How many series do you have?

Just one → What are you interested in?

More than one

What are you interested in?
- Prediction interval → MIS
- Safety stock → Do simulations
- Point forecast
- Quantile → Pinball score

Do simulations
- You don't want to? → Take cumulative values and assess them via...

Is the series intermittent?
- Yes → RMSE
- No → Are you dealing with symmetric distribution in your time series?
- I don't know → RMSE

Are you dealing with symmetric distribution in your time series?
- Yes → MAE
- No → What do you like?
- I don't know → MAE

What do you like?
- Mean → RMSE
- Geometric mean → RMSLE
- Median → MAE

rMIS
sMIS

Are all the series stationary?
- Yes → sMIS
- No → rMIS
- I'm not sure → rMIS

Do you care about interpretation?
- Yes → Are all the series stationary?
- No → MSIS

Prediction intervals → Do you care about interpretation?

What are you interested in?
- Quantile
- Safety stock → Do simulations
- Point forecasts
- Prediction intervals

Do simulations
- You don't want to? → Take cumulative values for each series then...

MSPS

Do you care about interpretation?
- No → MSPS
- Yes → Are the series stationary?

Are the series stationary?
- Yes → sMPS
- No → rMPS
- I don't know → rMPS

Are the series intermittent?
- Yes → sRMSE
- No → Are you dealing with symmetric distributions in your time series?
- I don't know → sRMSE

Are you dealing with symmetric distributions in your time series?
- No → sRMSE
- Yes → sMAE
- I don't know → sRMSE

Do you care about interpretation?
- No → Are the series intermittent?
- Yes → Are all the series stationary?

Are the series intermittent?
- Yes → RMSSE
- No → Are the distributions symmetric?
- I'm not sure → RMSSE

Are the distributions symmetric?
- No → RMSSE
- Yes → MASE

What do you like?
- Geometric mean → RMSSLE
- Mean → RMSSE
- Median → MASE

Are all the series stationary?
- Yes
- No
- I don't know → rRMSE

Are the series intermittent?
- No → Are the distributions symmetric?
- Yes → rRMSE
- I don't know → rRMSE

And use global average as benchmark

Are the distributions symmetric?
- Yes → rMAE
- No → What do you like?
- I don't know → rMAE

What do you like?
- Median → rMAE
- Geometric mean → rRMSLE
- Mean → rRMSE

And use Naïve as a benchmark

rRMSLE
rRMSE

- MAE is Mean Absolute Error,
- RMSE is Root Mean Squared Error
- RMSLE is Root Mean Squared Logarithmic Error
- MIS is Mean Interval Score
- PS is Pinball Score

- small "s" means "scaled" - divided by in-sample mean
- small "r" stands for "relative" - value divided by similar from a benchmark model
- RMSSE, MASE, RMSSLE, MSPS, MSIS are scaled errors, with in-sample first differences in the denominator