

**OPTIMAL FORECASTING WITH LINEX COST FUNCTIONS IN A HIERARCHICAL ORGANIZATION**

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**ABSTRACT**

When utilizing optimal minimum expected cost forecasting in a hierarchical organization, the aggregate of lower level forecasts generally do not sum to the forecast of the higher level. The traditional forecast reconciliation approach uses proportional allocation for reconciliation. It has been shown that such a procedure generally eliminates forecast optimality. In this paper an optimality retaining reconciliation method is developed with focus on the asymmetrical Linex cost function.

Keywords: *Optimal Forecasting, Linex Cost Function, Aggregation, Reconciling Forecasts.*