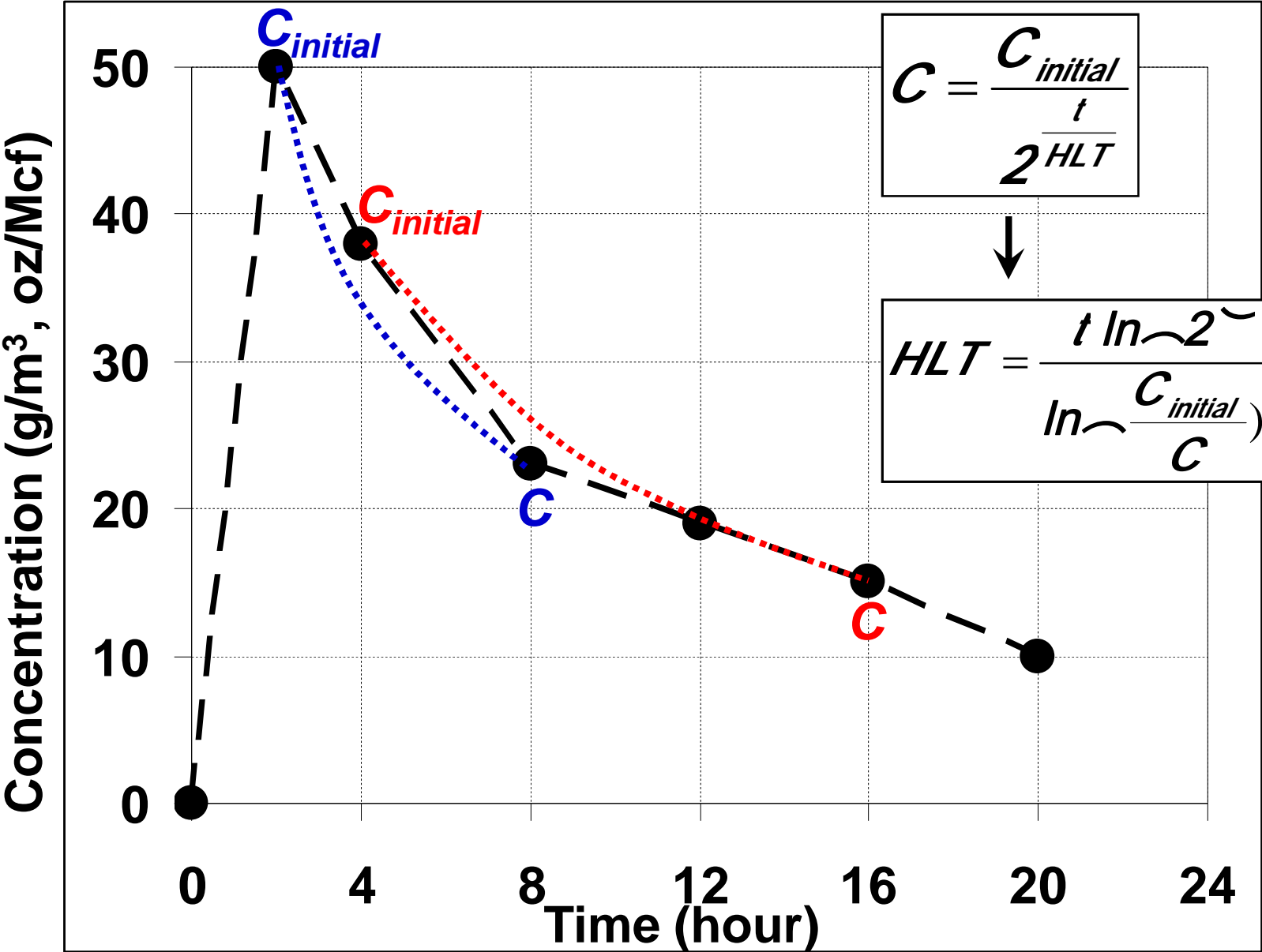


Real-Time Gas Monitoring

Dr. Wat Chayaprasert

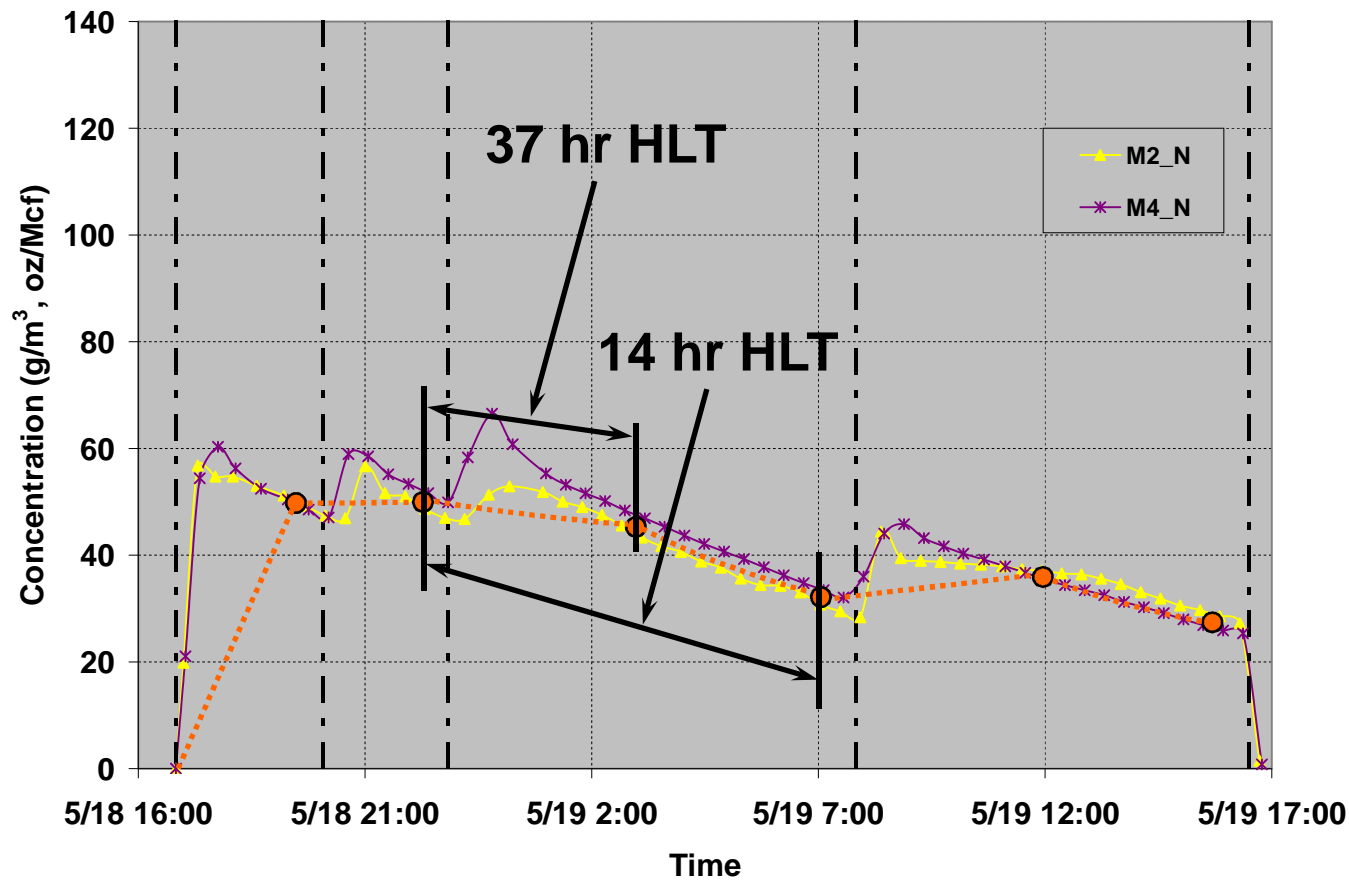
MB Alternatives Workshop, August 19th – 21st 2009

Half-Loss Time

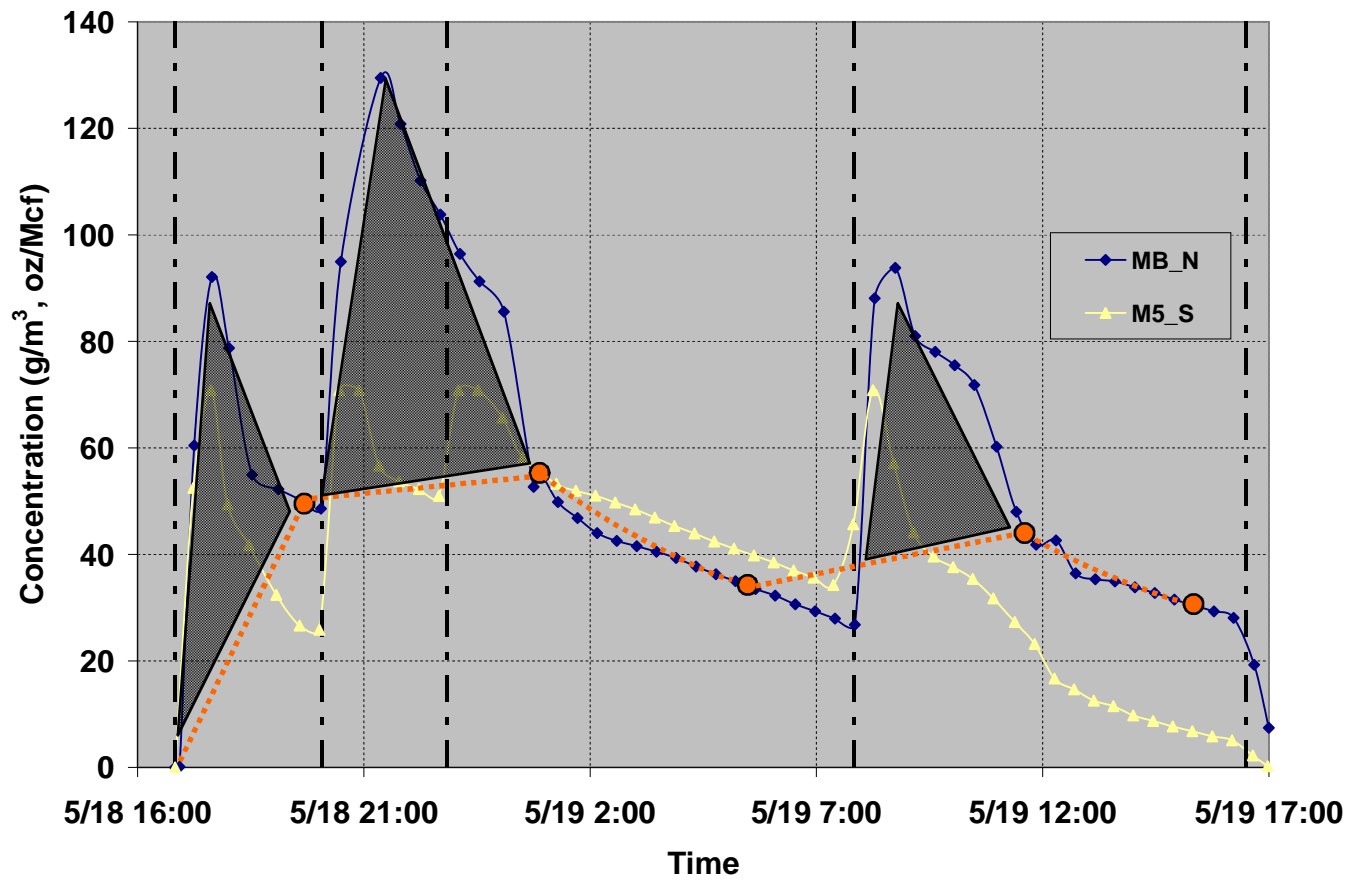


Why Continuous Monitoring?

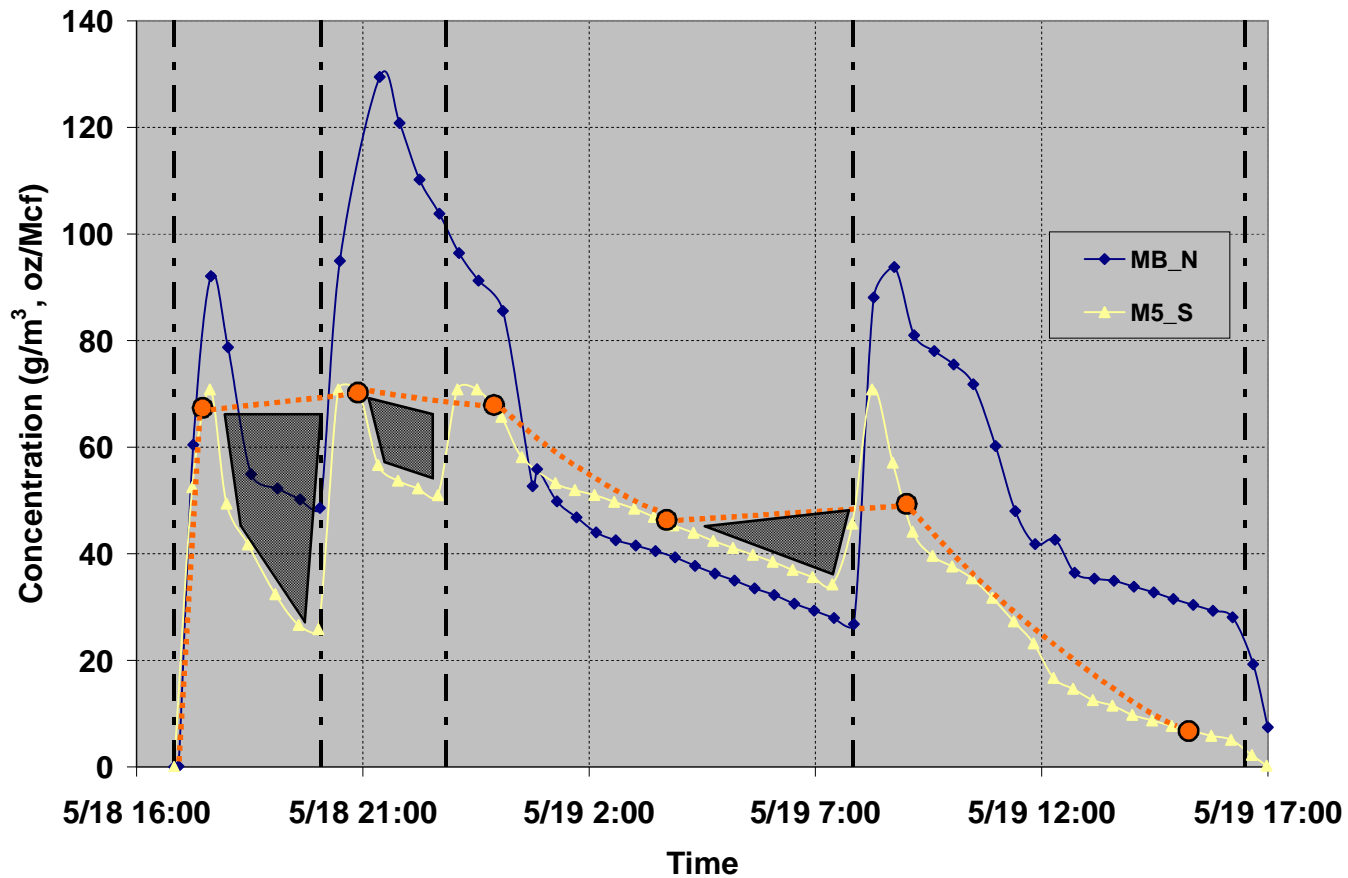
- Inadequate number of data points would not allow for accurate HLT estimation and Ct product calculations



Why Continuous Monitoring?



Why Continuous Monitoring?



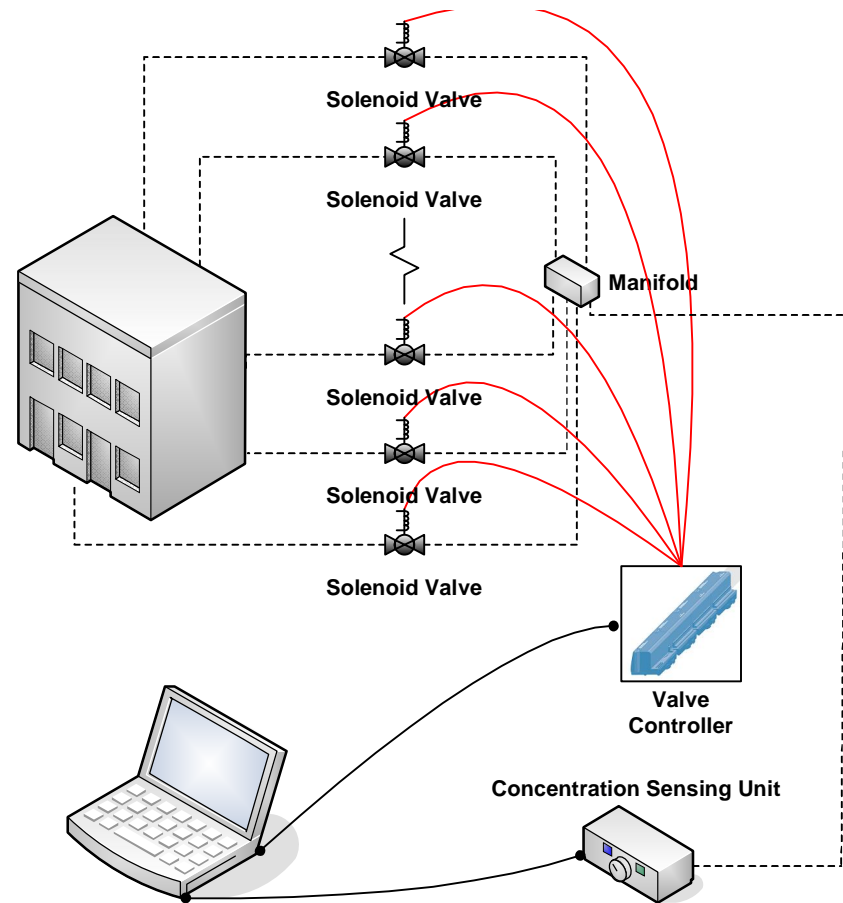
Current Practice

- Manually sample every 3-4 hours



K-State Monitoring System

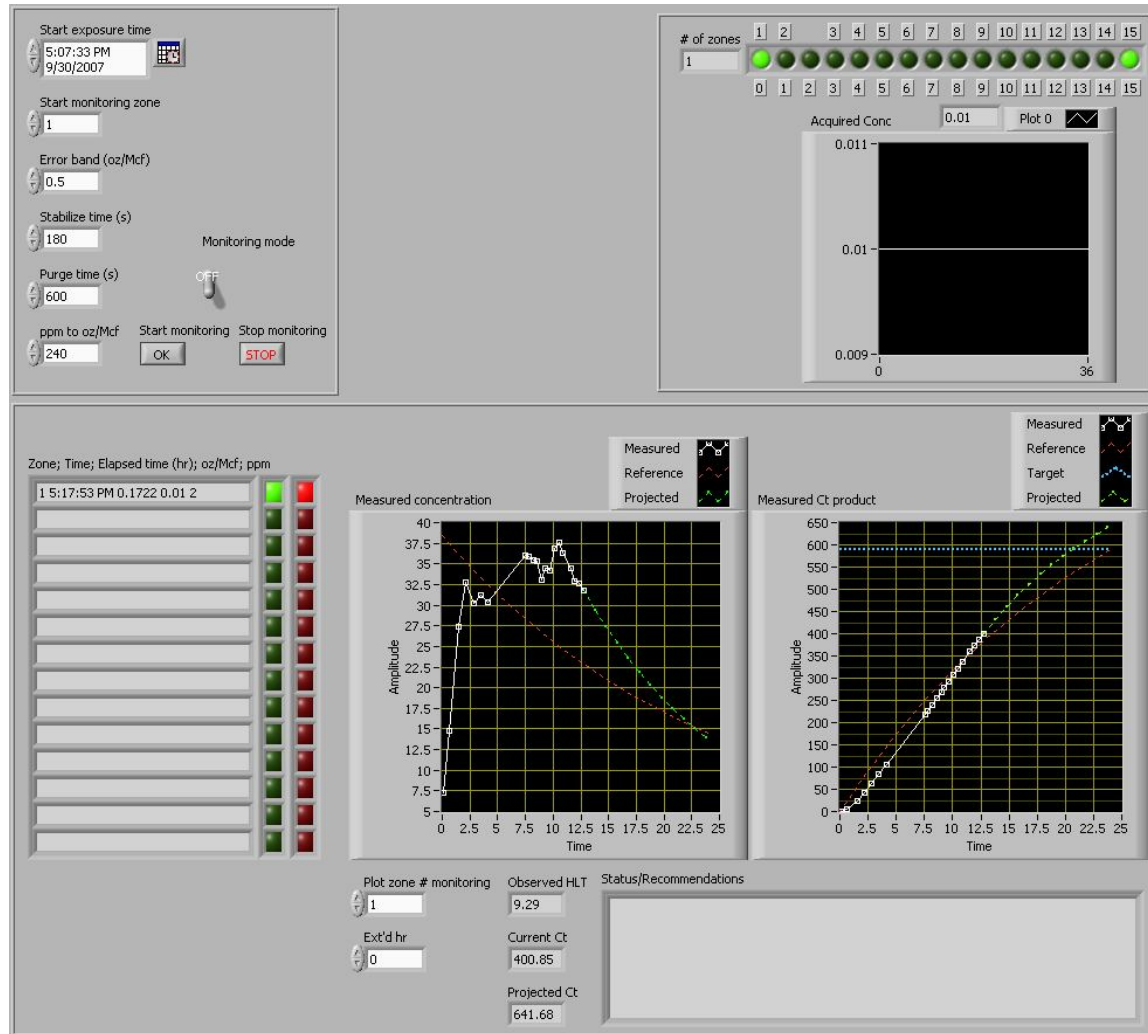
- Auxiliary tube-and-pump system
- One central concentration sensing unit
- Multiple lines sampled in cycles



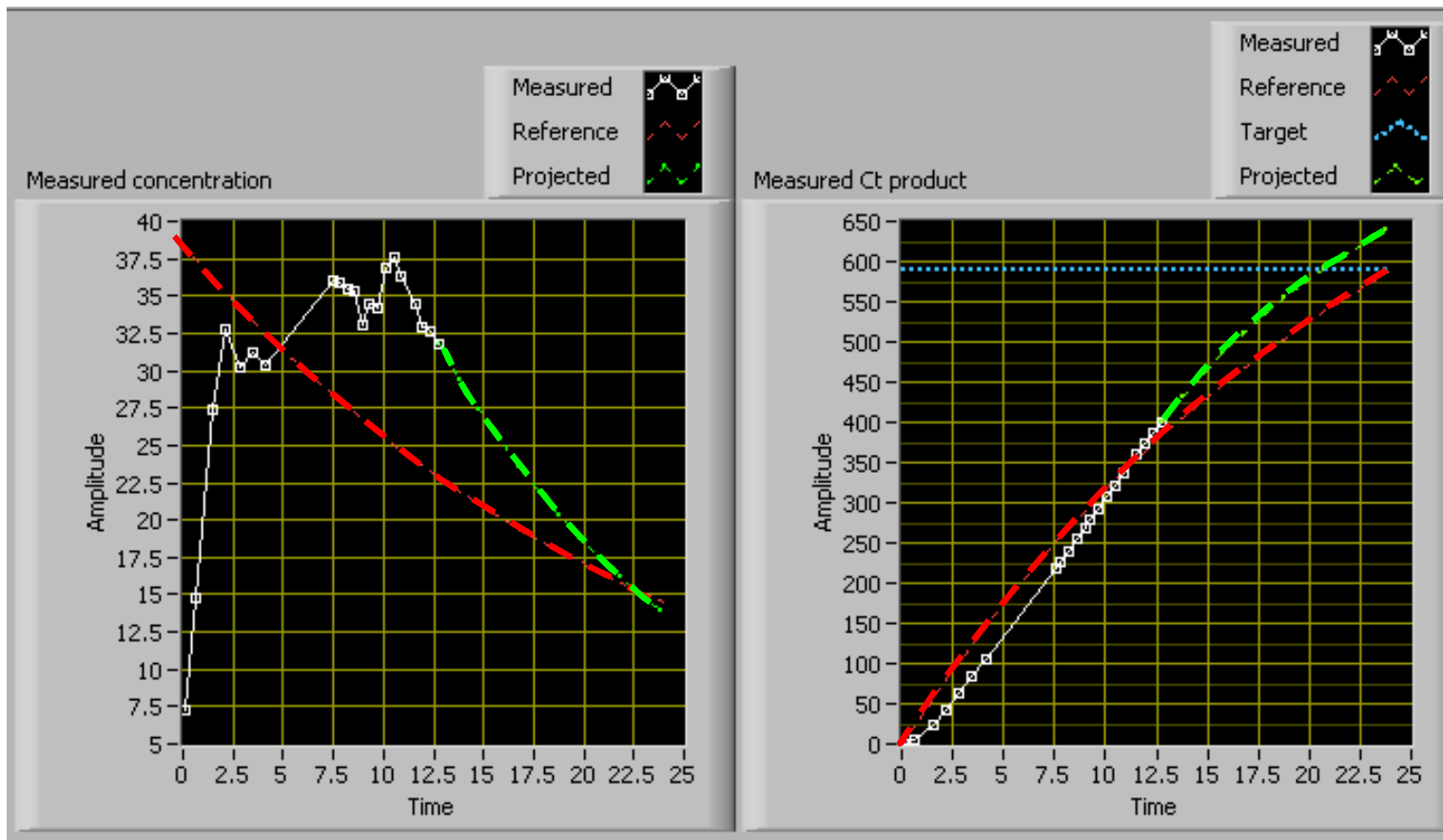
Gas Sensors



Decision Support Software



Decision Support Software



**Initial concentration, exposure time and estimated HLT
→ Predicted conc/Ct product curves**

Observed concentration → Projected conc/Ct product curves