(file == df.columns[6]) | (file == files[30])| (file == files[31])| (file == files[32])| (file == files[33])| (file == files[34])| (file == files[35])

rectify\_emg\_moving\_average(X,20)

Class 0 : others

Train (acc 0.967)

|  |  |  |
| --- | --- | --- |
|  | Predicted 0 | Predicted others |
| Actual 0 | 5365 | 197 |
| Actual others | 0 | 525 |

Valid (acc 0.946)

|  |  |  |
| --- | --- | --- |
|  | Predicted 0 | Predicted others |
| Actual 0 | 1741 | 99 |
| Actual others | 10 | 180 |

Test (acc 0.910)

|  |  |  |
| --- | --- | --- |
|  | Predicted 0 | Predicted others |
| Actual 0 | 283 | 43 |
| Actual others | 4 | 197 |

Class 1 : 2 : 6

Train (acc 0.824)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Predicted 1 | Predicted 2 | Predicted 6 |
| Actual 1 | 45 | 64 | 13 |
| Actual 2 | 0 | 256 | 1 |
| Actual 6 | 1 | 15 | 140 |

Valid (acc 0.782)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Predicted 1 | Predicted 2 | Predicted 6 |
| Actual 1 | 7 | 14 | 10 |
| Actual 2 | 1 | 97 | 0 |
| Actual 6 | 3 | 11 | 36 |

Test (acc 0.686)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Predicted 1 | Predicted 2 | Predicted 6 |
| Actual 1 | 4 | 39 | 9 |
| Actual 2 | 1 | 55 | 1 |
| Actual 6 | 4 | 9 | 79 |

Class 2 : 6

Train (acc 0.980)

|  |  |  |
| --- | --- | --- |
|  | Predicted 2 | Predicted 6 |
| Actual 2 | 251 | 8 |
| Actual 6 | 0 | 161 |

Valid (acc 0.943)

|  |  |  |
| --- | --- | --- |
|  | Predicted 2 | Predicted 6 |
| Actual 2 | 91 | 5 |
| Actual 6 | 3 | 42 |

Test (acc 0.932)

|  |  |  |
| --- | --- | --- |
|  | Predicted 2 | Predicted 6 |
| Actual 2 | 49 | 8 |
| Actual 6 | 2 | 90 |

Class 1 : 6

Train (acc 0.743)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 6 |
| Actual 1 | 53 | 69 |
| Actual 6 | 0 | 147 |

Valid (acc 0.755)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 6 |
| Actual 1 | 9 | 22 |
| Actual 6 | 0 | 59 |

Test (acc 0.763)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 6 |
| Actual 1 | 20 | 32 |
| Actual 6 | 2 | 90 |

Class 1 : 2

Train (acc 0.881)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 2 |
| Actual 1 | 96 | 25 |
| Actual 2 | 20 | 240 |

Valid (acc 0.834)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 2 |
| Actual 1 | 21 | 11 |
| Actual 2 | 10 | 85 |

Test (acc 0.660)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 2 |
| Actual 1 | 35 | 17 |
| Actual 2 | 20 | 37 |

(file == df.columns[7]) | (file == files[30])| (file == files[31])| (file == files[32])| (file == files[33])| (file == files[34])| (file == files[35])

Class 0 : others

Train (acc 0.966)

|  |  |  |
| --- | --- | --- |
|  | Predicted 0 | Predicted others |
| Actual 0 | 5402 | 197 |
| Actual others | 5 | 432 |

Valid (acc 0.953)

|  |  |  |
| --- | --- | --- |
|  | Predicted 0 | Predicted others |
| Actual 0 | 1772 | 81 |
| Actual others | 13 | 146 |

Test (acc 0.929)

|  |  |  |
| --- | --- | --- |
|  | Predicted 0 | Predicted others |
| Actual 0 | 270 | 6 |
| Actual others | 36 | 284 |

Class 1 : 2 : 6

Train (acc 1.000)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Predicted 1 | Predicted 2 | Predicted 6 |
| Actual 1 | 64 | 0 | 0 |
| Actual 2 | 0 | 232 | 0 |
| Actual 6 | 0 | 0 | 151 |

Valid (acc 0.926)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Predicted 1 | Predicted 2 | Predicted 6 |
| Actual 1 | 9 | 4 | 2 |
| Actual 2 | 1 | 92 | 2 |
| Actual 6 | 2 | 0 | 37 |

Test (acc 0.655)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Predicted 1 | Predicted 2 | Predicted 6 |
| Actual 1 | 49 | 26 | 51 |
| Actual 2 | 17 | 60 | 8 |
| Actual 6 | 5 | 3 | 100 |

Class 2 : 6

Train (acc 0.981)

|  |  |  |
| --- | --- | --- |
|  | Predicted 2 | Predicted 6 |
| Actual 2 | 239 | 5 |
| Actual 6 | 2 | 141 |

Valid (acc 0.953)

|  |  |  |
| --- | --- | --- |
|  | Predicted 2 | Predicted 6 |
| Actual 2 | 79 | 4 |
| Actual 6 | 2 | 45 |

Test (acc 0.932)

|  |  |  |
| --- | --- | --- |
|  | Predicted 2 | Predicted 6 |
| Actual 2 | 73 | 12 |
| Actual 6 | 1 | 107 |

Class 1 : 6

Train (acc 1.000)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 6 |
| Actual 1 | 59 | 0 |
| Actual 6 | 0 | 142 |

Valid (acc 0.955)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 6 |
| Actual 1 | 19 | 1 |
| Actual 6 | 2 | 46 |

Test (acc 0.739)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 6 |
| Actual 1 | 65 | 61 |
| Actual 6 | 0 | 108 |

Class 1 : 2

Train (acc 0.993)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 2 |
| Actual 1 | 56 | 2 |
| Actual 2 | 0 | 246 |

Valid (acc 0.882)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 2 |
| Actual 1 | 13 | 8 |
| Actual 2 | 4 | 77 |

Test (acc 0.779)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 2 |
| Actual 1 | 106 | 20 |
| Actual 2 | 28 | 57 |

(file == df.columns[5]) | (file == files[30])| (file == files[31])| (file == files[32])| (file == files[33])| (file == files[34])| (file == files[35])

Class 0 : others

Train (acc 0.993)

|  |  |  |
| --- | --- | --- |
|  | Predicted 0 | Predicted others |
| Actual 0 | 5511 | 60 |
| Actual others | 0 | 591 |

Valid (acc 0.987)

|  |  |  |
| --- | --- | --- |
|  | Predicted 0 | Predicted others |
| Actual 0 | 1821 | 25 |
| Actual others | 8 | 201 |

Test (acc 0.969)

|  |  |  |
| --- | --- | --- |
|  | Predicted 0 | Predicted others |
| Actual 0 | 301 | 10 |
| Actual others | 12 | 104 |

Class 1 : 2 : 6

Train (acc 1.000)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Predicted 1 | Predicted 2 | Predicted 6 |
| Actual 1 | 146 | 0 | 0 |
| Actual 2 | 0 | 297 | 0 |
| Actual 6 | 0 | 0 | 156 |

Valid (acc 0.905)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Predicted 1 | Predicted 2 | Predicted 6 |
| Actual 1 | 38 | 3 | 5 |
| Actual 2 | 4 | 100 | 2 |
| Actual 6 | 4 | 1 | 43 |

Test (acc 0.344)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Predicted 1 | Predicted 2 | Predicted 6 |
| Actual 1 | 2 | 11 | 51 |
| Actual 2 | 1 | 7 | 1 |
| Actual 6 | 30 | 33 | 31 |

Class 2 : 6

Train (acc 0.997)

|  |  |  |
| --- | --- | --- |
|  | Predicted 2 | Predicted 6 |
| Actual 2 | 291 | 1 |
| Actual 6 | 0 | 163 |

Valid (acc 0.986)

|  |  |  |
| --- | --- | --- |
|  | Predicted 2 | Predicted 6 |
| Actual 2 | 109 | 2 |
| Actual 6 | 0 | 41 |

Test (acc 0.572)

|  |  |  |
| --- | --- | --- |
|  | Predicted 2 | Predicted 6 |
| Actual 2 | 8 | 1 |
| Actual 6 | 43 | 51 |

Class 1 : 6

Train (acc 1.000)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 6 |
| Actual 1 | 145 | 0 |
| Actual 6 | 0 | 152 |

Valid (acc 0.909)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 6 |
| Actual 1 | 40 | 7 |
| Actual 6 | 2 | 50 |

Test (acc 0.439)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 6 |
| Actual 1 | 13 | 0 |
| Actual 6 | 60 | 34 |

Class 1 : 2

Train (acc 1.000)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 2 |
| Actual 1 | 152 | 0 |
| Actual 2 | 0 | 294 |

Valid (acc 0.892)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 2 |
| Actual 1 | 34 | 6 |
| Actual 2 | 10 | 99 |

Test (acc 0.409)

|  |  |  |
| --- | --- | --- |
|  | Predicted 1 | Predicted 2 |
| Actual 1 | 2 | 11 |
| Actual 2 | 2 | 7 |