$$\begin{bmatrix} 1 & 0 \\ 0 & 1 \\ -1 & 1 \end{bmatrix} \begin{bmatrix} \sigma_1^2 & \sigma_{12} \\ \sigma_{21} & \sigma_2^2 \end{bmatrix} \begin{bmatrix} 1 & 0 & -1 \\ 0 & 1 & -1 \end{bmatrix} = \begin{bmatrix} \sigma_1^2 & \sigma_{12} & -\sigma_1^2 - \sigma_{12} \\ \sigma_{21} & \sigma_2^2 & -\sigma_2^2 - \sigma_{21} \\ -2 & -\sigma_2^2 - \sigma_{21} - \sigma_2^2 - \sigma_{21} \end{bmatrix}$$

Covariance Matrix (Reconstructed)

 $Contrast^T$

Contrast