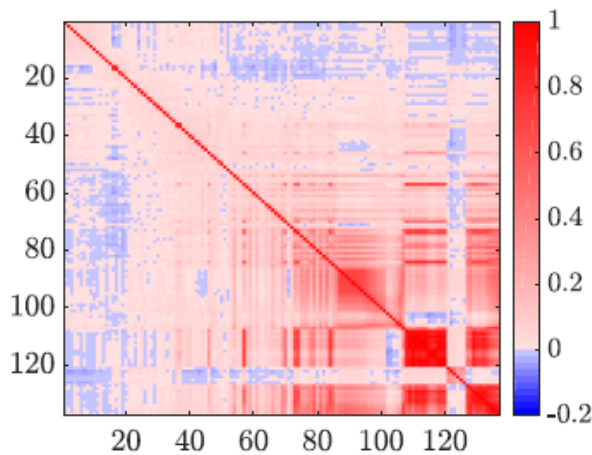


# The impact of using reconditioned correlated observation error covariance matrices in the Met Office 1D-Var system



IASI observation error correlations

- Using observation error correlations in data assimilation is shown to improve the analysis and allows the use of more high-density data
- Reconditioning the error correlation matrix enables observation error correlations to be included in the assimilation efficiently
- The application of reconditioning in the 1D-Var Met Office retrieval system is investigated

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