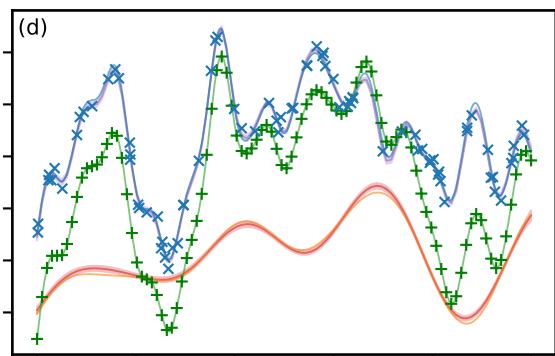
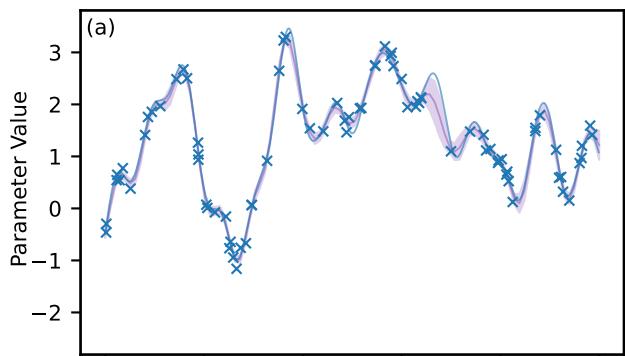


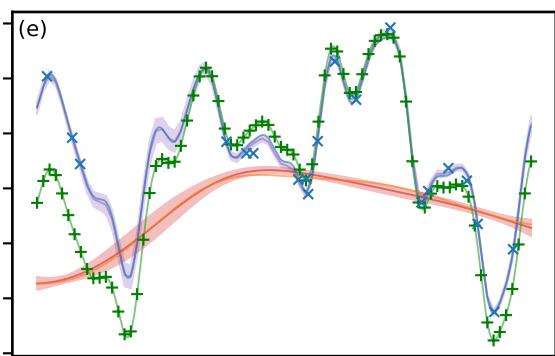
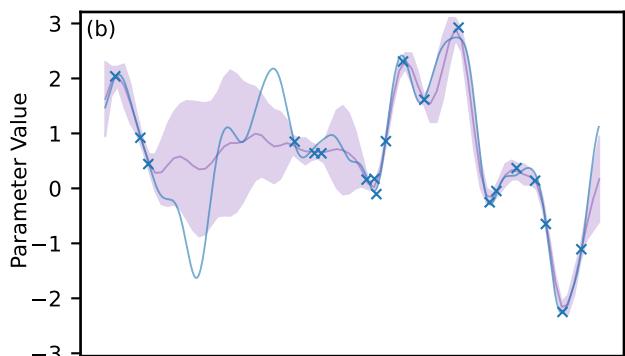
Single Process Model

Shared Process Model

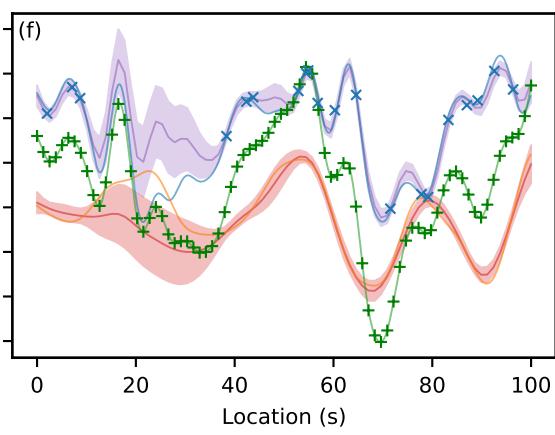
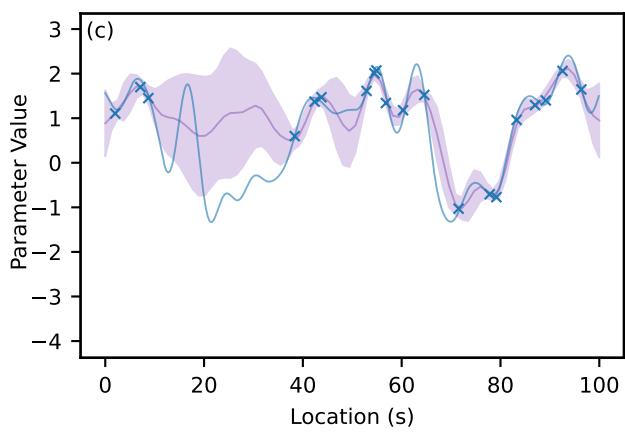
Scenario 1



Scenario 2



Scenario 3



- | | |
|---|---|
| — Unbiased Parameter Post.Pred. Exp. $E[\phi_Y(\mathbf{s}_z)]$ | — Unbiased Parameter Field $\phi_Y(\mathbf{s}^*)$ |
| — Unbiased Parameter Post.Pred. Std.Dev. $\sigma[\phi_Y(\mathbf{s}_z)]$ | — Bias Parameter Field $\phi_B(\mathbf{s}^*)$ |
| — Bias Parameter Post.Pred. Exp. $E[\phi_B(\mathbf{s}_z)]$ | — Climate Model Parameter Field $\phi_Z(\mathbf{s}^*)$ |
| — Bias Parameter Post.Pred. Std.Dev. $\sigma[\phi_B(\mathbf{s}_z)]$ | + In Situ Parameter Observations $\phi_Y(\mathbf{s}_Y)$ |
| | + Climate Model Parameter Observations $\phi_Z(\mathbf{s}_Z)$ |