

**Accountability** Let a ‘**perfect model**’ be defined as one which captures completely the dynamics of a system. ‘**Model error**’ can then be defined as the difference in predictions that arise from models that are not perfect. Smith [2] notes that a prediction from a model that has initial condition uncertainty will not be exact, even if made by a perfect model. In the case of a perfect model this form of error is, however, different to model error since, provided [3] the initial conditions are consistent with observations and chosen to lie on the attractor, the forecasted values will reflect the true Probability Density Function (PDF) of the system. An ensemble that samples the true PDF of a system is defined by Smith [2] as ‘**Accountable**’, he (and others) note that imperfect models cannot be accountable [1, 2].

# Bibliography

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- [3] L. A. Smith. The maintenance of uncertainty. Proc International School of Physics "Enrico Fermi", CXXXIII:177–246, 1997.