Cylinder Map-Making Results
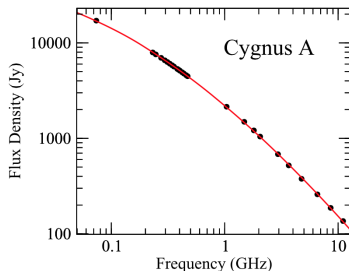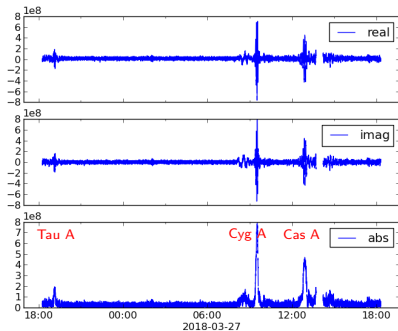
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Observational Data

We use data observed in 2018/03/22 – 2018/03/28.
Use Cygnus A as calibrator with flux given in Perley and Butler, 2017.

Map-Making

Map made by using Tikhonov-regularization based m-mode method.

$$v_{ij}^m = \sum_l B_{ij,l}^m a_l^m + n_{ij}^m$$

$$\boldsymbol{v} = \mathbf{B}\boldsymbol{a}$$

$$\hat{\boldsymbol{a}} = (\mathbf{B}^\dagger\mathbf{B} + \epsilon\mathbf{I})^{-1}\mathbf{B}^\dagger\boldsymbol{v}$$