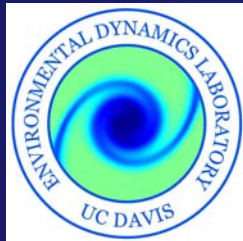


# Hydrodynamic and Oxygen Modeling of the Stockton Deep Water Ship Channel ERP-02D-P51



Civil & Environmental Engineering

UC DAVIS

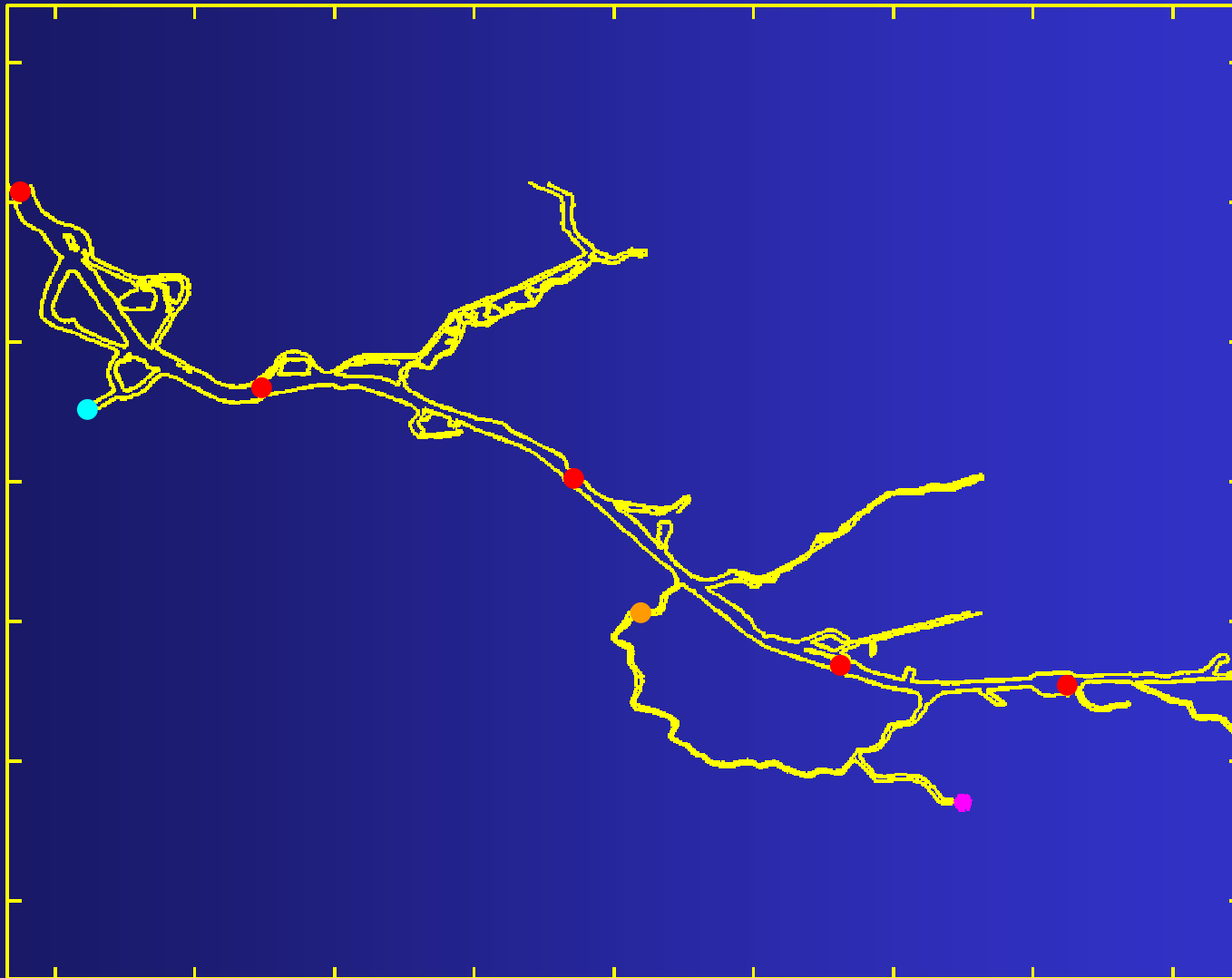


# Field Data Collection

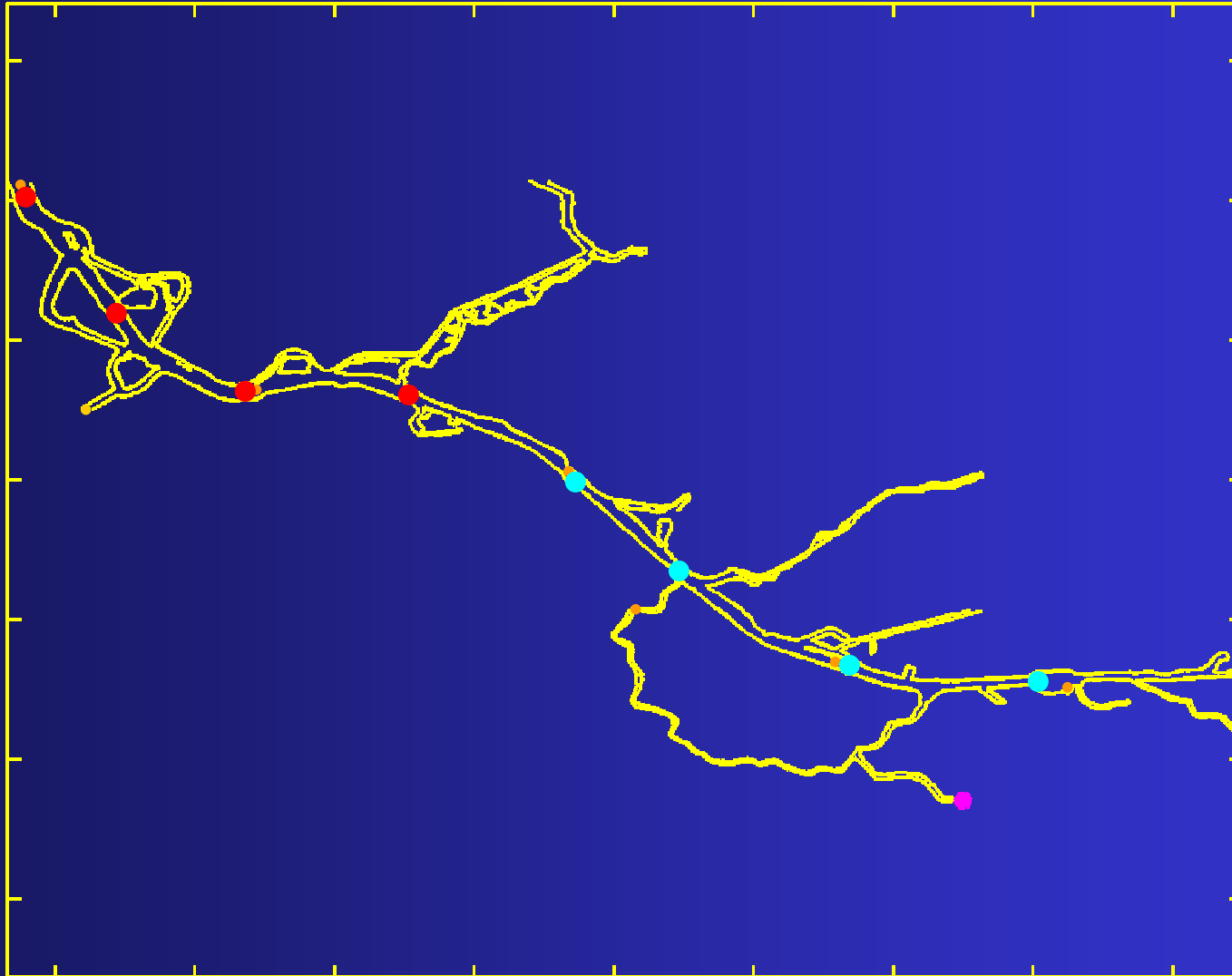
- UP to three 1-month studies
- 2-days of concentrated transects of velocity and water quality during each month
- 2 tracer studies

# First Field Study

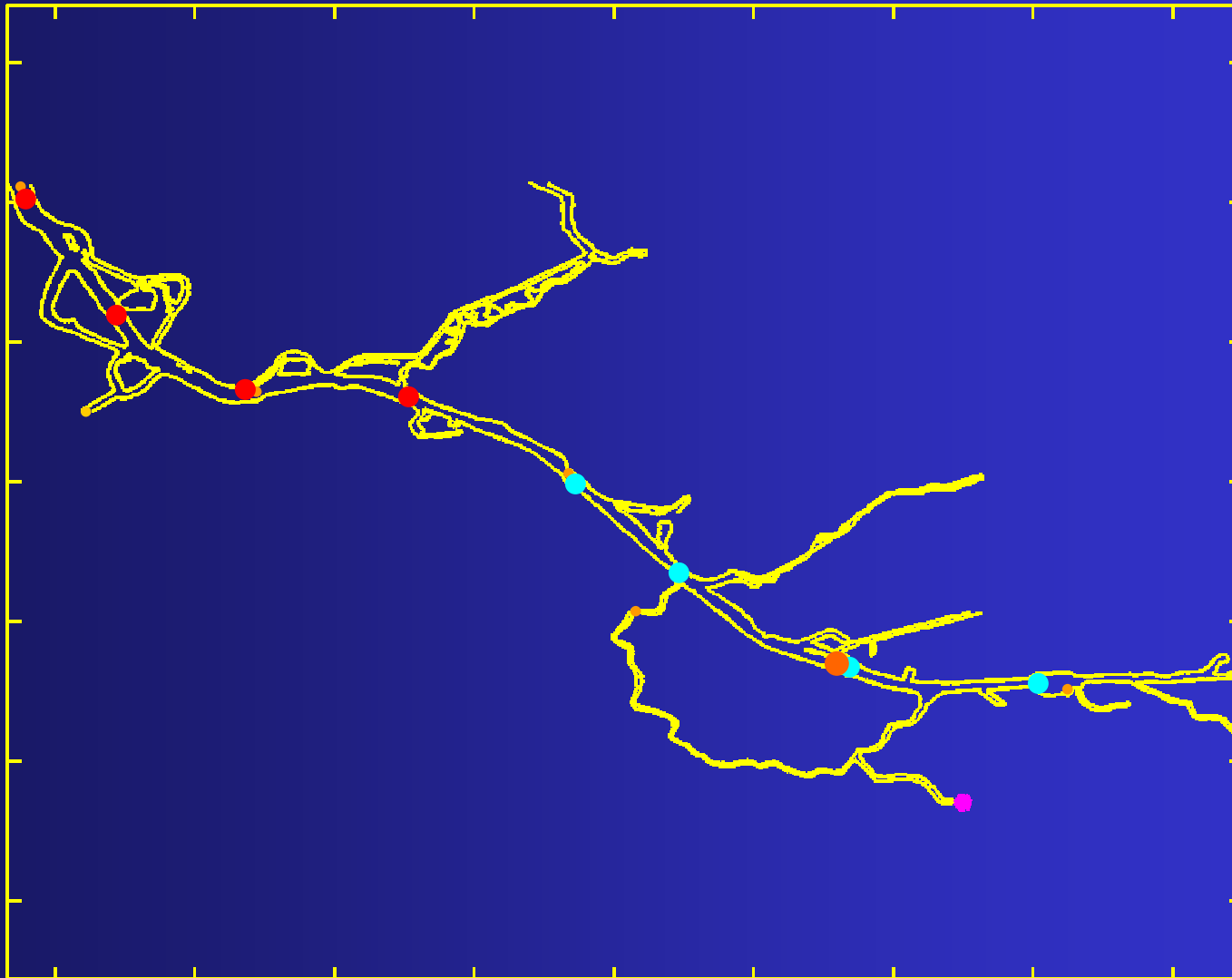
## August 2 – September 2, 2004



# Concentrated Transects August 9 & August 16, 2004



# 30-hour single site study August 9 & August 16, 2004



# 30-hour single site study August 9 & August 16, 2004

- SCAMP microstructure profiler:
  - vertical turbulent mixing rates
- SeaBird SBE-25 profiles:
  - temperature, conductivity, Chl-a, obs, transmissivity, DO, PAR
- Pump and filter water for laboratory analysis at 6 depths every 2-hours:
  - $\text{NH}_4$ ,  $\text{NO}_3$ , TKN

# Numerical Modeling

- Preliminary from Pete Smith, USGS