

TOKYO INSTITUTE OF TECHNOLOGY Ookayama Campus

Department of Civil Engineering 2011 Summer Semester Yoshimura Chihiro

> Environmental Statistics Outline #3 (25 Apr. 2010)

- 1. Uncertainty
- 2. Central tendency (Arithmetic mean, Geometric mean, Median, Mode)
- 3. Variability (Range, Variance, Standard deviation, Coefficient of Variation)
- 4. Basic assumption for population in parametric procedures
- 5. Normality assumption
- 6. Data transformation
- 7. Standard Deviation (SD) vs Standard Error (SE)
- 8. Central Limit Theorem
- 9. Monte Carlo methods
- 10. Statistical test for environmental monitoring
- 11. Exercise and Report