What is a Kernel-phase?

(abbreviated)

Non-redundant array

Observed phase ϕ, true phase ϕ_0, phase error φ

$\phi^{BC} = \phi_0^{BC} + (\varphi^{B} - \varphi^{C})$ $\phi^{AC} = \phi_0^{AC} + (\varphi^{A} - \varphi^{C})$ $\phi^{BA} = \phi_0^{BA} + (\varphi^{B} - \varphi^{A})$

Matrix A encodes the baselines.

$$\mathbf{\Phi} = \mathbf{\Phi}_0 + \mathbf{A} \bullet \boldsymbol{\varphi}$$

$$\mathbf{A} = \begin{bmatrix} 0 & 1 & -1 \\ 1 & 0 & -1 \\ -1 & 1 & 0 \end{bmatrix}$$

non-redundant
triangular array

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