**Time Series Modeler**

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| **Notes** |  |  |
| Output Created |  | 29-DEC-2023 00:33:03 |
| Comments |  |  |
| Input | Active Dataset | DataSet3 |
| Filter | <none> |
| Weight | <none> |
| Split File | <none> |
| Date | WEEK, not periodic, DAY, period 5 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| Cases Used | Only cases with valid data for the dependent variable are used in computing any statistics. |
| Syntax |  | TSMODEL /MODELSUMMARY PRINT=[MODELFIT] /MODELSTATISTICS DISPLAY=YES MODELFIT=[ SRSQUARE] /MODELDETAILS PRINT=[ FORECASTS] /SERIESPLOT OBSERVED FORECAST FIT FORECASTCI /OUTPUTFILTER DISPLAY=ALLMODELS /SAVE PREDICTED(Predicted) /AUXILIARY CILEVEL=95 MAXACFLAGS=24 /MISSING USERMISSING=EXCLUDE /MODEL DEPENDENT=Price INDEPENDENT=WEEK\_ DAY\_ PREFIX='Model' /EXPERTMODELER TYPE=[ARIMA EXSMOOTH] TRYSEASONAL=YES /AUTOOUTLIER DETECT=OFF. |
| Resources | Processor Time | 00:00:00.81 |
| Elapsed Time | 00:00:02.98 |
| Variables Created or Modified | Predicted\_Price\_Model\_1 | Predicted value from Price-Model\_1 |
| Use | From | First observation |
| To | Last observation |
| Predict | From | First observation |
| To | WEEK\_ 320, DAY\_ 5 |

[DataSet3]

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| **Warnings** |
| Subcommand MODEL 1: The Expert Modeler did not consider seasonal models because there are gaps in the data. |

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| **Model Description** |  |  |  |
|  |  |  | Model Type |
| Model ID | Price | Model\_1 | ARIMA(0,1,5) |

**Model Summary**

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| **Model Fit** |  |  |  |  |  |  |  |
| Fit Statistic | Mean | SE | Minimum | Maximum | Percentile |  |  |
| 5 | 10 | 25 |
| Stationary R-squared | .184 | . | .184 | .184 | .184 | .184 | .184 |
| R-squared | .992 | . | .992 | .992 | .992 | .992 | .992 |
| RMSE | 18.591 | . | 18.591 | 18.591 | 18.591 | 18.591 | 18.591 |
| MAPE | 2.659 | . | 2.659 | 2.659 | 2.659 | 2.659 | 2.659 |
| MaxAPE | 90.303 | . | 90.303 | 90.303 | 90.303 | 90.303 | 90.303 |
| MAE | 8.279 | . | 8.279 | 8.279 | 8.279 | 8.279 | 8.279 |
| MaxAE | 343.150 | . | 343.150 | 343.150 | 343.150 | 343.150 | 343.150 |
| Normalized BIC | 5.864 | . | 5.864 | 5.864 | 5.864 | 5.864 | 5.864 |

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| **Model Fit** |  |  |  |  |
| Fit Statistic | Percentile |  |  |  |
| 50 | 75 | 90 | 95 |
| Stationary R-squared | .184 | .184 | .184 | .184 |
| R-squared | .992 | .992 | .992 | .992 |
| RMSE | 18.591 | 18.591 | 18.591 | 18.591 |
| MAPE | 2.659 | 2.659 | 2.659 | 2.659 |
| MaxAPE | 90.303 | 90.303 | 90.303 | 90.303 |
| MAE | 8.279 | 8.279 | 8.279 | 8.279 |
| MaxAE | 343.150 | 343.150 | 343.150 | 343.150 |
| Normalized BIC | 5.864 | 5.864 | 5.864 | 5.864 |

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| **Model Statistics** |  |  |  |  |  |  |
| Model | Number of Predictors | Model Fit statistics | Ljung-Box Q(18) |  |  | Number of Outliers |
| Stationary R-squared | Statistics | DF | Sig. |
| Price-Model\_1 | 0 | .184 | 16.006 | 14 | .313 | <.001 |

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| **Forecast** |  |  |  |  |  |  |  |
| Model |  | 311 Thu | 311 Fri | 311 Sat | 312 Sun | 312 Mon | 312 Tue |
| Price-Model\_1 | Forecast | 442.05 | 439.76 | 437.93 | 439.93 | 441.34 | 441.54 |
| UCL | 482.18 | 488.21 | 489.06 | 494.93 | 499.95 | 506.53 |
| LCL | 404.44 | 394.96 | 390.86 | 389.60 | 387.98 | 382.93 |

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| **Forecast** |  |  |  |  |  |  |  |
| Model |  | 312 Wed | 312 Thu | 312 Fri | 312 Sat | 313 Sun | 313 Mon |
| Price-Model\_1 | Forecast | 441.74 | 441.94 | 442.14 | 442.34 | 442.54 | 442.74 |
| UCL | 512.63 | 518.34 | 523.75 | 528.90 | 533.84 | 538.60 |
| LCL | 378.38 | 374.21 | 370.35 | 366.74 | 363.35 | 360.14 |

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| **Forecast** |  |  |  |  |  |  |  |
| Model |  | 313 Tue | 313 Wed | 313 Thu | 313 Fri | 313 Sat | 314 Sun |
| Price-Model\_1 | Forecast | 442.94 | 443.14 | 443.35 | 443.55 | 443.75 | 443.95 |
| UCL | 543.19 | 547.64 | 551.96 | 556.17 | 560.28 | 564.30 |
| LCL | 357.09 | 354.19 | 351.42 | 348.76 | 346.20 | 343.74 |

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| **Forecast** |  |  |  |  |  |  |  |
| Model |  | 314 Mon | 314 Tue | 314 Wed | 314 Thu | 314 Fri | 314 Sat |
| Price-Model\_1 | Forecast | 444.15 | 444.35 | 444.55 | 444.76 | 444.96 | 445.16 |
| UCL | 568.23 | 572.08 | 575.86 | 579.58 | 583.23 | 586.82 |
| LCL | 341.36 | 339.06 | 336.83 | 334.67 | 332.58 | 330.54 |

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| **Forecast** |  |  |  |  |  |  |  |
| Model |  | 315 Sun | 315 Mon | 315 Tue | 315 Wed | 315 Thu | 315 Fri |
| Price-Model\_1 | Forecast | 445.36 | 445.56 | 445.76 | 445.97 | 446.17 | 446.37 |
| UCL | 590.36 | 593.85 | 597.30 | 600.69 | 604.05 | 607.37 |
| LCL | 328.56 | 326.63 | 324.74 | 322.91 | 321.11 | 319.36 |

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| **Forecast** |  |  |  |  |  |  |  |
| Model |  | 315 Sat | 316 Sun | 316 Mon | 316 Tue | 316 Wed | 316 Thu |
| Price-Model\_1 | Forecast | 446.57 | 446.78 | 446.98 | 447.18 | 447.38 | 447.59 |
| UCL | 610.65 | 613.89 | 617.10 | 620.27 | 623.42 | 626.53 |
| LCL | 317.65 | 315.97 | 314.33 | 312.72 | 311.14 | 309.59 |

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| **Forecast** |  |  |  |  |  |  |  |
| Model |  | 316 Fri | 316 Sat | 317 Sun | 317 Mon | 317 Tue | 317 Wed |
| Price-Model\_1 | Forecast | 447.79 | 447.99 | 448.20 | 448.40 | 448.60 | 448.81 |
| UCL | 629.62 | 632.68 | 635.71 | 638.72 | 641.71 | 644.67 |
| LCL | 308.07 | 306.58 | 305.12 | 303.68 | 302.27 | 300.88 |

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| **Forecast** |  |  |  |  |  |  |  |
| Model |  | 317 Thu | 317 Fri | 317 Sat | 318 Sun | 318 Mon | 318 Tue |
| Price-Model\_1 | Forecast | 449.01 | 449.21 | 449.42 | 449.62 | 449.83 | 450.03 |
| UCL | 647.61 | 650.53 | 653.43 | 656.31 | 659.17 | 662.02 |
| LCL | 299.51 | 298.17 | 296.85 | 295.54 | 294.26 | 293.00 |

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| **Forecast** |  |  |  |  |  |  |  |
| Model |  | 318 Wed | 318 Thu | 318 Fri | 318 Sat | 319 Sun | 319 Mon |
| Price-Model\_1 | Forecast | 450.23 | 450.44 | 450.64 | 450.85 | 451.05 | 451.26 |
| UCL | 664.84 | 667.65 | 670.44 | 673.22 | 675.98 | 678.72 |
| LCL | 291.75 | 290.53 | 289.32 | 288.12 | 286.95 | 285.79 |

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| **Forecast** |  |  |  |  |  |  |  |
| Model |  | 319 Tue | 319 Wed | 319 Thu | 319 Fri | 319 Sat | 320 Sun |
| Price-Model\_1 | Forecast | 451.46 | 451.67 | 451.87 | 452.07 | 452.28 | 452.49 |
| UCL | 681.45 | 684.17 | 686.87 | 689.56 | 692.24 | 694.90 |
| LCL | 284.64 | 283.51 | 282.39 | 281.29 | 280.21 | 279.13 |

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| **Forecast** |  |  |  |  |  |
| Model |  | 320 Mon | 320 Tue | 320 Wed | 320 Thu |
| Price-Model\_1 | Forecast | 452.69 | 452.90 | 453.10 | 453.31 |
| UCL | 697.56 | 700.20 | 702.83 | 705.44 |
| LCL | 278.07 | 277.02 | 275.98 | 274.96 |

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| For each model, forecasts start after the last non-missing in the range of the requested estimation period, and end at the last period for which non-missing values of all the predictors are available or at the end date of the requested forecast period, whichever is earlier. |  |  |  |  |  |

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