BEX3012 Project Analysis

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Contents

Emotions Analysis

Data used: ME: Microsoft's results, emotion data SB: Skybiometry's results, emotion data GE: Google's results, emotion data GoogleFaces: The Set of Faces found by Google in the intital study

Connect face id to original Google set

Add meta data to Emotion results

Create normalized SB values

Create normalized GE values GE: Google results of player facial emotions in numeric confidences

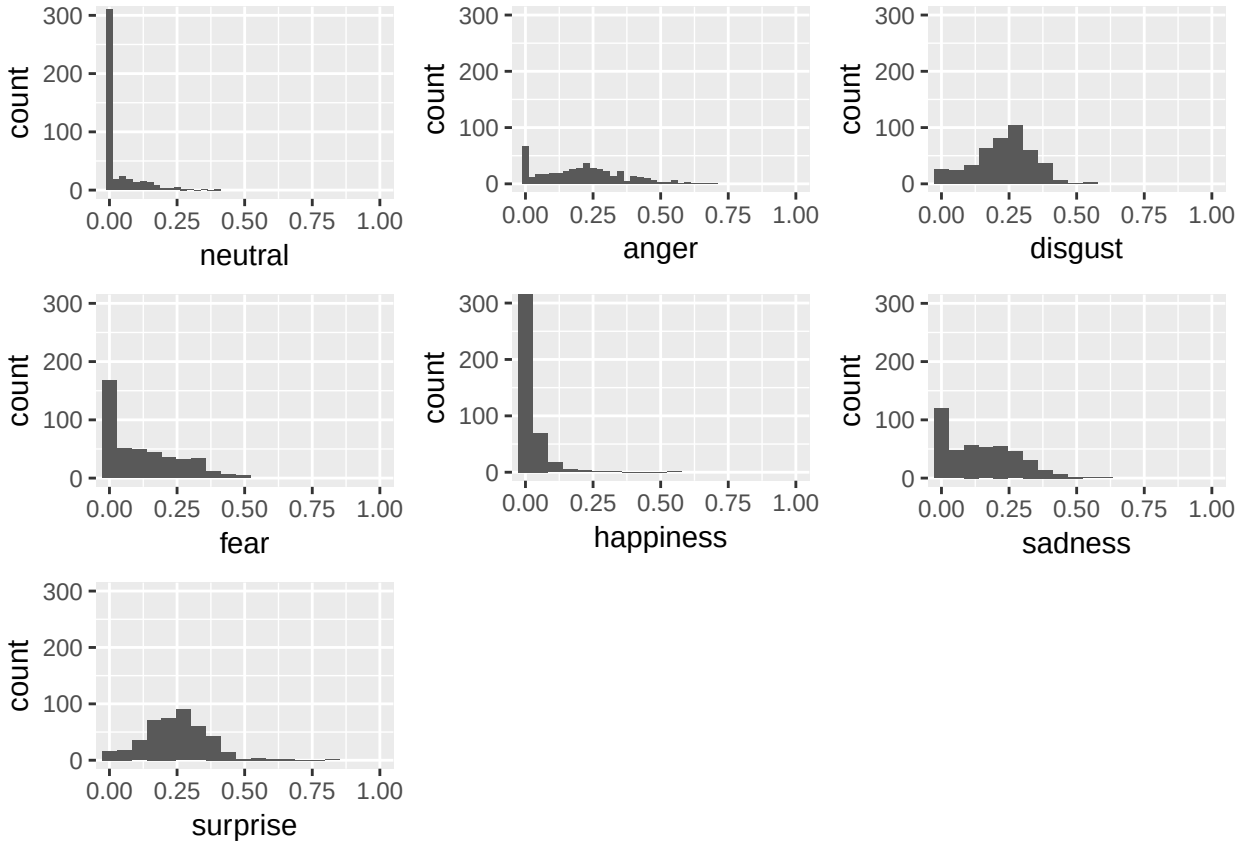
Convert to true or false emotion values

Consider just players, GEP: Microsoft's results, emotion data for only players MEP: Skybiometry's results, emotion data for only players SBP: Google's results, emotion data for only players

```
## [1] 446
```

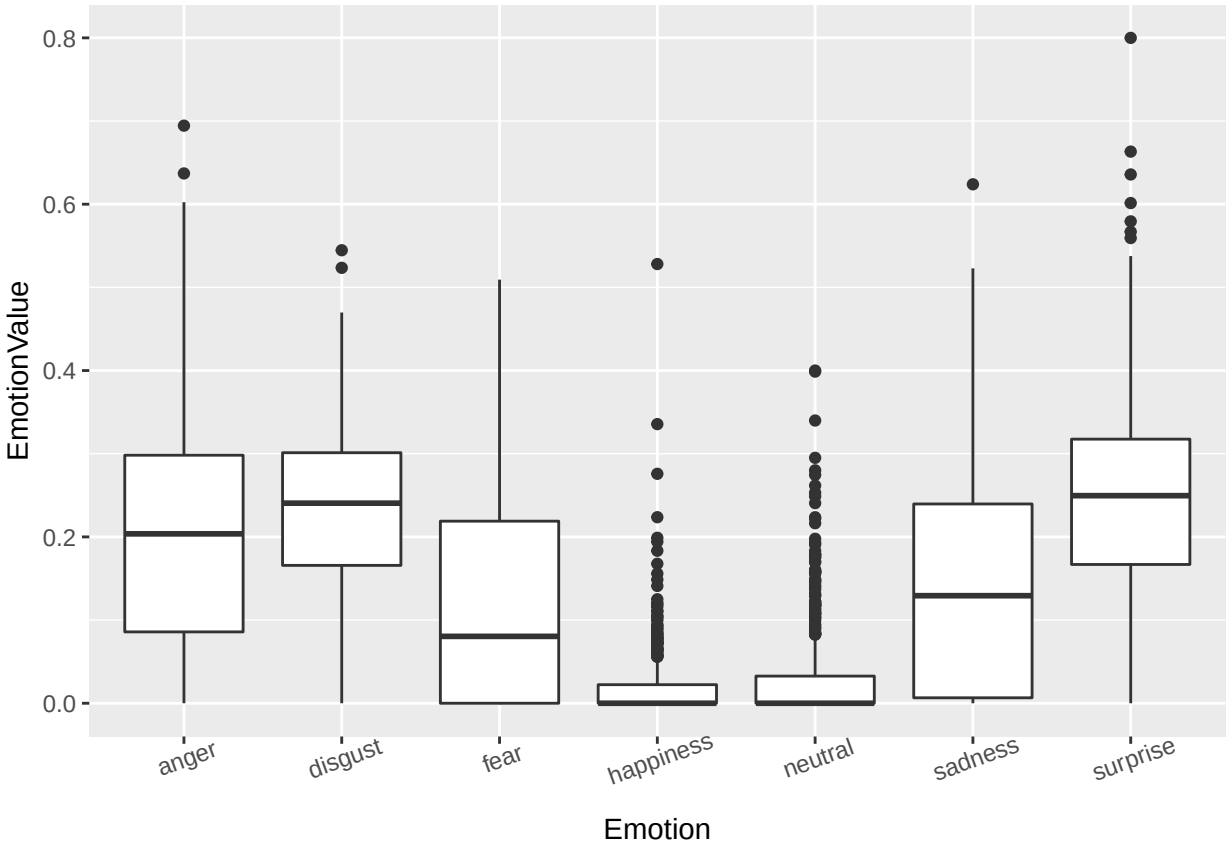
```
## [1] 509
```

Skybiometry Emotion plots



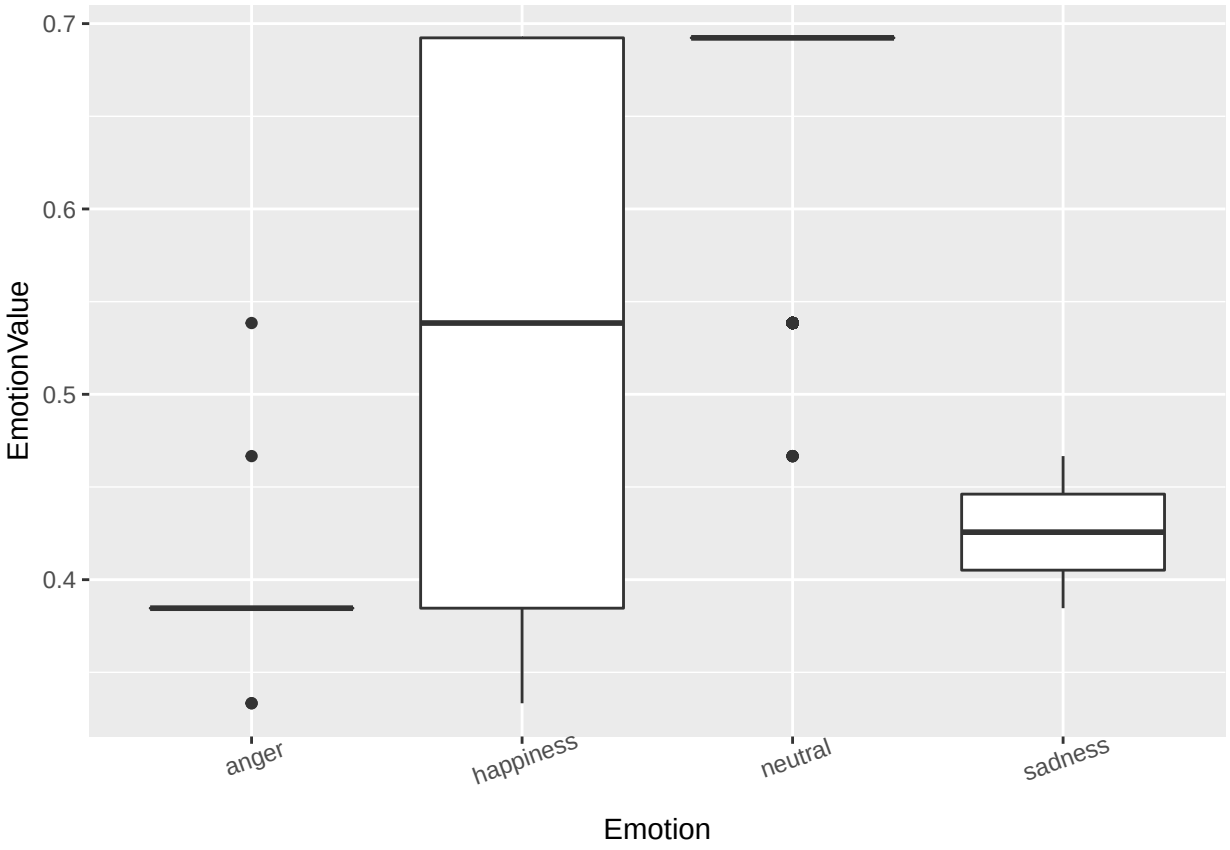
SBPCL: Long form of Confidence levels of SB results

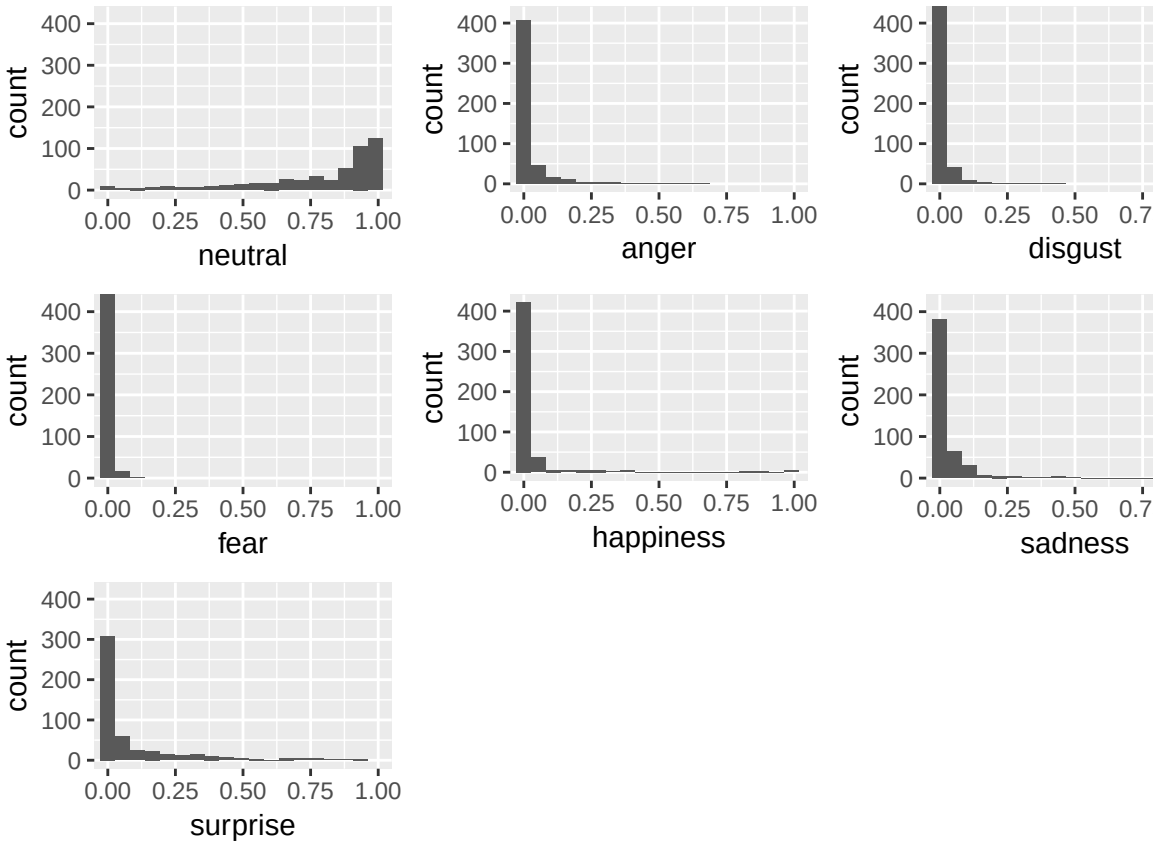
```
##
##     anger   disgust      fear happiness   neutral   sadness  surprise
##       622        89        60         1         3        56       110
```



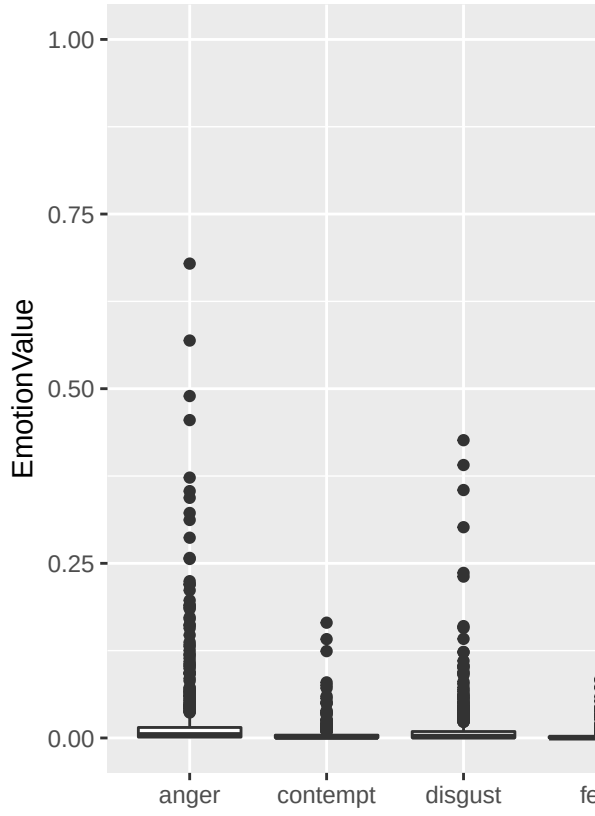
GEP: Long form of Confidence levels of GE results GEPN: Long form of Confidence levels of GE results renamed to match

```
##
##     anger happiness   neutral   sadness
##        46        57       840         2
```


0.7
0.6
0.5
0.4
EmotionValue
anger
happiness
neutral
sadness
Emotion



Microsoft Emotion plots



Microsoft Long form MEPCL: Long form of Confidence levels of ME results

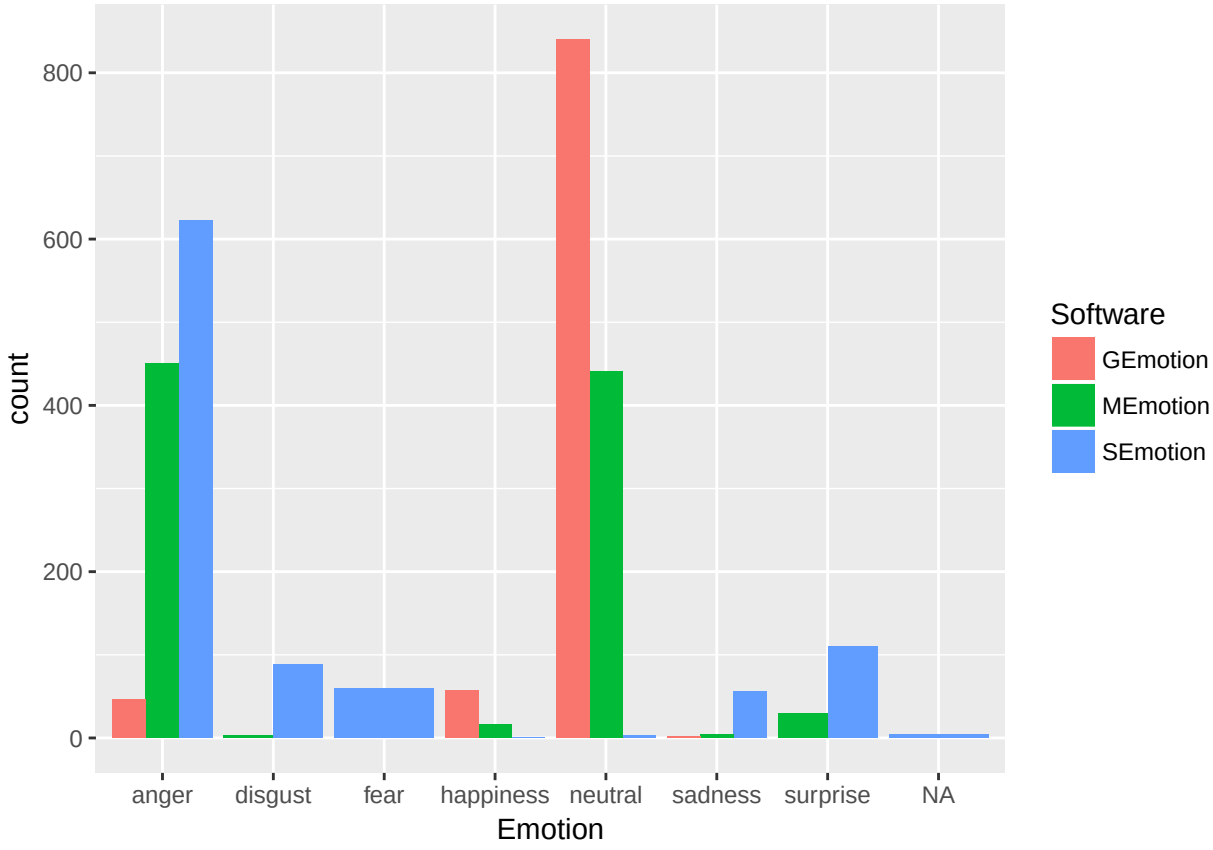
```
##
##     anger   disgust happiness   neutral   sadness  surprise
##       451         3        16       441         4        30
```

Tables

0.0.1

Join emotions for each face J2: Table of FileNames and associated dominant emotion

```
## [1] 847
```



Contingency Table of 50 image sample

```
##                     anger happiness neutral
##
## anger    anger          1         1      22
##          happiness      0         1       0
##          neutral        1         1       6
## disgust  anger          0         0       0
##          happiness      0         0       0
##          neutral        0         0       3
## fear     anger          0         0       0
##          happiness      0         0       0
##          neutral        0         0       2
## sadness  anger          0         0       0
##          happiness      0         0       0
##          neutral        0         0       4
## surprise anger          0         0       1
##          happiness      0         0       0
##          neutral        0         0       7
```

Plot images and compare to emotion data

```
##            anger disgust fear neutral sadness surprise
##
## anger          2       1    0       0       1        3
## disgust        0       1    1       0       1        3
## fear           4       1    2       0       0        1
## happiness      0       0    2       0       1        0
```

```
## neutral        1       2    1       1       0       4
## sadness        2       0    2       0       4       1
## surprise       1       3    1       0       0       3
```

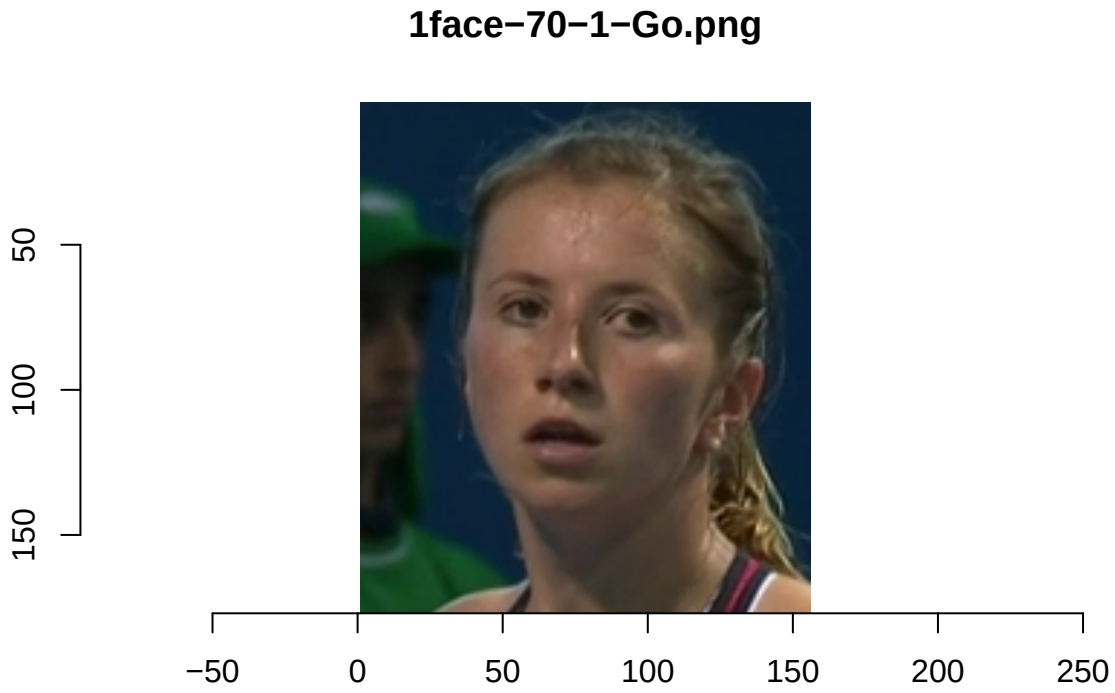
Find images from matches played by certain players

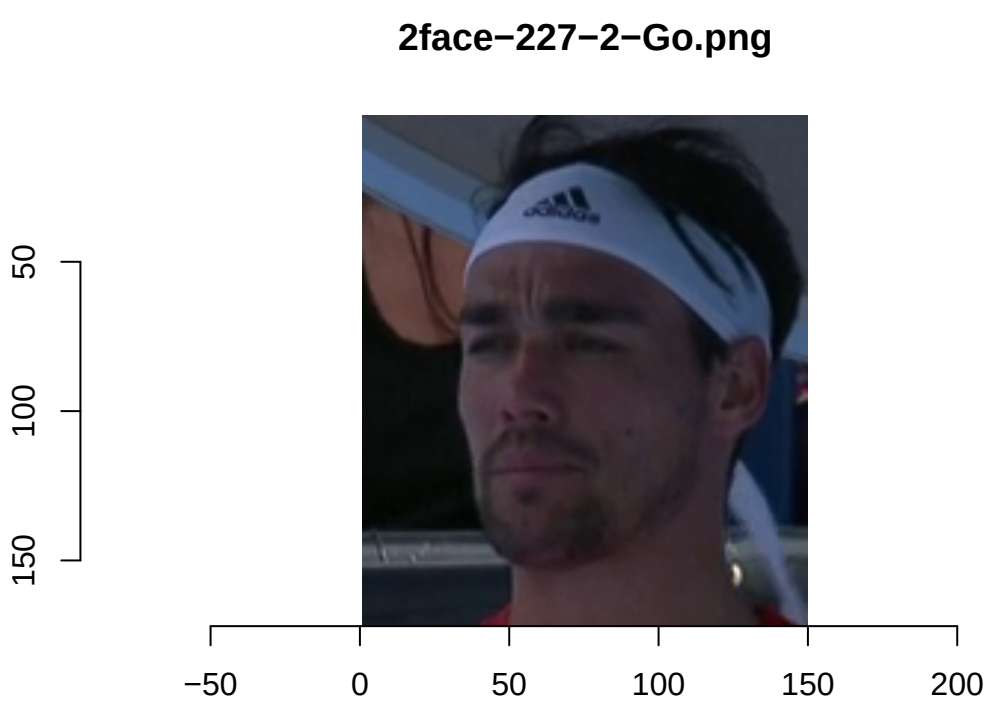
Player Subsetting

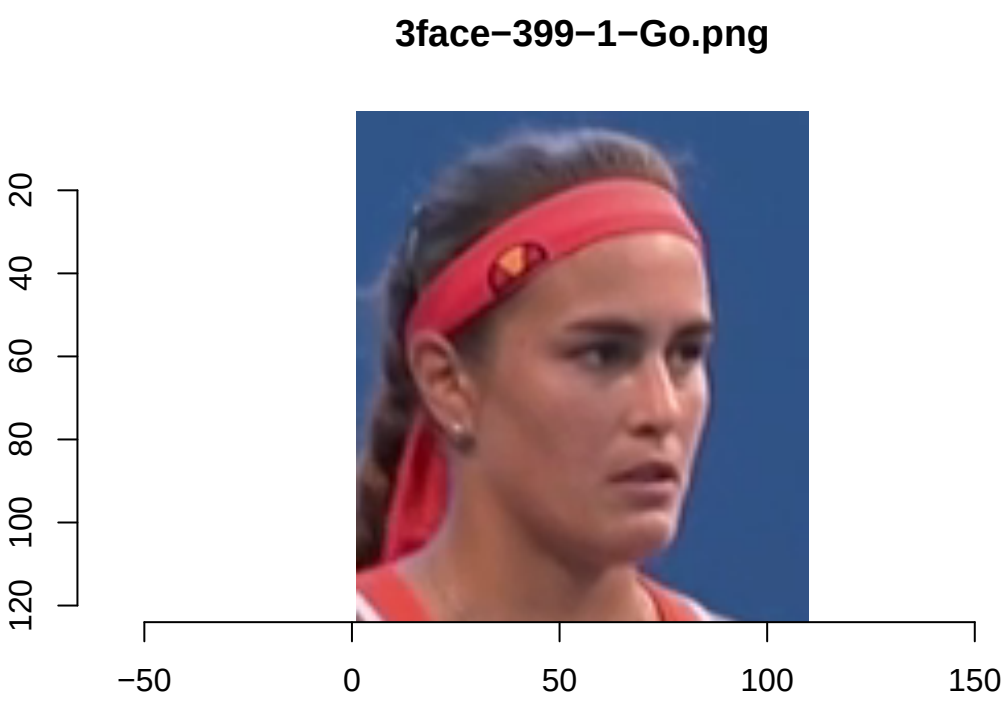
```
## [1] 32
```

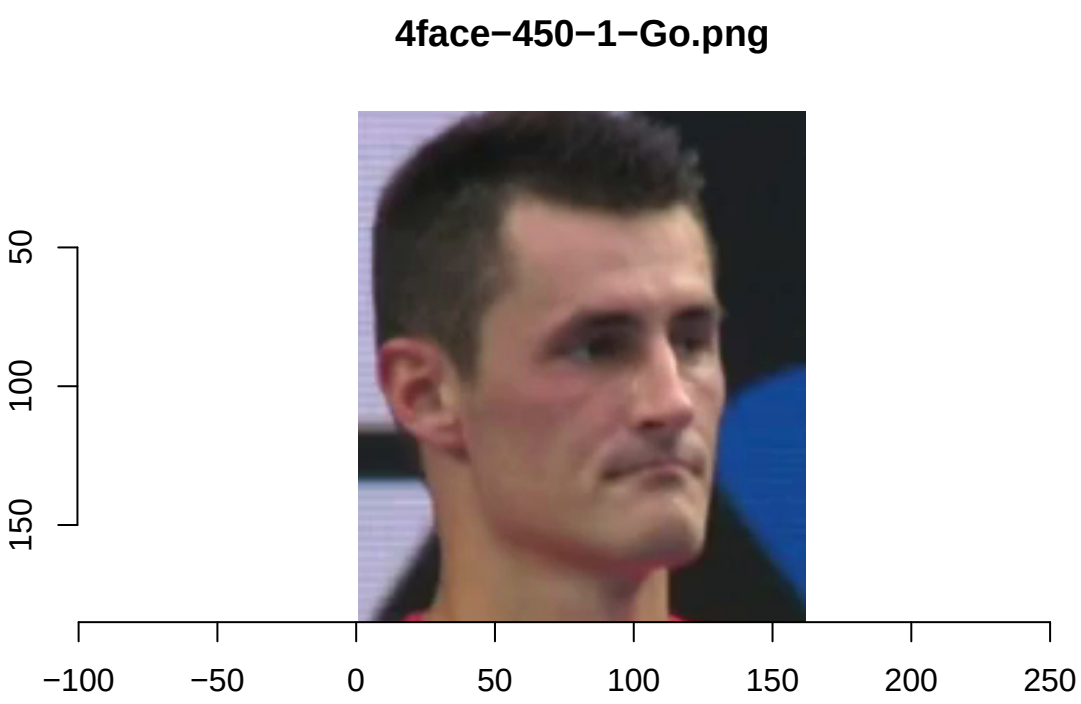
subset of Google where neutral = another category

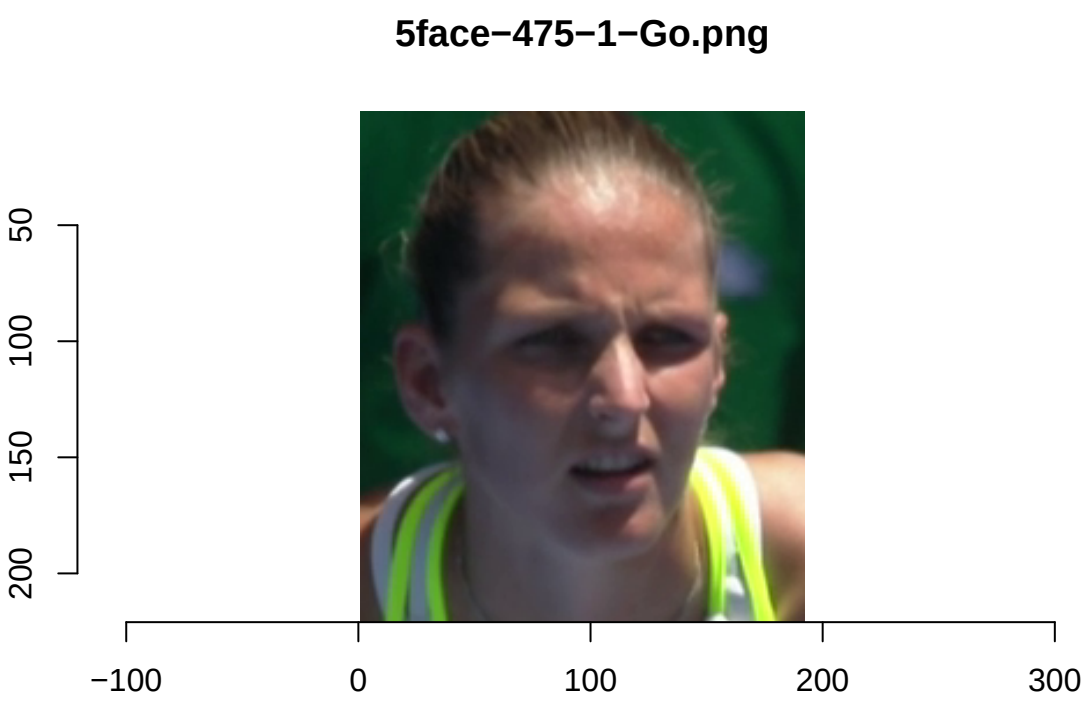
Emotive Player Faces EF: Emotive Player Faces to be used as sample. It is hard to classify many of the faces as one of the seven possible options. Where hints of emotive expressions can be attributed to one or more faces

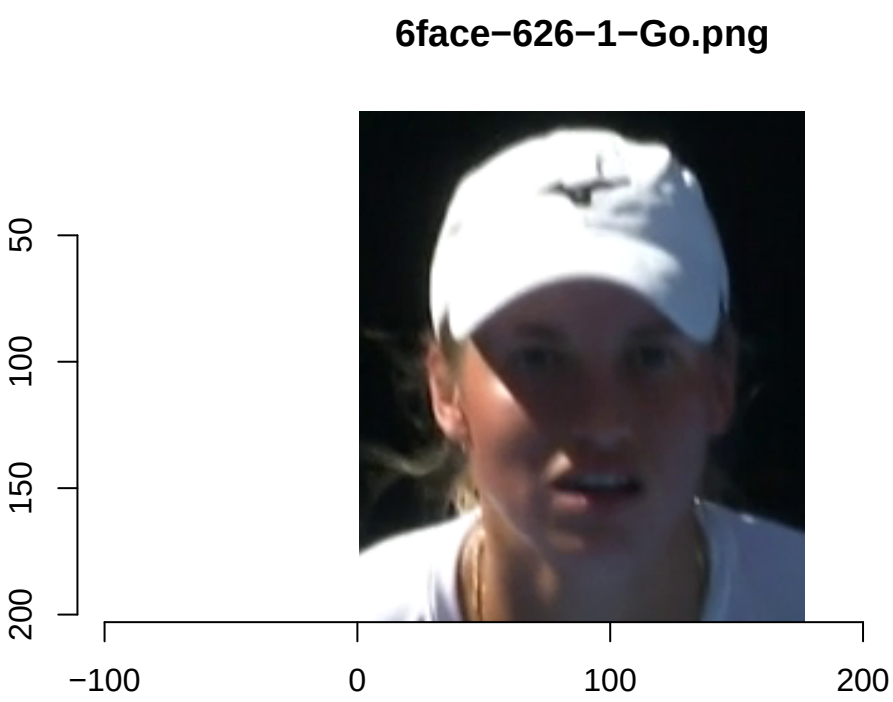


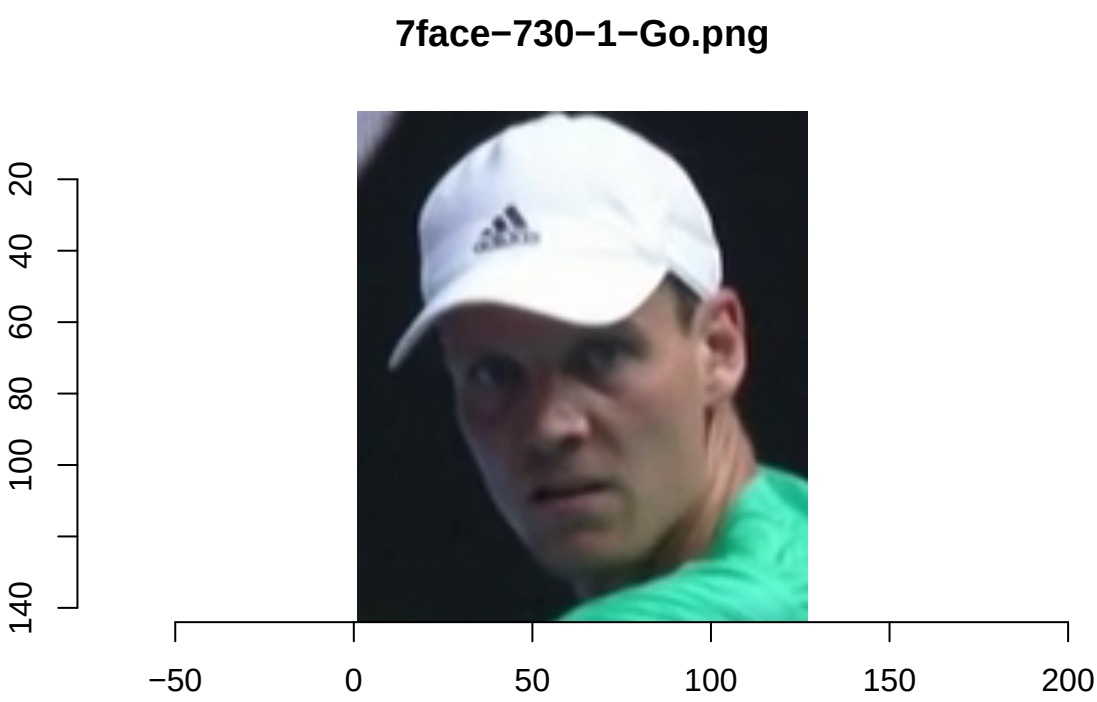

2face−227−2−Go.png
50
100
150
−50
0
50
100
150
200


3face−399−1−Go.png
20
40
60
80
100
120
−50
0
50
100
150

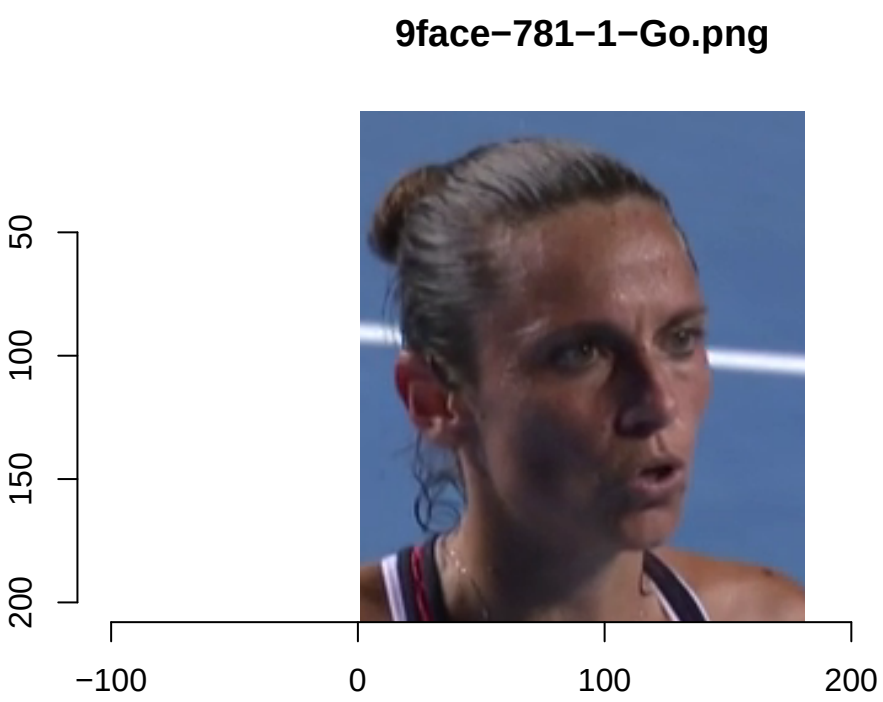

4face−450−1−Go.png
50
100
150
−100
−50
0
50
100
150
200
250

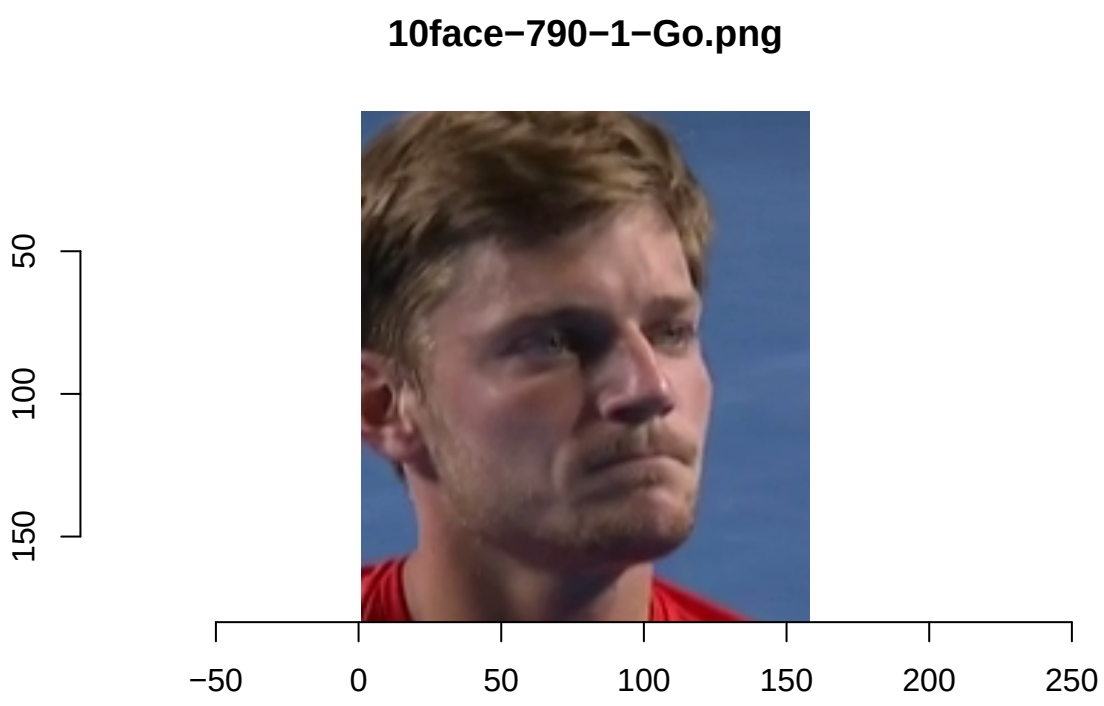

5face−475−1−Go.png
50
100
150
200
−100
0
100
200
300

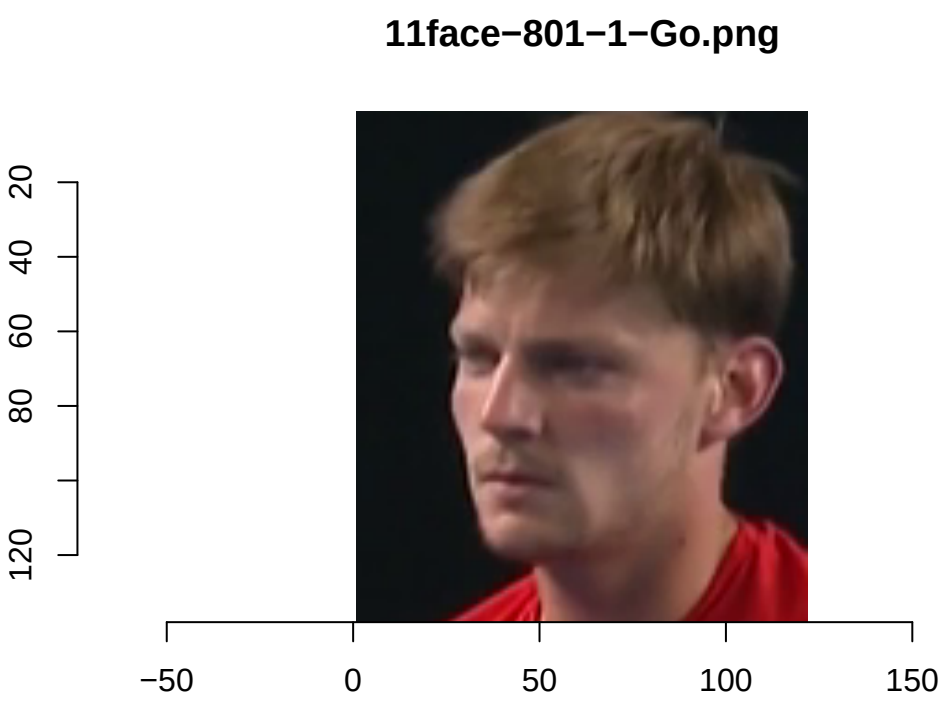

6face−626−1−Go.png
50
100
150
200
−100
0
100
200

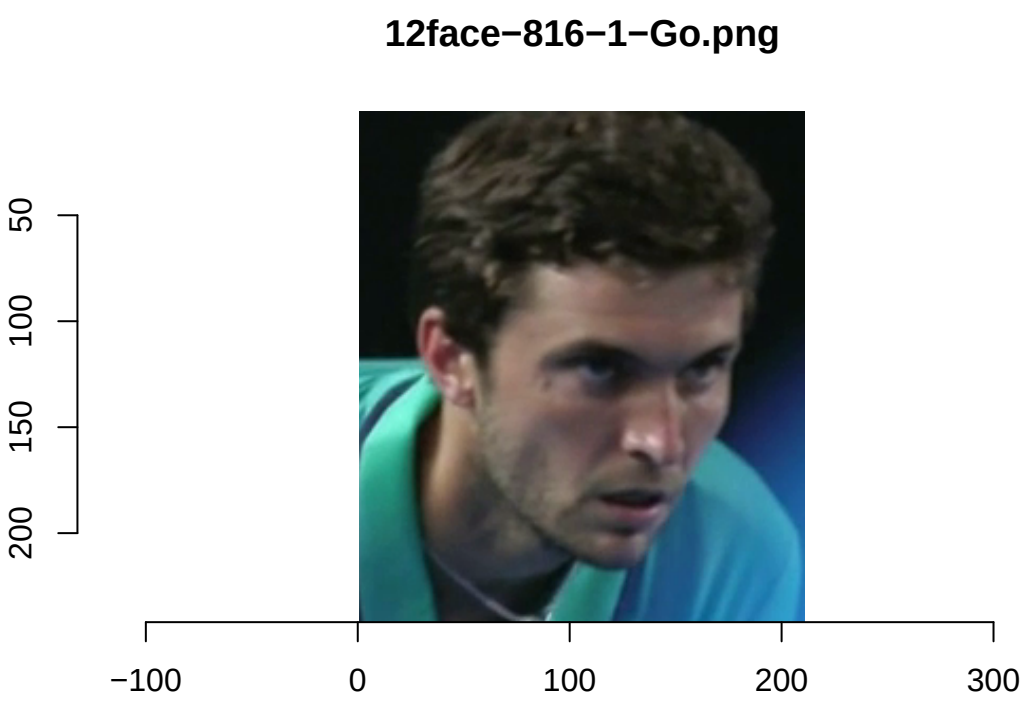

7face−730−1−Go.png
20
40
60
80
100
140
−50
0
50
100
150
200

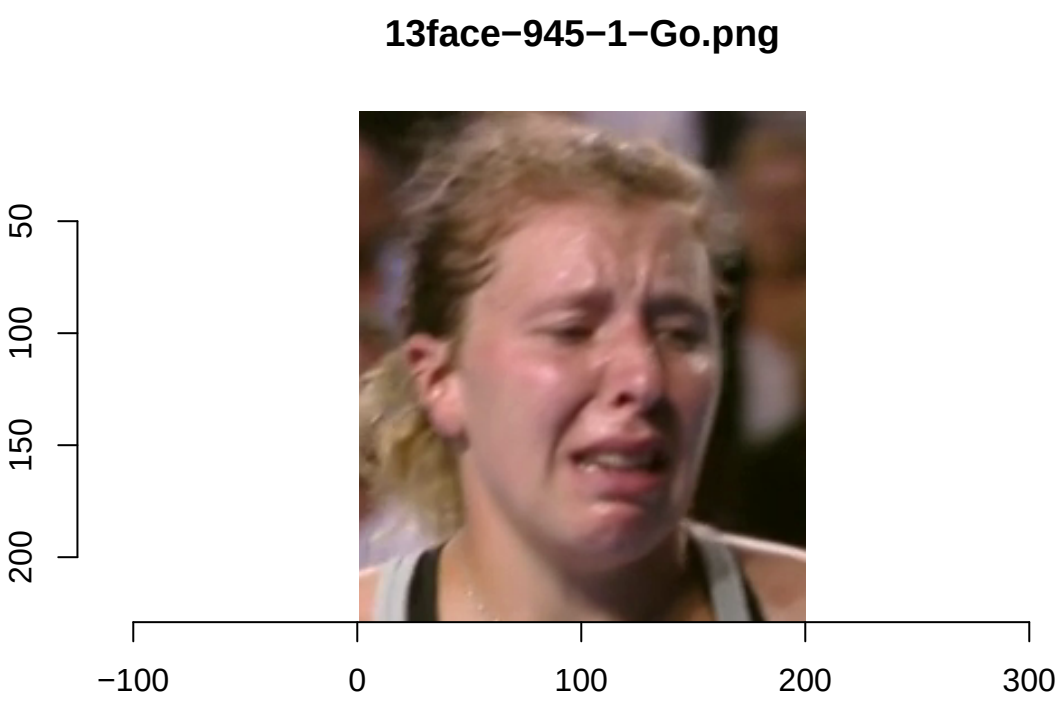

8face−762−1−Go.png
20
40
60
100
140
−50
0
50
100
150
200

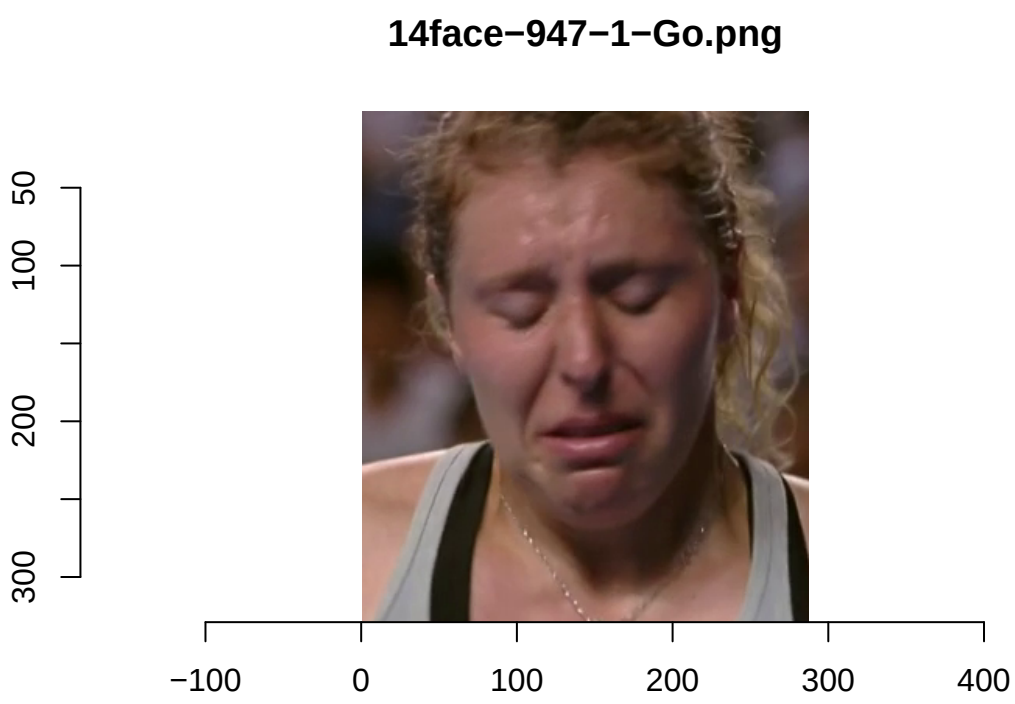

9face−781−1−Go.png
50
100
150
200
−100
0
100
200

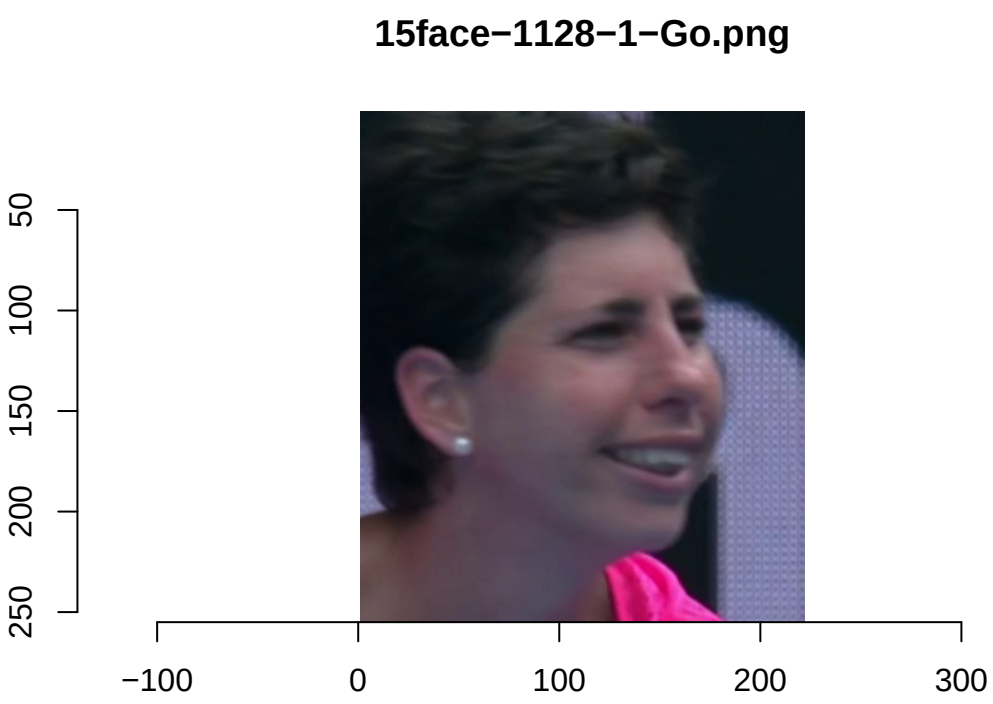

10face−790−1−Go.png
50
100
150
−50
0
50
100
150
200
250

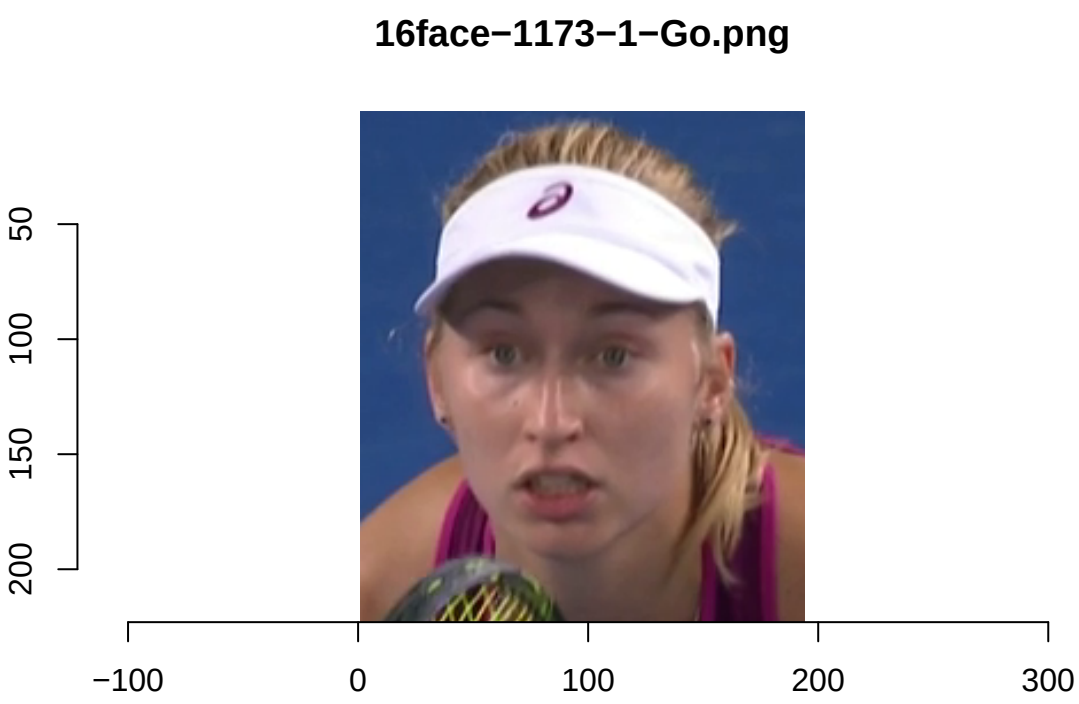

11face−801−1−Go.png
20
40
60
80
120
−50
0
50
100
150

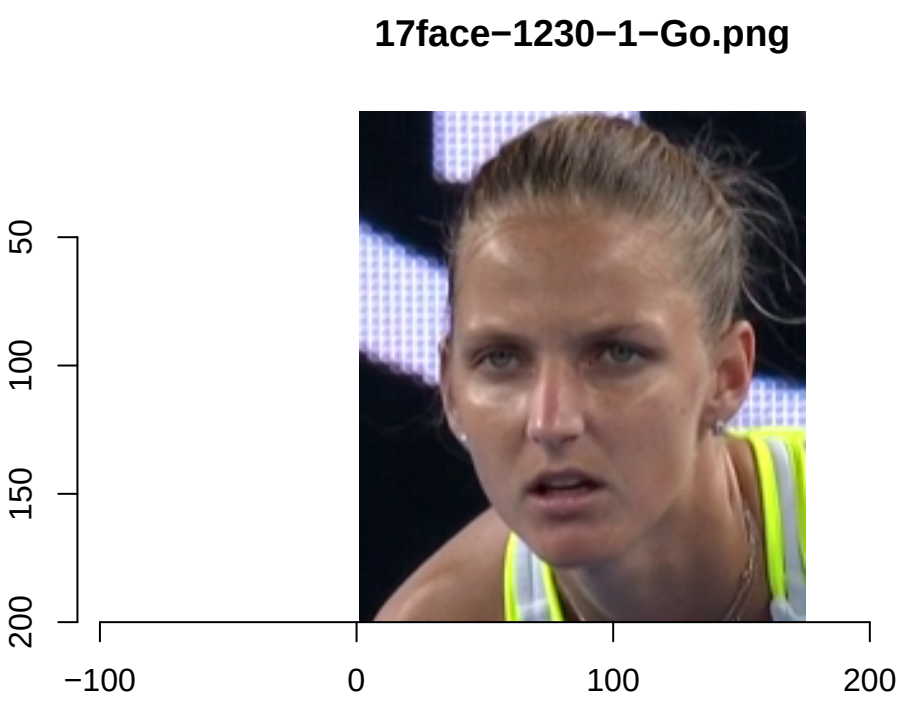

12face−816−1−Go.png
50
100
150
200
−100
0
100
200
300

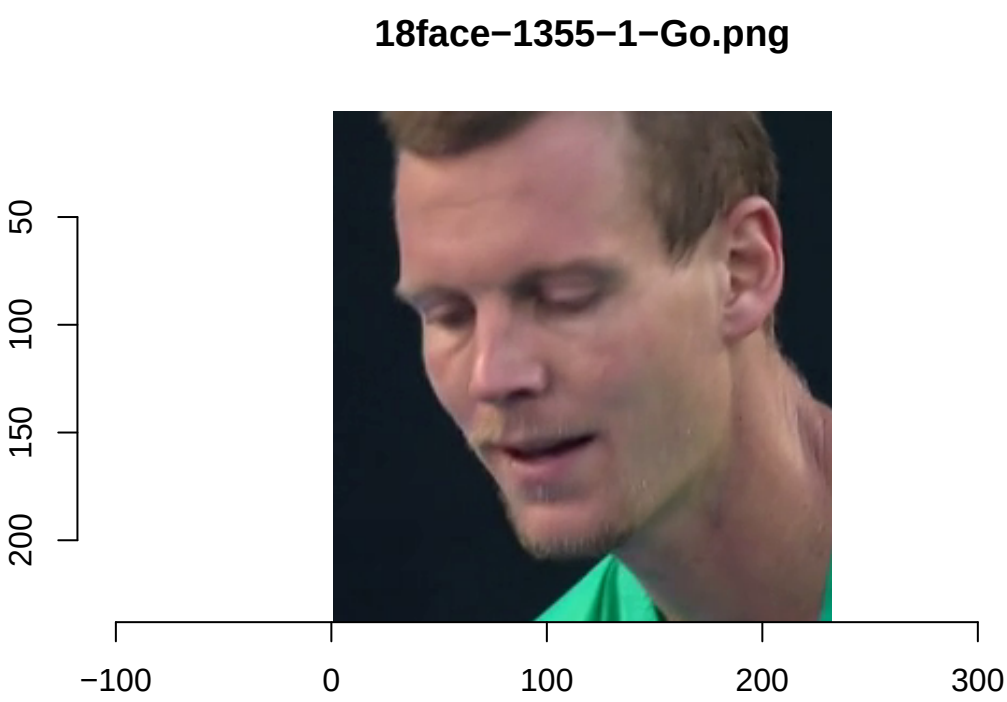

13face−945−1−Go.png
50
100
150
200
−100
0
100
200
300

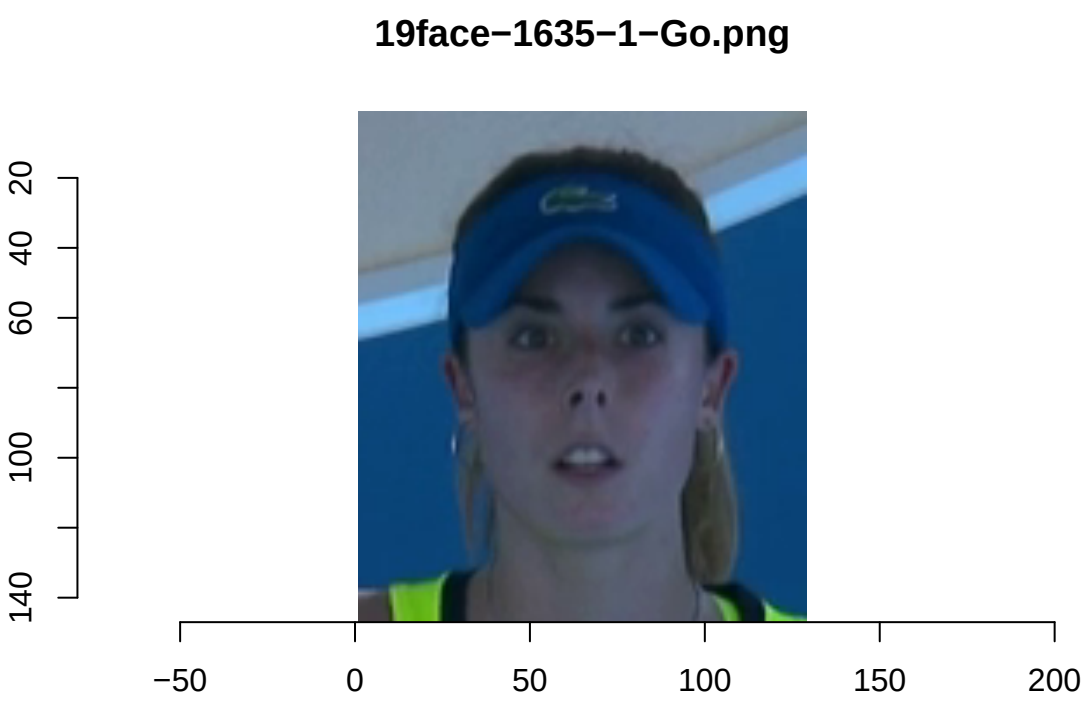

14face−947−1−Go.png
50
100
200
300
−100
0
100
200
300
400

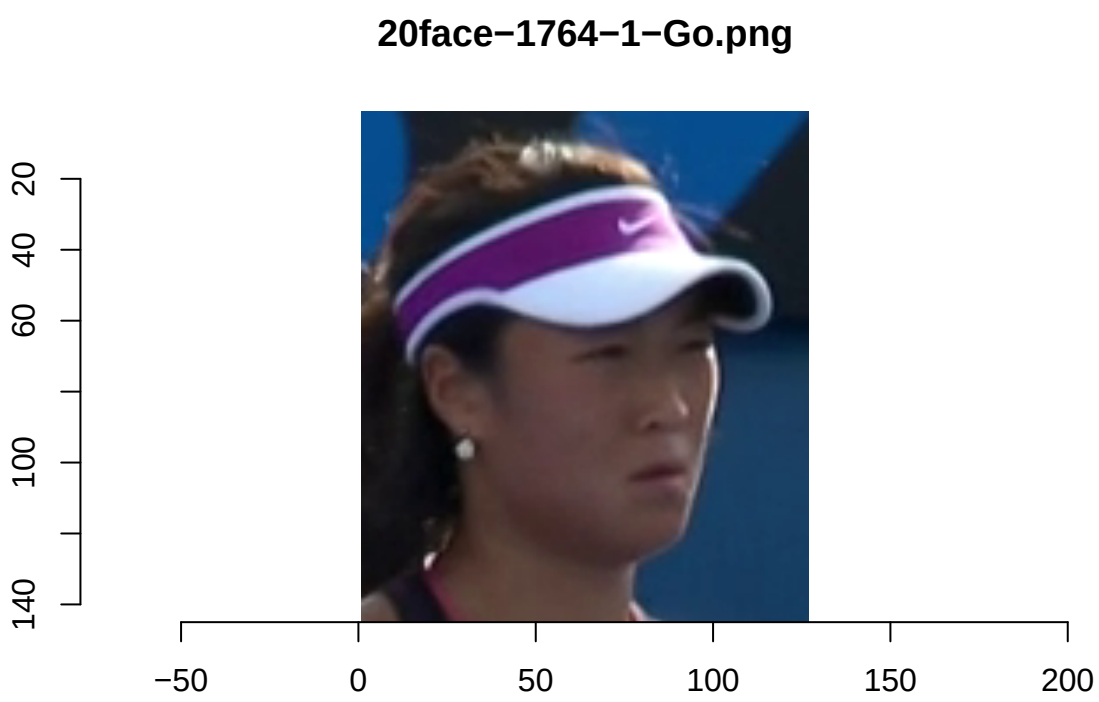

15face−1128−1−Go.png
50
100
150
200
250
−100
0
100
200
300


16face−1173−1−Go.png
50
100
150
200
−100
0
100
200
300


17face−1230−1−Go.png
50
100
150
200
−100
0
100
200


18face−1355−1−Go.png
50
100
150
200
−100
0
100
200
300


19face−1635−1−Go.png
20
40
60
100
140
−50
0
50
100
150
200



Player Emotion Tables Distribution of emotion values for particular emotions across all images of a player

Parallel coordinate plots