Problem Set 1 ENCE689E Spring 2014

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Hydrologic Modeling

(a)

For each time t and each geographic point (x, y), the state variable \mathbf{y}_t is defined as

$$\begin{pmatrix} \text{SWE} \\ T_{\text{snow}} \end{pmatrix}_{x,y}$$

where SWE is snow water equivalent and $T_{\rm snow}$ is snowpack temperature.

Review of univariate PDFs

Distribution

Normal Gaussian

Lognormal

Gamma

Beta

Exponential