"General" Data Table

Column Heading	Column Description
Series Name	Name of series. This is the <i>name</i> argument in the series spec, if given, or the name of the output files otherwise.
View Spec File	Press the button to show the spec file that was used to adjust the series. Only works if the row was added automatically when the series was run.
Filename	Name of the output files
Period	Number of observations per year.
Transform	Transformation. Includes "**" if the transformation was automatically selected.
Mode	Seasonal adjustment mode. Includes "**" if the mode was automatically selected.
Span	Span of data adjusted.
Outlier Span	Span of data checked for outliers.
AO/LS/TC Crit Val	Critical t values for additive outliers, level shifts, and temporary changes, separated by a slash. "*" indicates it was chosen by X-13ARIMA-SEATS; "" indicates this type of outlier was not searched for.
# Outliers	Number of hard-coded and automatically selected outliers.
# Auto	Number of outliers automatically selected.
# Iter	Number of iterations to reach convergence. If the maximum number of iterations was changed from the default (1500), the cell will also show an "m". If the convergence tolerance was changed from the default (0.00001), the cell will also contain a "t".
# Forecasts	Number of forecasted values.
Forecast mode	Indicates whether forecasts are within sample or out of sample.

"Model Info" Data Table Column Description

Column Heading	Column Description
Series Name	Name of series.
Model Span	Span of data used to estimate regARIMA model coefficients.
ARIMA Model	ARIMA model; "**" indicates the model was selected automatically by the program.
Regressors	The regressors included in the model.
Trading Day	Trading day regressors included, with t-values if only one regressor and
	p-values of the chi-squared test of groups of regressors if multiple regressors; "**" indicates trading day was included based on results of AIC test.
Holiday	Easter, Thanksgiving, or Labor Day regressors (with their t-values) included; "**" indicates Easter was included based on results of AIC test.
Seasonal	Seasonal or trigonometric seasonal regressors included, with the p-value of the chi-squared test.
Constant	Gives the t-value of the constant, if it is included.
User	Gives t-values of user defined regressors included, and p-value of the chi- squared test of the group of regressors, if there is more than one; "**" indicates user regressors are included based on results of AIC test.
Coded Outliers	The outliers hard-coded in the spec file, with their t-values.
Auto Outliers	The outliers automatically found, with their t-values.
Variance	Innovation variance of the ARIMA model.
Phi1	Estimate of nonseasonal AR parameter at lag 1.
Sum NS AR	Sum of all nonseasonal AR parameter estimates.

1 von 5

Column Heading	Column Description
Theta1	Estimate of nonseasonal MA parameter at lag 1.
Sum NS MA	Sum of all nonseasonal MA parameter estimates.
Sum Seas AR	Sum of all seasonal AR parameter estimates.
Sum Seas MA	Sum of all seasonal MA parameter estimates.
Successful SEATS Adj?	If a SEATS adjustment was requested and the decomposition was not successful (that is, there is no seasonal adjustment), this column will be 'no'. If it was successful, if will say 'yes'. If no SEATS decomposition was attempted, it will read 'n/a'.
SEATS Model	If the SEATS procedure changed the ARIMA model specified by the arima {} spec or selected by the automatic model procedure, then this column will give the SEATS model.

"Model Diagnostics" Data Table Column Description

Column Heading	Column Description
Series Name	Name of series.
AICC	F-adjusted Akaike's Information Criterion (corrected for sample size).
aa FcE (3-yr)	Average absolute percentage error of forecasts in the last three years. An average of the 1-step ahead to 12-step ahead (4-step ahead for quarterly series) forecasts of the data with one, two and three years removed. By default, this is calculated using within-sample forecasts, but it can be done with out-of-sample forecasts if requested.
Normal?	Indicates whether residuals pass normality tests.
# LBQ Fail	Number of the lags from 1 to 24 with significant Ljung-Box Q statistic.
Sig LBQ	List of lags with significant LBQ.
Sig Seas LBQ	Seasonal lags with significant LBQ.
# BPQ Fail	Number of the lags from 1 to 24 with significant Box-Pierce Q statistic.
Sig BPQ	List of lags with significant BPQ.
Sig Seas BPQ	Seasonal lags with significant BPQ.
Sig ACF	Lags with significant autocorrelation in the residuals.
Sig Seas ACF	Seasonal lags with significant autocorrelation in the residuals.
Sig PACF	Lags with significant partial autocorrelation in the residuals.
Sig Seas PACF	Seasonal lags with significant partial autocorrelation in the residuals.
Resid Peaks	Indicates the visually significant seasonal and trading day peaks in the spectrum of the model residuals.
QS Residuals	QS statistic of the residuals.
QSS Residuals	QS statistic of the residuals on the last 96 observations (8 years for a monthly series).

"x11" Data Table

Column Heading	Column Description
Series Name	Name of series.
Sigma Lim	Lower and upper sigma limits for downweighting extreme values.
Seasonal MA	Seasonal moving average filter; "**" indicates the filter was chosen by X-13ARIMA-SEATS.
Trend MA	Length of the final Henderson trend filter; "**" indicates the filter was chosen by X-13ARIMA-SEATS.

2 von 5 08.08.2023, 10:59

Column Heading	Column Description
I/S Ratio	The final irregular/seasonal Ratio from Table D10; also called the global moving
	seasonality ratio.
I/C Ratio	The final irregular/trend ratio from Table D12.
D8F	F-statistic of test for seasonality assuming stability from D8 table.
D8F p-val	p-value of D8 F statistic.
D11F	p-value of D11 F statistic for residual seasonality.
D11F 3 yr	p-value of D11 F statistic for residual seasonality in the last three years.
M1	The relative contribution of the irregular over three months span.
M2	The relative contribution of the irregular component to the stationary portion of the variance.
M3	The amount of period-to-period change in the irregular component as compared to the amount of period-to-period change in the trend-cycle.
M4	The amount of autocorrelation in the irregular as described by the average duration of run.
M5	The number of months it takes the change in the trend-cycle to surpass the amount of change in the irregular.
M6	The amount of year-to-year change in the irregular as compared to the amount of year-to-year change in the seasonal.
M7	The amount of moving seasonality present relative to the amount of stable seasonality.
M8	The size of the fluctuations in the seasonal component throughout the whole series.
M9	The average linear movement in the seasonal component.
M10	As M8, calculated for recent years only.
M11	As M9, calculated for recent years only.
Q	A weighted average of M1-M11.
Q2	A weighted average of M1-M11 without M2.
MCD	Months for Cyclical Dominance
	"Spectrum & QS" Data Table

"Spectrum & QS" Data Table

Column Heading	Column Description
Series Name	Name of series.
SAdj Peaks	Indicates the visually significant seasonal and trading day peaks in the spectrum of the seasonally adjusted series.
Irr Peaks	Indicates the visually significant seasonal and trading day peaks in the spectrum of the modified irregular.
Resid Peaks	Indicates the visually significant seasonal and trading day peaks in the spectrum of the model residuals.
Ori Peaks	Indicates the visually significant seasonal and trading day peaks in the spectrum of the (possibly differenced, transformed, prior-adjusted) original series.
Nonsig Seasonal Peaks	Indicates whether there is a nonsignificant peak at any of S1, S2, S3, or S4 in the spectrum of the seasonally adjusted series ("sadj"), irregular ("irr"), or residuals ("rsd"). Also gives the height in stars of the tallest of these peaks.
Nonsig TD Peaks	Indicates whether there is a nonsignificant peak at T1 in the spectrum of the seasonally adjusted series ("sadj"), irregular ("irr"), or residuals ("rsd"). Also gives the height in stars of the tallest of these peaks.
QS Sadj	QS statistic of the seasonally adjusted series.
QSS Sadj	QS statistic of the seasonally adjusted series calculated using the spectrum span.

3 von 5

Column Heading	Column Description
QS Sadj Adj Ext	QS statistic of the seasonally adjusted series adjusted for extreme values.
QSS Sadj Adj Ext	QS statistic of the seasonally adjusted series adjusted for extreme values calculated using the spectrum span.
QS Irr	QS statistic of the irregular component.
QSS Irr	QS statistic of the irregular component calculated using the spectrum span.
QS Irr Adj Ext	QS statistic of the irregular component adjusted for extreme values.
QSS Irr Adj Ext	QS statistic of the irregular component adjusted for extreme values calculated using the spectrum span.
QS Ori	QS statistic of the original series.
QSS Ori	QS statistic of the original series calculated using the spectrum span.
QS Ori Adj Ext	QS statistic of the original series adjusted for extreme values.
QSS Ori Adj Ext	QS statistic of the original series adjusted for extreme values calculated using the spectrum span.

"Stability Diagnostics" Data Table

Column Heading	Column Description
Series Name	Name of series.
Rev Span	Span of data of revision history analysis.
SA.AAR	Average absolute percent revisions of the seasonal adjustments.
MM.AAR	Average absolute revision of the month-to-month percent change of the adjustments.
#Spans	Number of spans for sliding spans analysis.
Span Length	Length of each span.
SF Cut	Threshold value for the seasonal factors.
SF75p	75th percentile of maximum percent differences across spans of seasonal factors.
SF%	Percent of months (quarters) with a maximum absolute percent change of the seasonal factors greater than the threshold.
SA Cut	Threshold value for the seasonal adjustment values.
SA75p	75th percentile of maximum percent differences across spans of the seasonally adjusted series.
SA%	Percent of months (quarters) with a maximum absolute percent change of the seasonal adjustment values greater than the threshold.
MM Cut	Threshold value for the period-to-period percent change in the seasonally adjusted series.
MM60p	60th percentile of maximum percent differences across spans of period-to-period changes in the seasonally adjusted series.
MM%	Percent of months (quarters) with a maximum absolute difference of period-to- period change in the seasonally adjusted series greater than the threshold.
TD Cut	Threshold value for trading day factors.
TD75p	75th percentile of maximum percent differences across spans of trading day factors.
TD%	Percent of months (quarters) with a maximum absolute percent change of the trading day factors greater than the threshold.
YY Cut	Threshold value for the year-to-year change in the seasonally adjusted series.
YY90p	90th percentile of maximum percent differences across spans of year-to-year changes in the seasonally adjusted series.

4 von 5 08.08.2023, 10:59

Column Heading

Column Description

YY%

Percent of months (quarters) with a maximum absolute difference of year-to-year change in the seasonally adjusted series greater than the threshold.

5 von 5