

Combined Data Analysis

FullTimestamp	Timestamp (yyyy/mm/dd hh:mm:ss)
ElapsedSec	Elapsed time in sec
SecfromMidnight	Elapsed time in sec since midnight
Event	Mode of event flag (see below for key)
BadData	Bad data flag (4 = all good, 2 = $\frac{3}{4}$ good, 0 = $\frac{1}{2}$ good, -2 = $\frac{3}{4}$ bad, -4 = all bad)
AvgEDA	Average EDA level
dAvgEDA	Difference between adjacent windows of Col F
RMSEDA	RMS of the EDA signal (filtered to 0.04-0.4 Hz band)
dRMSEDA	Difference between adjacent windows of Col H
nPksHighThresh	Number of peaks using a high threshold
dnPksHighThresh	Difference between adjacent windows of Col J
AvgPkHeighthighthresh	Average peak height of peaks found in Col J
dAvgPkHeighthighthresh	Difference between adjacent windows of Col L
nPksLowThresh	Number of peaks using a low threshold
dnPksLowThresh	Difference between adjacent windows of Col N
AvgPkHeightlowthresh	Average peak height of peaks found in Col N
dAvgPkHeightlowthresh	Difference between adjacent windows of Col P
AvgTemp	Average temperature
dAvgTemp	Difference between adjacent windows of Col R
Activity	Average activity count (uses all 3 axes to derive measurement)
dActivity	Difference between adjacent windows of Col T
SlopeEDA20s	Slope of avg EDA level (20s window)
SlopeEDA120s	Slope of avg EDA level (2min window)
NormAvgEDA	Col F / average EDA level from 20:20-0:20 previous
ZAvgEDA	Z-score Col F (population is average EDA level from 20:20-0:20 previous)
NormRMSEDA	Col H / RMS of EDA signal from 20:20-0:20 previous
ZRMSEDA	Z-score of Col H (population is RMS EDA from 20:20-0:20 previous)
dispatch	Number of consecutive windows the officer has been dispatched
enroute	Number of consecutive windows the officer has been en routeCol
arrived	Number of consecutive windows the officer has been at the sceneCol
transport	Number of consecutive windows the officer has been conducting a transport
idle	Number of consecutive windows the officer has been idle (cleared/cancelled a call)
dispatch2	Number of consecutive windows the officer has been dispatched (2nd or more time within the same call)
enroute2	Number of consecutive windows the officer has been en route (2nd or more time within the same call)
arrived2	Number of consecutive windows the officer has been at the scene (2nd or more time within the same call)
transport2	Number of consecutive windows the officer has been conducting a transport (2nd or more time within the same call)
Device	ID of the device used by the officer

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ShiftStartDate	Starting date of the current shift (NOT the current date of the row; if the timestamp goes past midnight on the same day, this will be one day behind the current row)
ParticipantID	ParticipantID
Shift	Categorical variable identifying officer shifts in chronological order
dispatch01	Dummy coded variable indicating rows during which a dispatch phase occurred
en_route01	Dummy coded variable indicating rows during which an en route phase occurred
arrived01	Dummy coded variable indicating rows during which an officer was on the scene
transport01	Dummy coded variable indicating rows during which a transport phase occurred
idle01	Dummy coded variable indicating rows during which an idle phase occurred

Multimedia Appendix 2. Combined data for analysis inventory illustrating the combination of variables that result from signal processing and data fusion to prepare for statistical analysis for the Biometrics & Policing Demonstration pilot project.