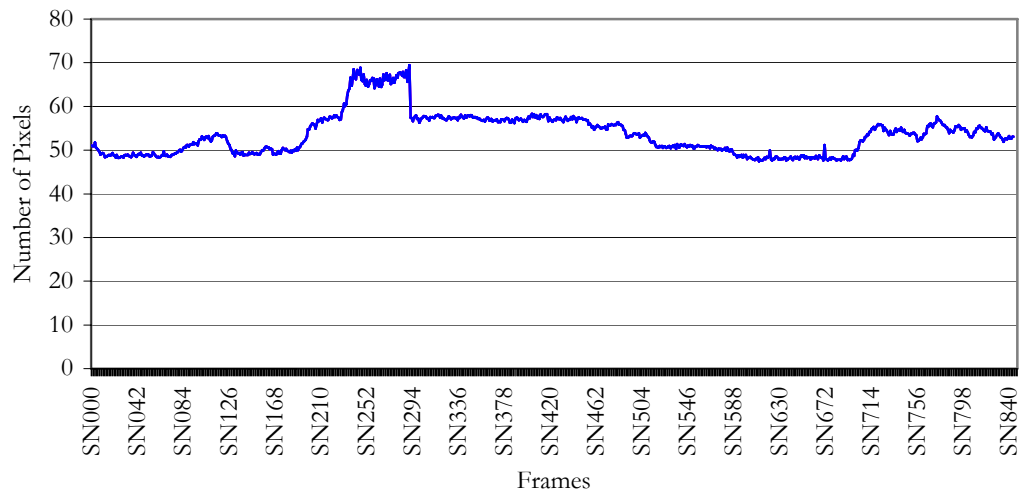
SN – SNOOKER

Edge RGB Average Frame Values - SN

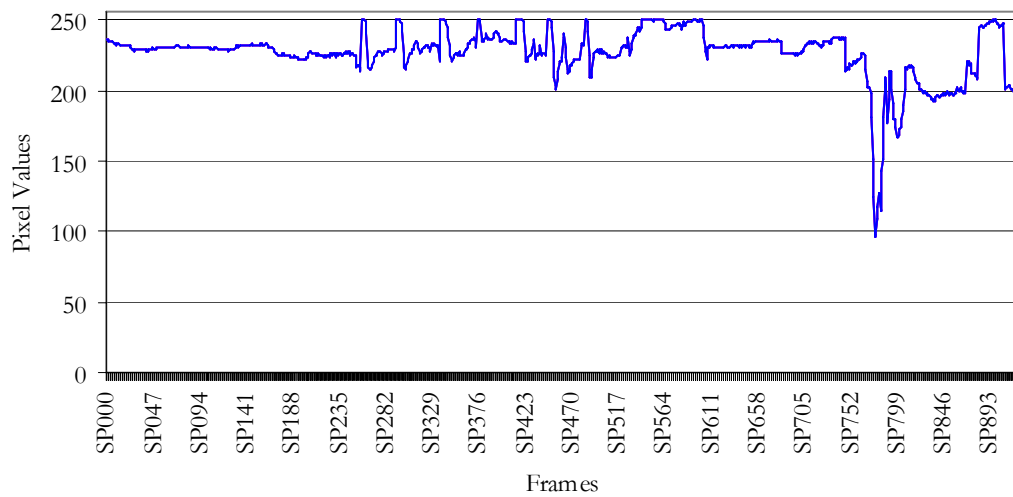SN: The average edge image pixel values – for all frames. (in pixel value)

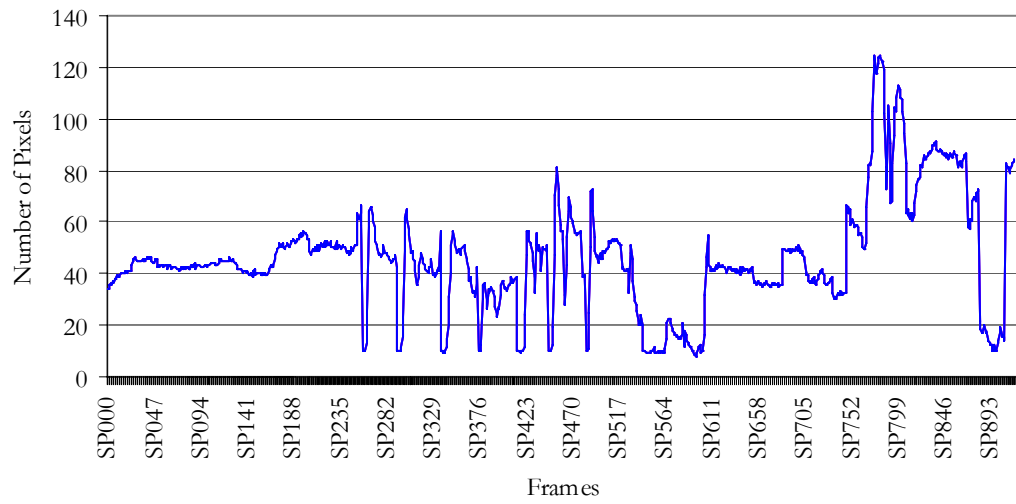**Edge RGB Frame Standard Deviation - SN**

SN: The edge image pixel standard deviation values – for all frame. (in pixel value)

SP – SPACE

Edge RGB Average Frame Values - SP

SP: The average edge image pixel values – for all frames. (in pixel value)

Edge RGB Frame Standard Deviation - SP

SP: The edge image pixel standard deviation values – for all frame. (in pixel value)