



Data Assimilation Studies

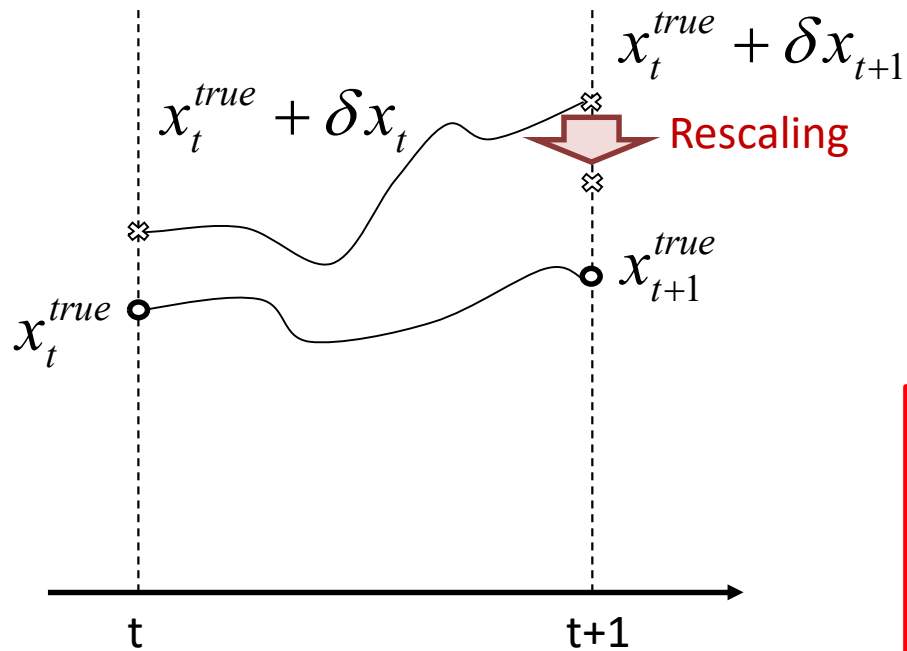
Shunji KOTSUKI

Postdoctoral Researcher, Data Assimilation Research Team, AICS

Data Assimilation Team Meeting, AICS, Kobe

Breeding analysis

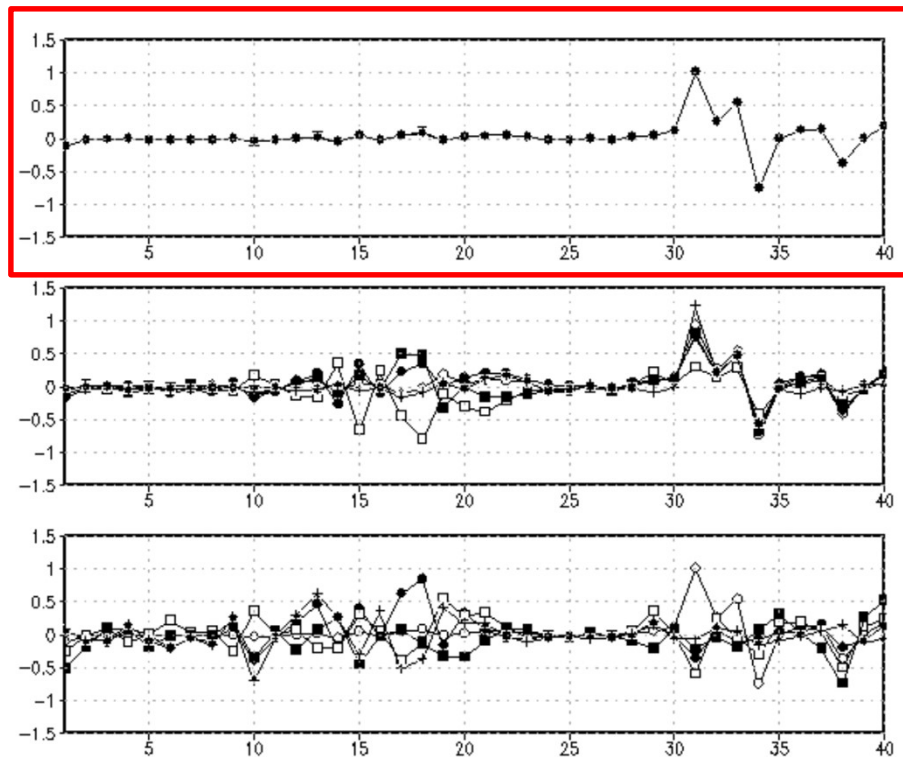
Breeding vectors with nature run cycle



$$\delta x_{t+1} \leftarrow \alpha \cdot \delta x_{t+1}$$

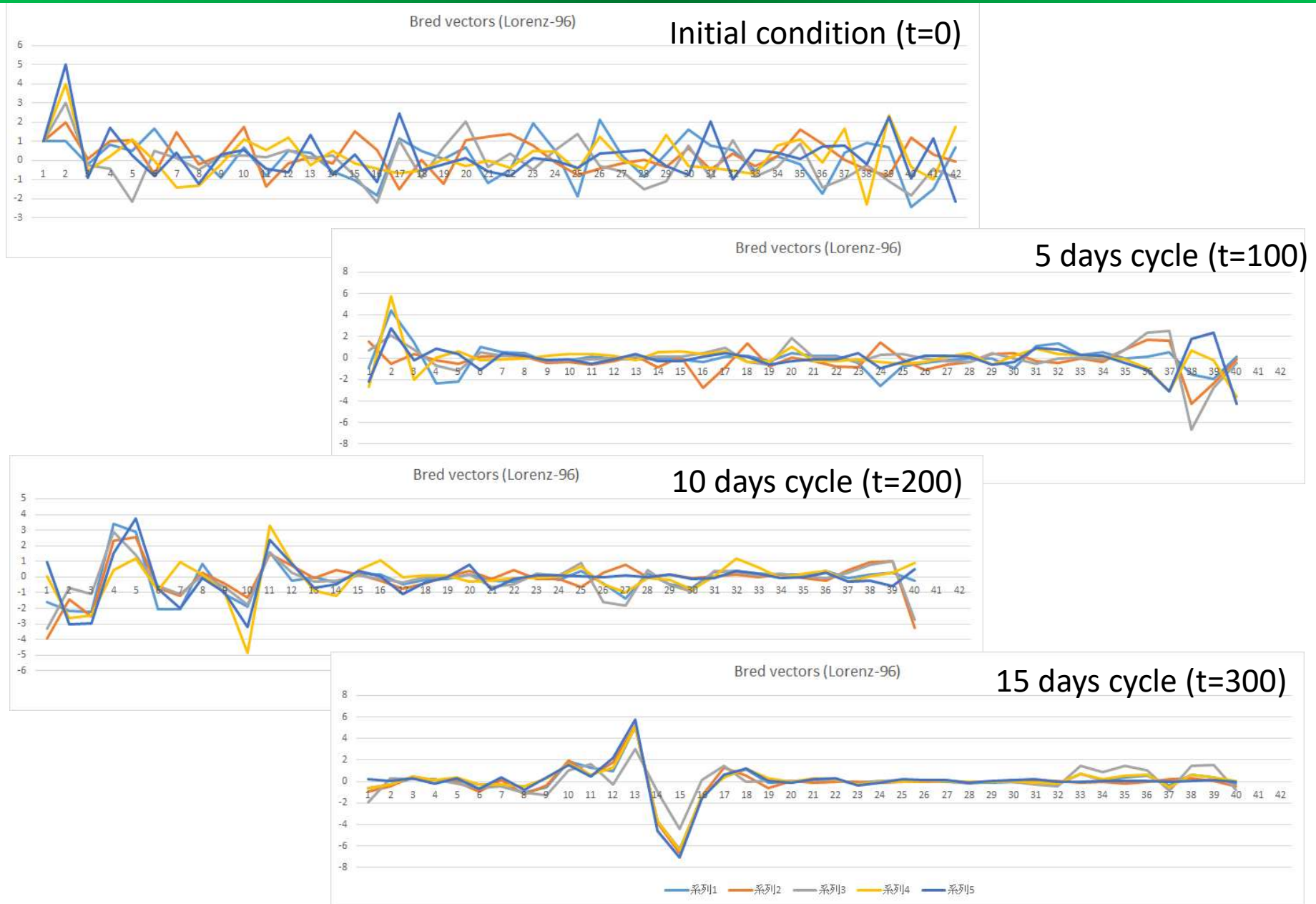
$$\alpha = \alpha_{init} / |\delta x_{t+1}|$$

when $|\delta x_{t+1}| > \alpha_{init}$

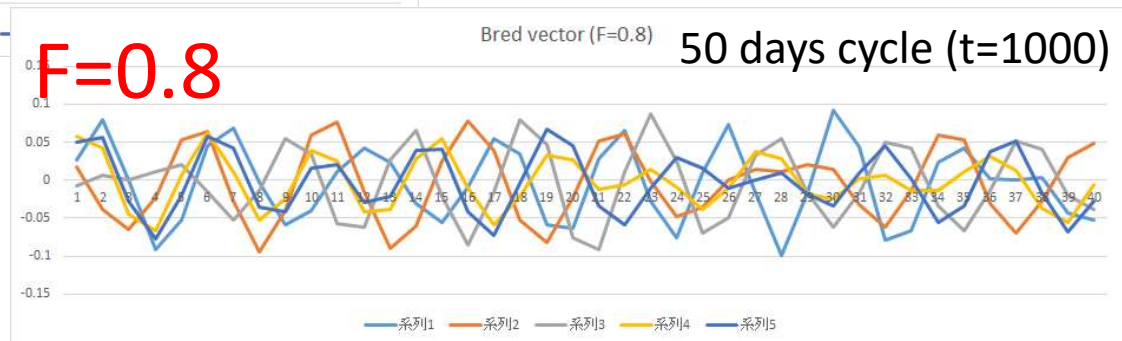
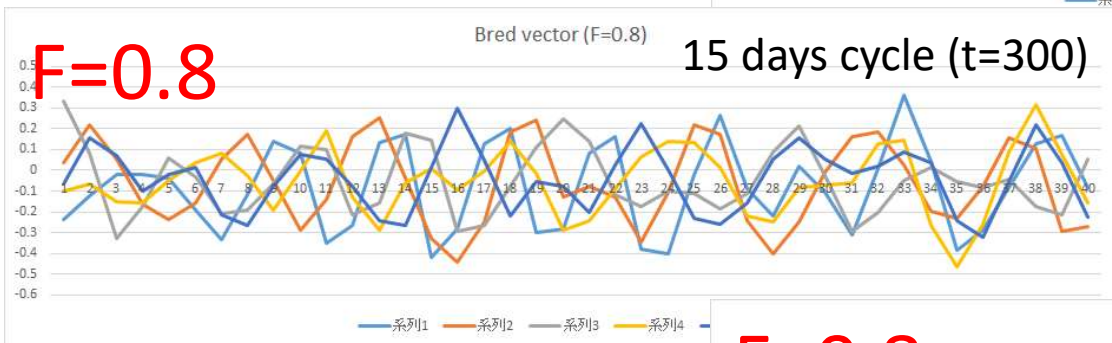
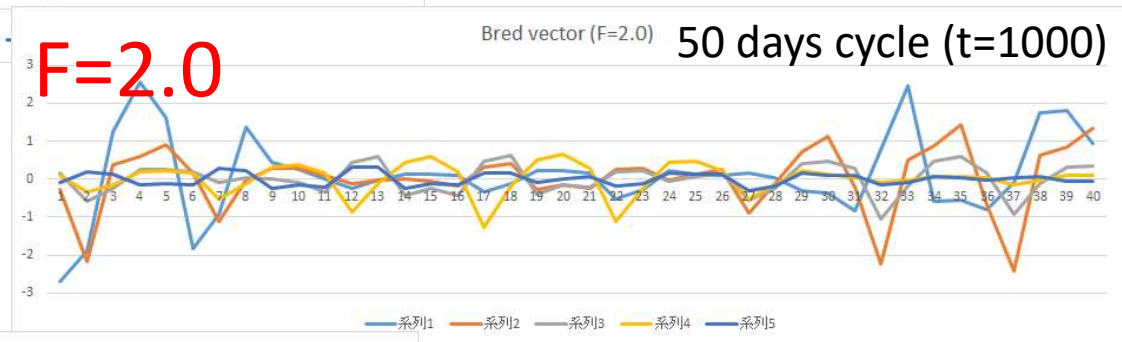
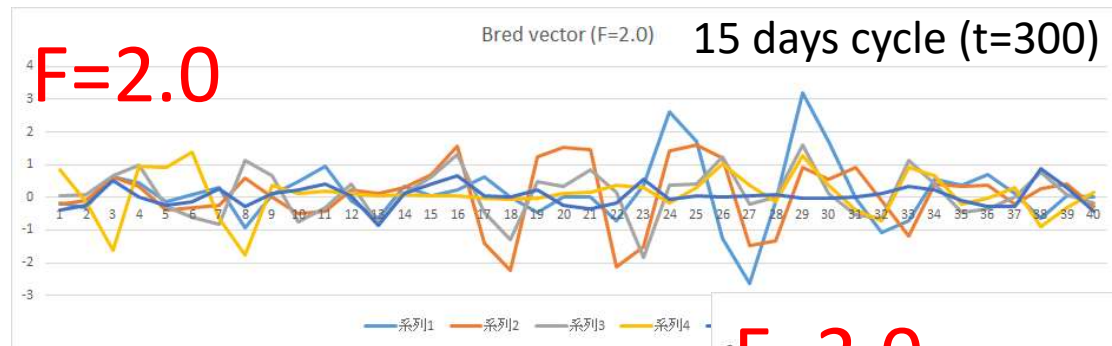


BV of 5 members (Miyoshi and Kalnay, 2005)

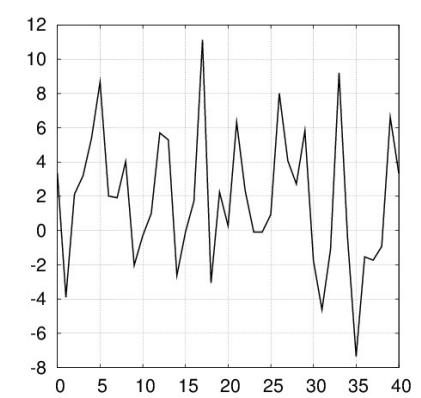
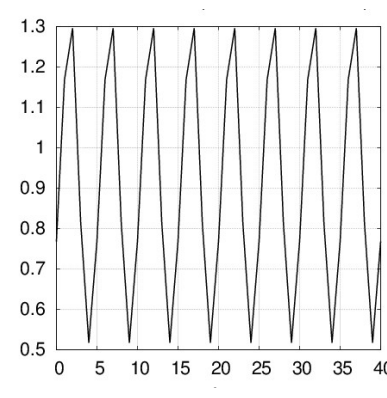
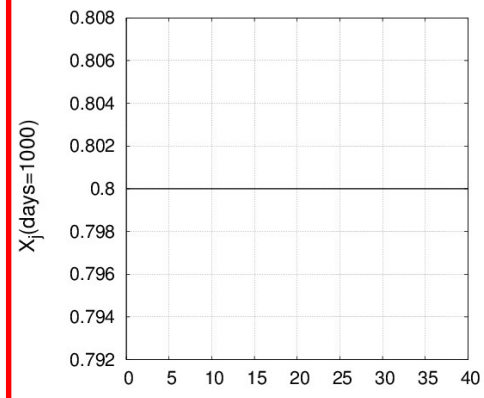
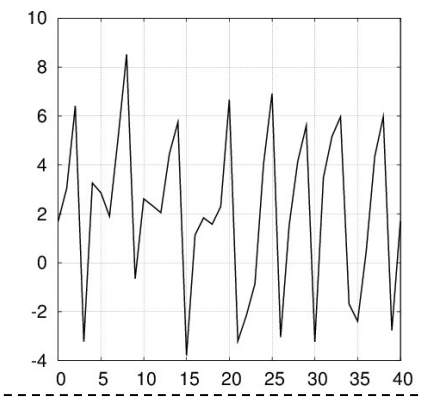
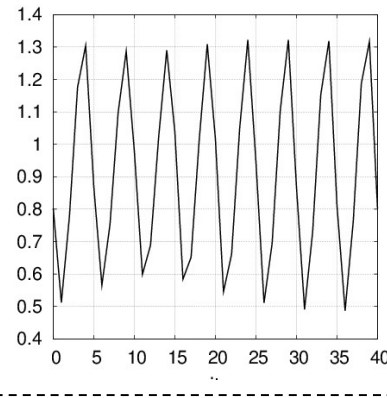
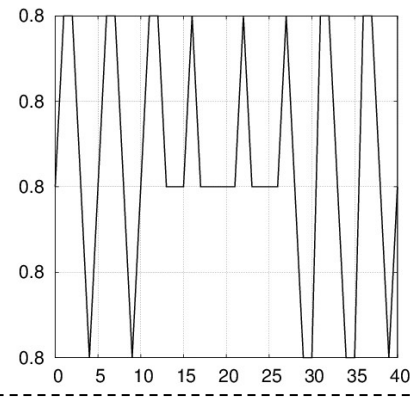
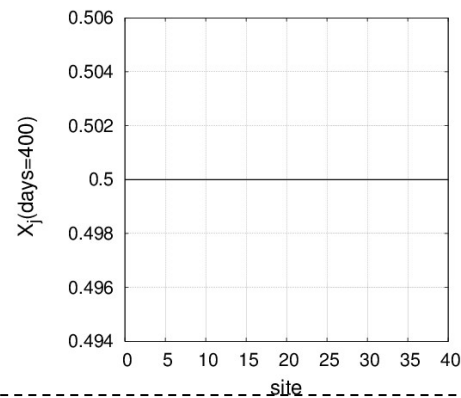
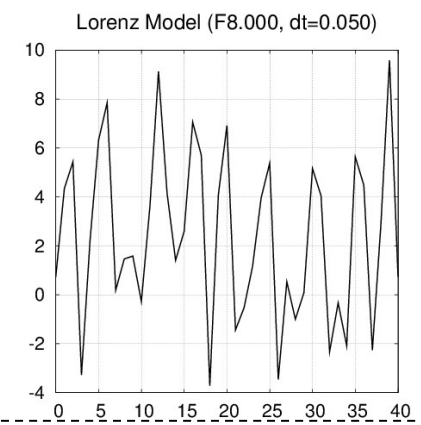
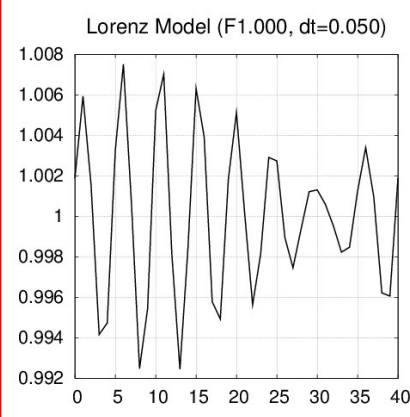
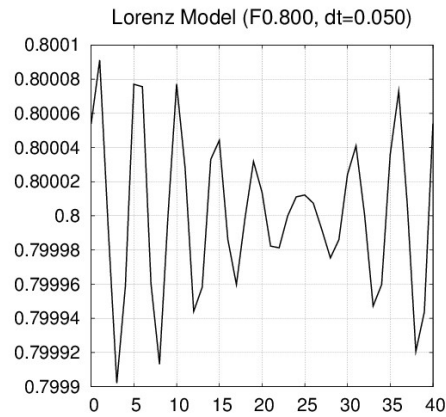
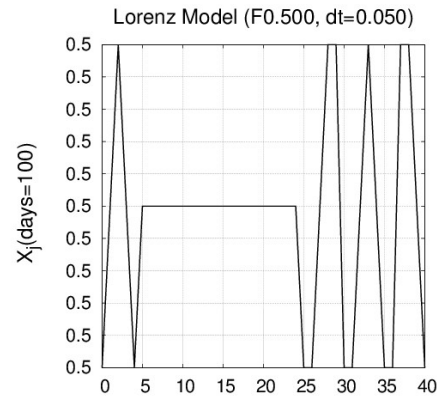
Breeding vectors with nature run cycle



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Ultimate condition (1000 days simulation)



Ongoing work

- Research
 - To check how serial EnSRF depends on orders of assimilating observation
 - To start breeding analysis with the land surface model
 - To prepare a PPT for the coming JSCE hydraulic engineering conference (4 – 6 March, in Kobe Univ.)
- Under consideration
 - To apply HPC summer school in Budapest (Jun)
 - To apply a JSPS start support (Apr-May)

