



Parameter choice methods for downward continuation

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This presentation investigates the behavior of many parameter choice methods for the ill-posed problem of downward continuation, e.g., of satellite measurements. The corresponding regularization methods are spectral cut-off (i.e. truncation of the spherical harmonics expansion) and Tikhonov regularization. We present the result of a large number of scenarios with regard to white and colored stochastic noise. This study focuses on the stability of the parameter choice methods for different types of noise and identifies the most reliable methods.