|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Single Fold** | | | **5-Fold** | | |
|  |  |  |  |  |  |  |
| **Raw Features – no PCA** | | | | | | |
| **Full - Cov** | 0.346 | 0.766 | 0.824 | 0.343 | 0.795 | 0.906 |
| **Diag -Cov** | 0.527 | 0.911 | 0.937 | 0.548 | 0.962 | 0.973 |
| **Tied Full-Cov** | 0.355 | 0.818 | 0.836 | 0.359 | 0.843 | 0.827 |
| **Tied Diag- Cov** | 0.521 | 0.913 | 0.983 | 0.543 | 0.970 | 0.952 |
| **Gaussianized Features – no PCA** | | | | | | |
| **Full - Cov** | 0.277 | 0.791 | 0.824 | 0.306 | 0.772 | 0.871 |
| **Diag -Cov** | 0.497 | 0.901 | 0.963 | 0.516 | 0.927 | 0.975 |
| **Tied Full-Cov** | 0.355 | 0.889 | 0.906 | 0.379 | 0.811 | 0.928 |
| **Tied Diag- Cov** | 0.529 | 0.913 | 0.992 | 0.543 | 0.958 | 0.995 |
| **Raw Features – PCA (m=9)** | | | | | | |
| **Full - Cov** | 0.455 | 0.966 | 0.884 | 0.495 | 0.980 | 0.975 |
| **Diag -Cov** | 0.541 | 0.963 | 0.947 | 0.570 | 1.00 | 0.988 |
| **Tied Full-Cov** | 0.555 | 0.974 | 0.939 | 0.601 | 0.962 | 0.936 |
| **Tied Diag- Cov** | 0.568 | 0.967 | 0.918 | 0.598 | 0.960 | 0.924 |
| **Gaussianized Features – PCA (m=9)** | | | | | | |
| **Full - Cov** | 0.301 | 0.820 | 0.858 | 0.336 | 0.805 | 0.898 |
| **Diag -Cov** | 0.392 | 0.834 | 0.899 | 0.407 | 0.884 | 0.899 |
| **Tied Full-Cov** | 0.421 | 0.897 | 0.903 | 0.424 | 0.888 | 0.969 |
| **Tied Diag- Cov** | 0.413 | 0.901 | 0.908 | 0.419 | 0.894 | 0.973 |
| **Raw Features – PCA (m=8)** | | | | | | |
| **Full - Cov** | 0.490 | 0.970 | 0.930 | 0.537 | 0.998 | 0.951 |
| **Diag -Cov** | 0.606 | 0.992 | 0.966 | 0.611 | 1.00 | 0.963 |
| **Tied Full-Cov** | 0.585 | 0.963 | 0.947 | 0.636 | 0.978 | 0.973 |
| **Tied Diag- Cov** | 0.599 | 0.984 | 0.954 | 0.639 | 0.985 | 0.968 |
| **Gaussianized Features – PCA (m=8)** | | | | | | |
| **Full - Cov** | 0.345 | 0.870 | 0.867 | 0.385 | 0.932 | 0.892 |
| **Diag -Cov** | 0.427 | 0.945 | 0.927 | 0.458 | 0.982 | 0.900 |
| **Tied Full-Cov** | 0.434 | 0.987 | 0.853 | 0.477 | 0.985 | 0.920 |
| **Tied Diag- Cov** | 0.425 | 0.992 | 0.841 | 0.480 | 0.987 | 0.918 |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Raw Features** | | | |
| Quad LR (**λ= , )** | 0.274 | 0.969 | 0.934 |
| Quad LR (**λ= , )** | 0.584 | 0.977 | 0.917 |
| Quad LR (**λ= , )** | 0.556 | 0.963 | 0.952 |
| **Gaussianized features** | | | |
| Quad LR (**λ= , )** | 0.371 | 0.854 | 0.818 |
| Quad LR (**λ= , )** | 0.375 | 0.914 | 0.827 |
| Quad LR (**λ= , )** | 0.372 | 0.791 | 0.986 |