487 features were selected using backward selection, 335 features were selected by Huaixiu, and 799 features were selected using Random Forest. The results are summarized below:

**Table 1. Agreement between forward feature selection1 and backward feature selection.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Forward1** | **Backward** | **Agreement** | **Agreement**  **Relative to Forward1** |
| **Original numerical features** | 167 | 456 | 78 | 46.7% |
| **Derived numerical features** | 0 | 6 | 0 | 0 |
| **Time series derived** | 4 | 15 | 0 | 0 |
| **Time series original** | 1 | 0 | 0 | 0 |
| **Categorical numeric** | 7 | 5 | 0 | 0 |
| **Categorical label encoded** | 0 | 5 | 0 | 0 |

**Table 2. Agreement between forward feature selection2 and forward feature selection 2.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Forward1** | **Forward2** | **Agreement** | **Agreement**  **Relative to Forward1** |
| **Original numerical features** | 167 | 307 | 52 | 31.1% |
| **Derived numerical features** | 0 | 1 | 0 | 0 |
| **Time series derived** | 4 | 5 | 1 | 25% |
| **Time series original** | 1 | 1 | 0 | 0 |
| **Categorical numeric** | 7 | 21 | 0 | 0 |
| **Categorical label encoded** | 0 | 0 | 0 | 0 |

**Table 3. Agreement between forward feature selection2 and backward feature selection .**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Forward2** | **Backward** | **Agreement** | **Agreement**  **Relative to Forward2** |
| **Original numerical features** | 307 | 456 | 154 | 50.2% |
| **Derived numerical features** | 1 | 6 | 1 | 100% |
| **Time series derived** | 5 | 15 | 1 | 20% |
| **Time series original** | 1 | 0 | 0 | 0 |
| **Categorical numeric** | 21 | 5 | 1 | 4.8% |
| **Categorical label encoded** | 0 | 5 | 0 | 0 |

**Table 4. Agreement between backward feature selection using random forest and backward feature selection using XGBoost.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **XGB** | **RF** | **Agreement** | **Agreement**  **Relative to XGB** |
| **Original numerical features** | 456 | 733 | 435 | 95% |
| **Derived numerical features** | 6 | 8 | 6 | 100% |
| **Time series derived** | 15 | 25 | 15 | 100% |
| **Time series original** | 0 | 6 | 0 | 0 |
| **Categorical numeric** | 5 | 20 | 2 | 40% |
| **Categorical label encoded** | 5 | 7 | 2 | 40% |