Arnold Schwarzenegger
Governor

INTEGRATED FORECAST AND RESERVOIR MANAGEMENT (INFORM) FOR NORTHERN CALIFORNIA:
SYSTEM DEVELOPMENT AND INITIAL DEMONSTRATION

Appendix E

PIER FINAL PROJECT REPORT

Prepared For:
California Energy Commission
Public Interest Energy Research Program

Prepared By:
Hydrologic Research Center and
Georgia Water Resources Institute

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Appendix E

Plots from the Evaluation of the CNRFC Operational Hydrologic Model

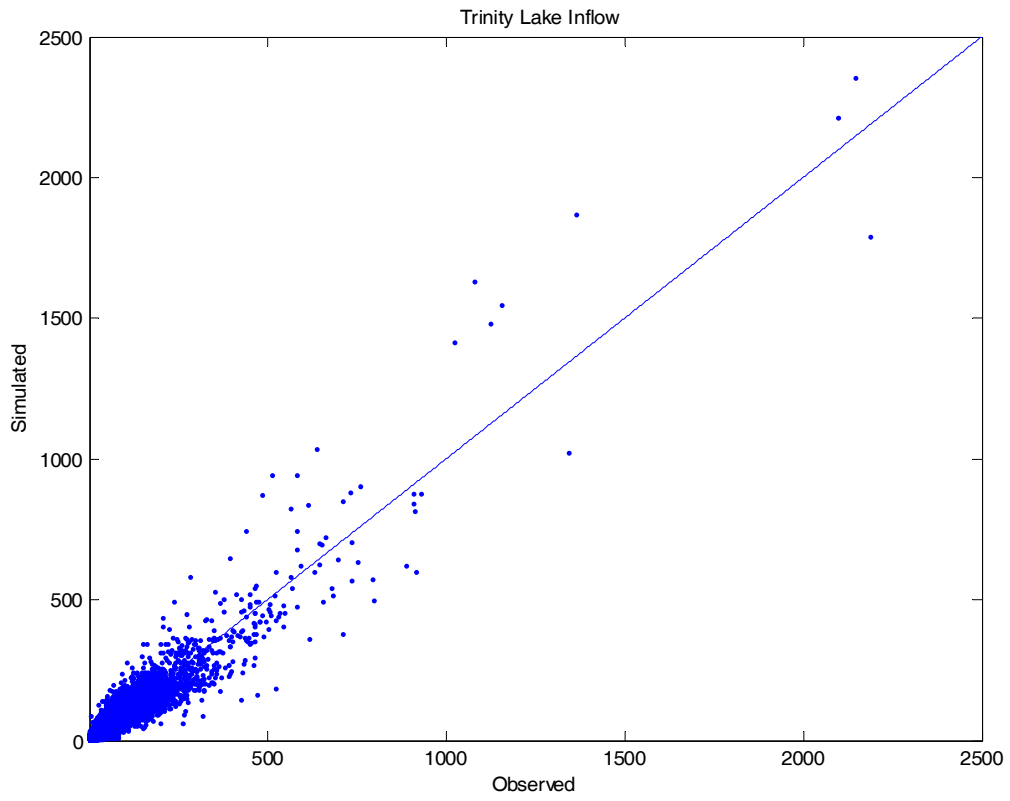


Figure APE-1. Simulated daily flow versus observed (FNF) flow in m^3/s for the Trinity Lake Inflow (WY 1963-1999)

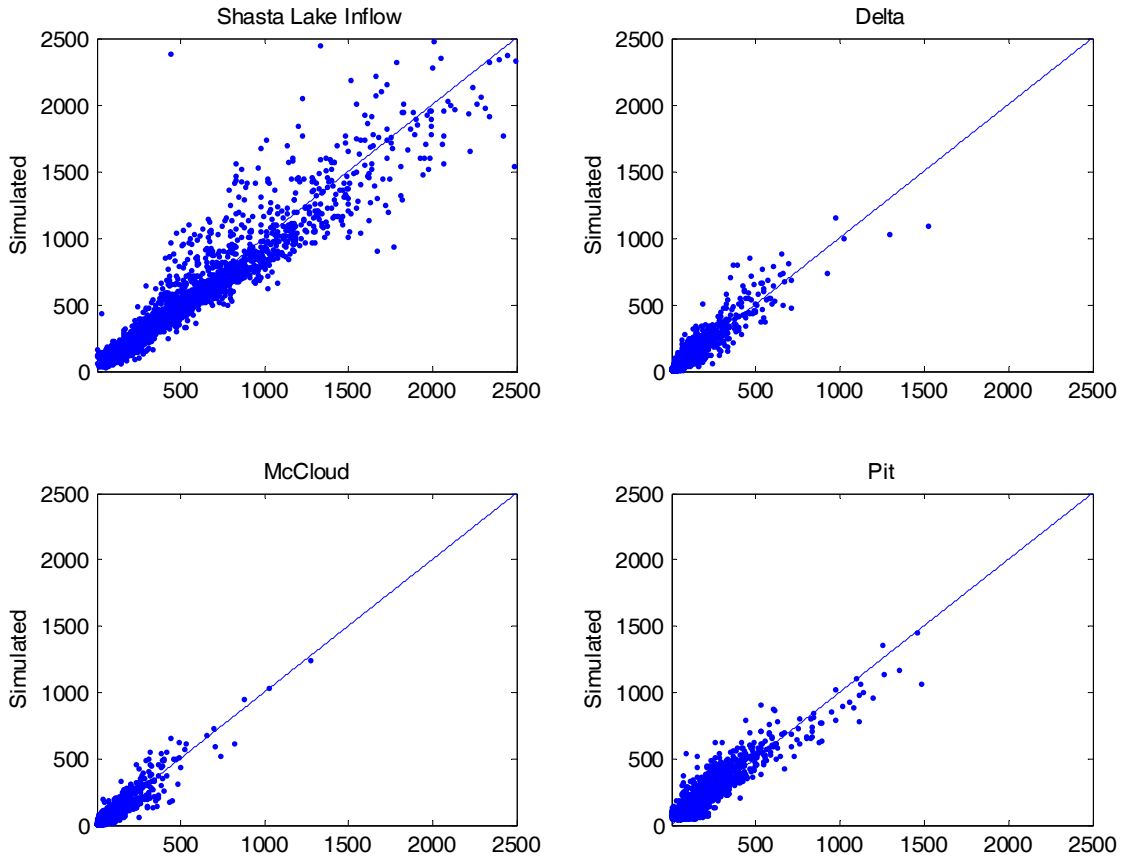


Figure APE-2. As in Figure APE-1 but for sub-basins of the Shasta Reservoir drainage basin. Period of record varies by sub-basin.

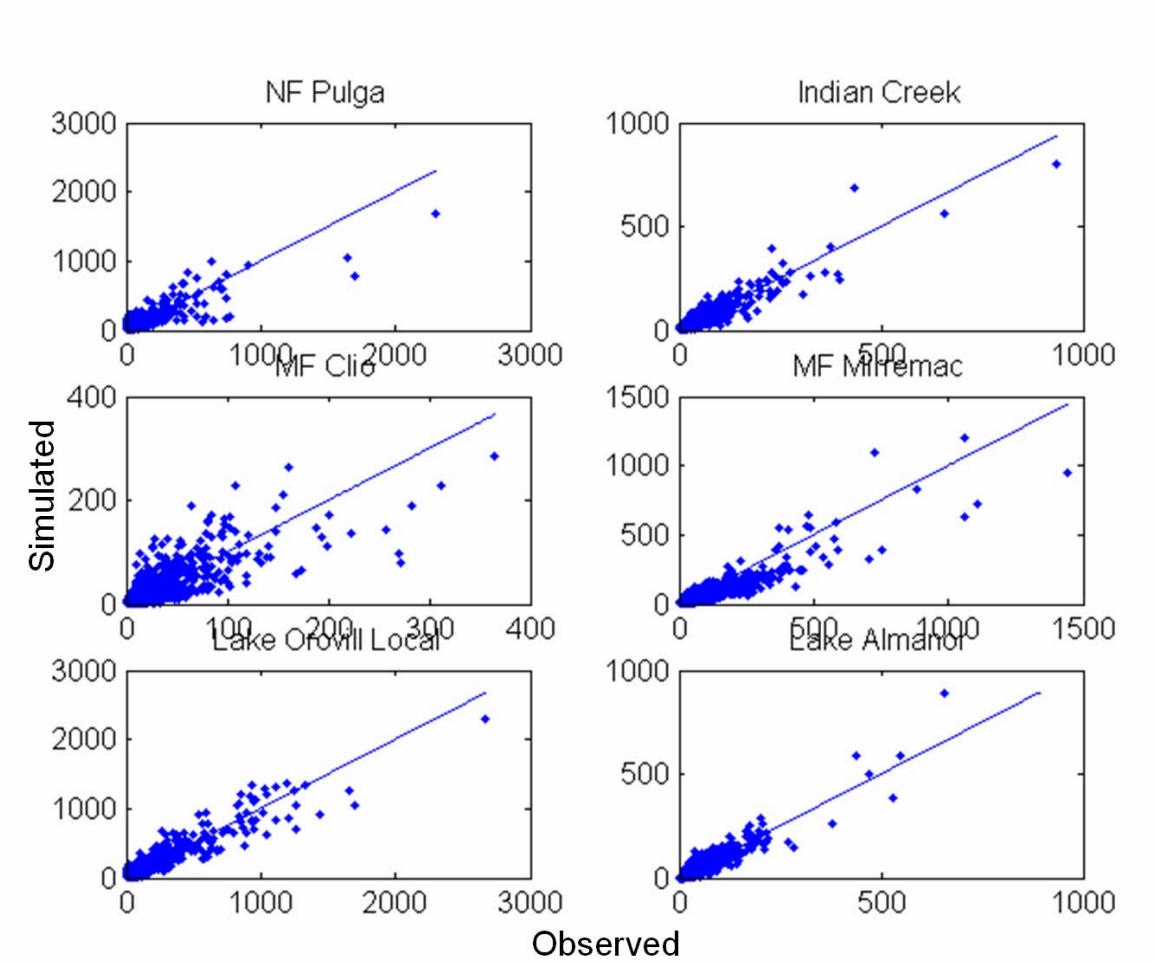


Figure APE-3. As in Figure APE-1 but for sub-basins of the Oroville Reservoir drainage basin on the Feather River. Period of record varies by sub-basin.

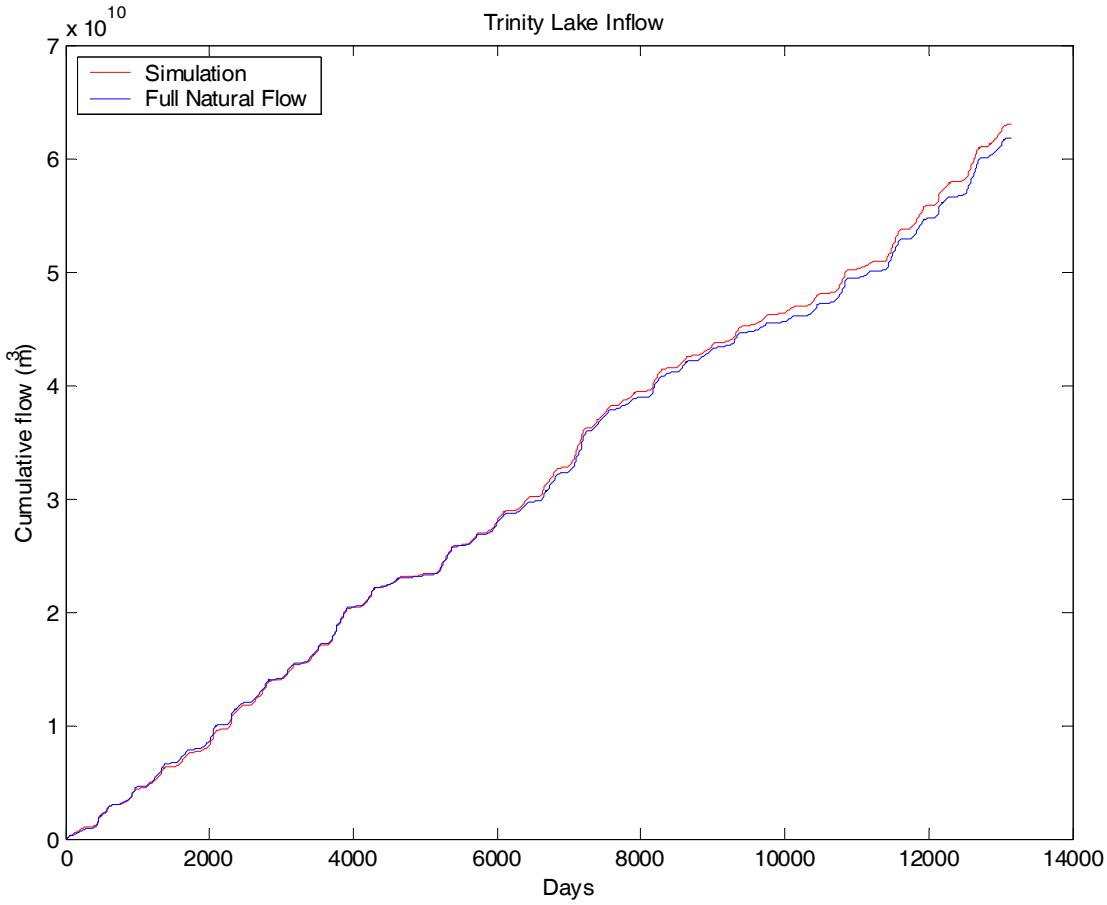


Figure APE-4. Full Natural Flow (blue) and simulated (red) of cumulative flow for the length of the simulation for the Trinity Lake inflow

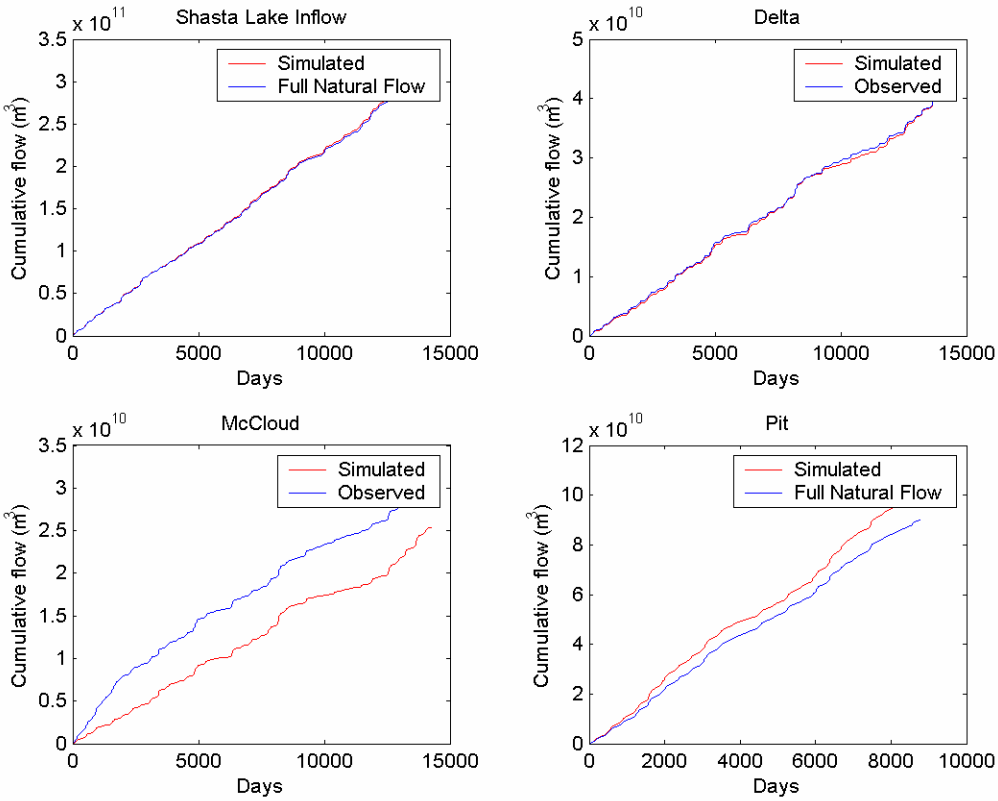


Figure APE-5. As in Figure APE-4 except for the sub-basins of the Shasta Reservoir drainage basin

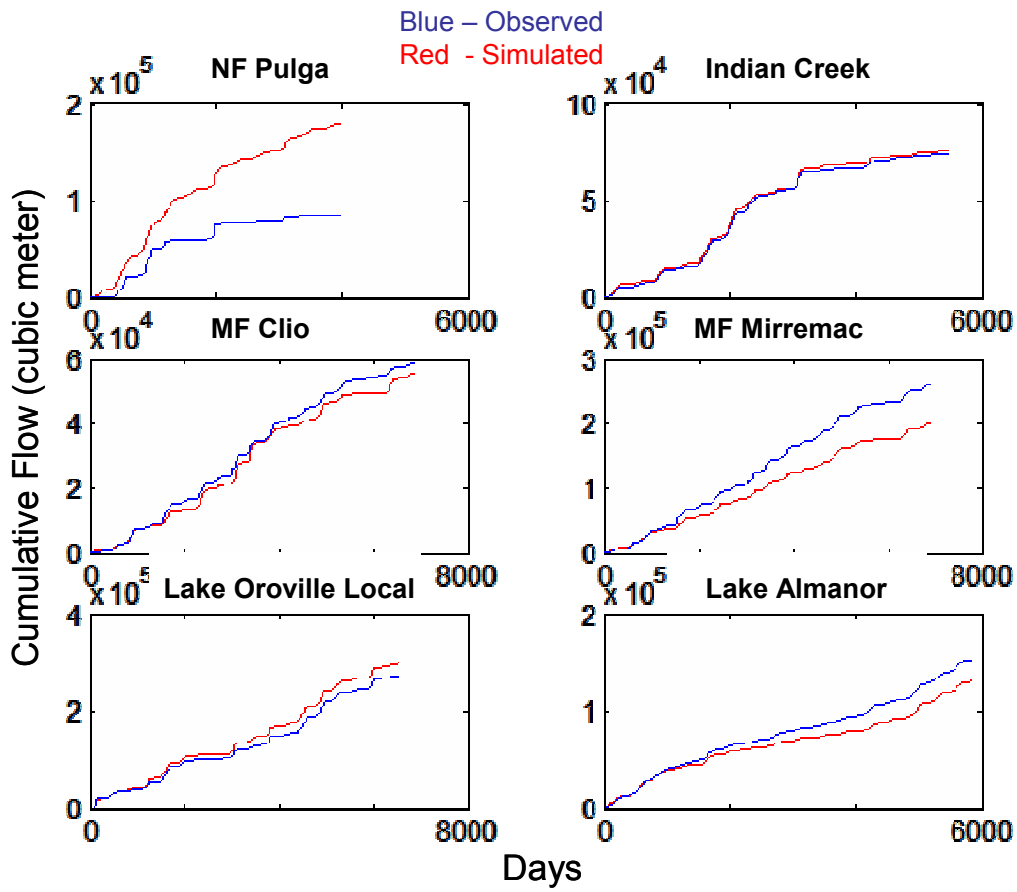


Figure APE-6. As in Figure APE-4 except for the sub-basins of the Oroville Reservoir drainage basin

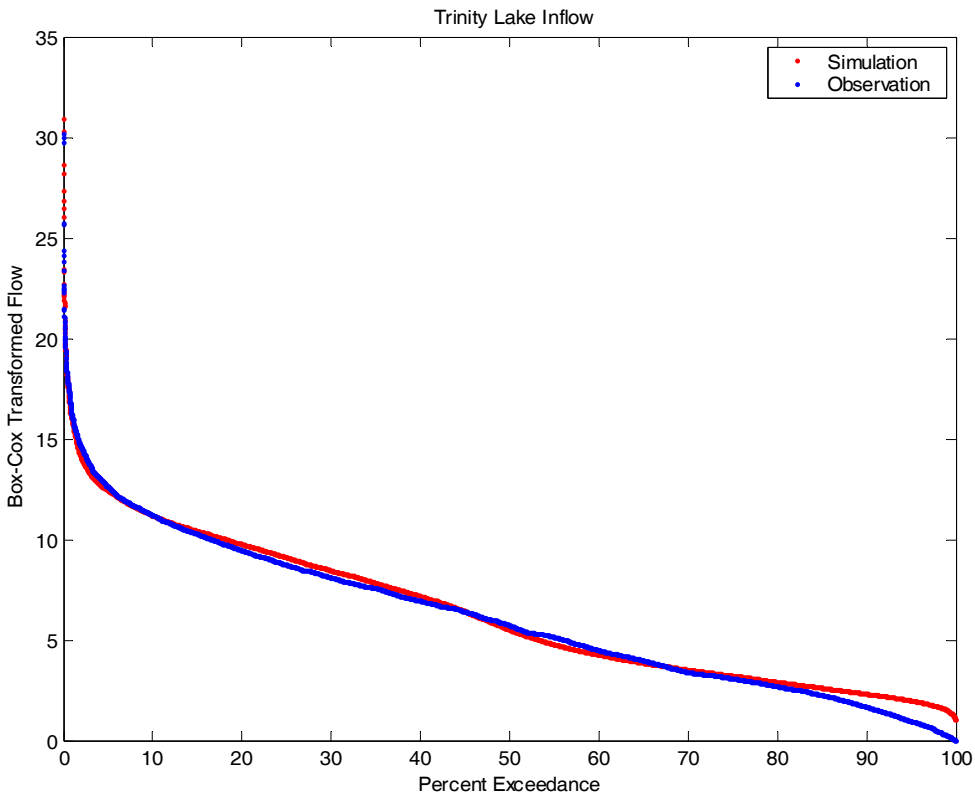


Figure APE-7. Exceedance plot of the Full Natural Flow (blue) and simulated (red) duration curves of Box Cox transformed flow for the Trinity Lake inflow for the 1963-1999

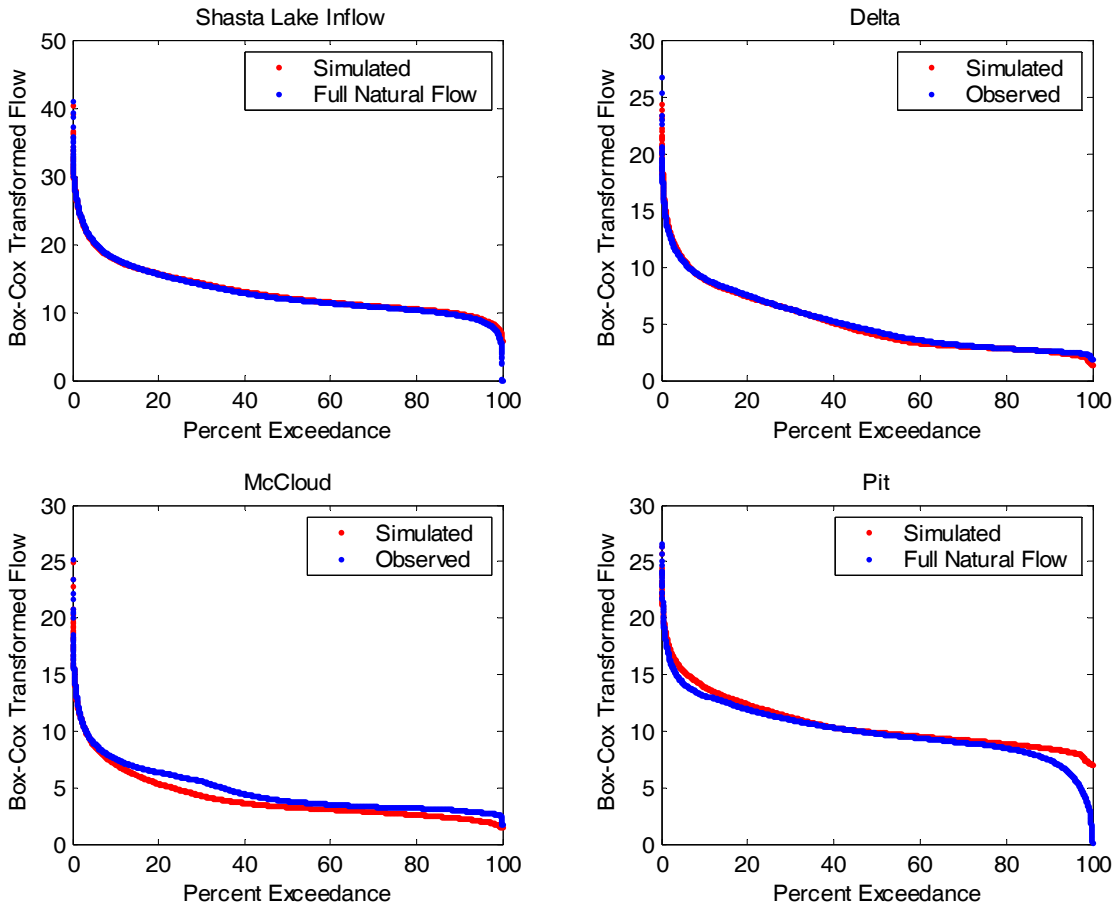


Figure APE-8. As in Figure APE-7 but for sub-basins of the Shasta Reservoir drainage basin. Period of record varies by sub-basin.

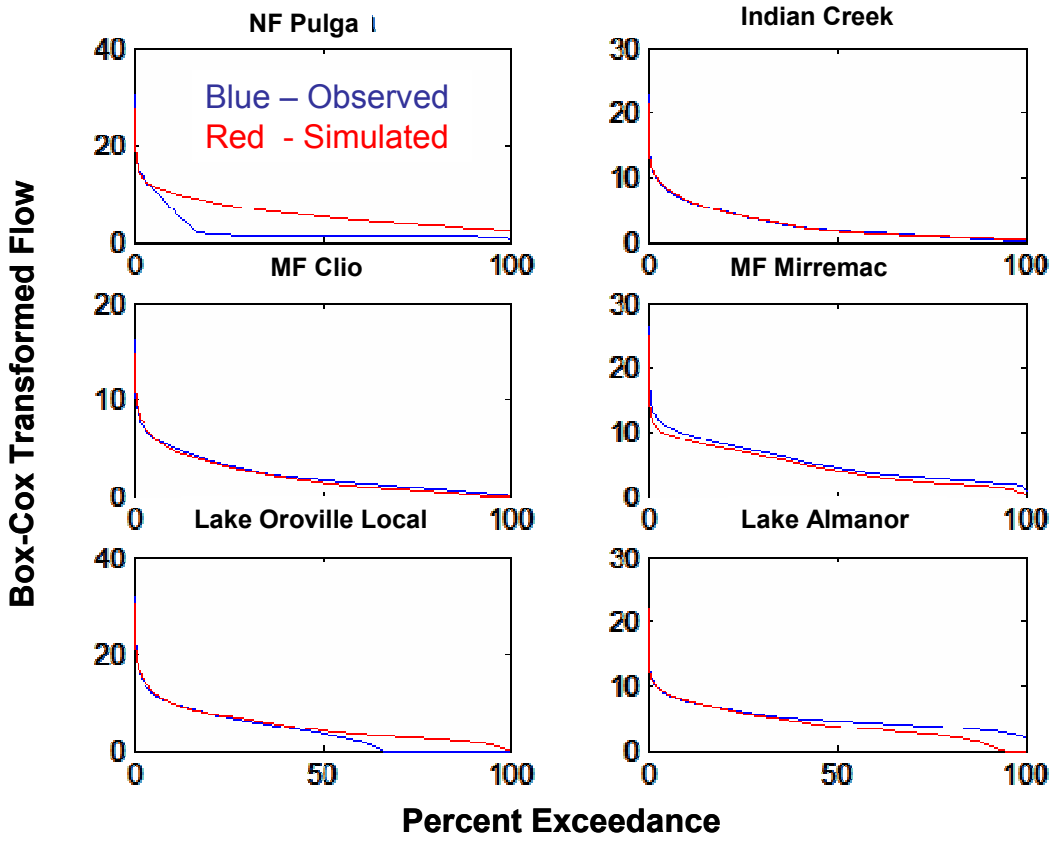


Figure APE-9. As in Figure APE-7 but for sub-basins of the Oroville Reservoir drainage basin. Period of record varies by sub-basin.

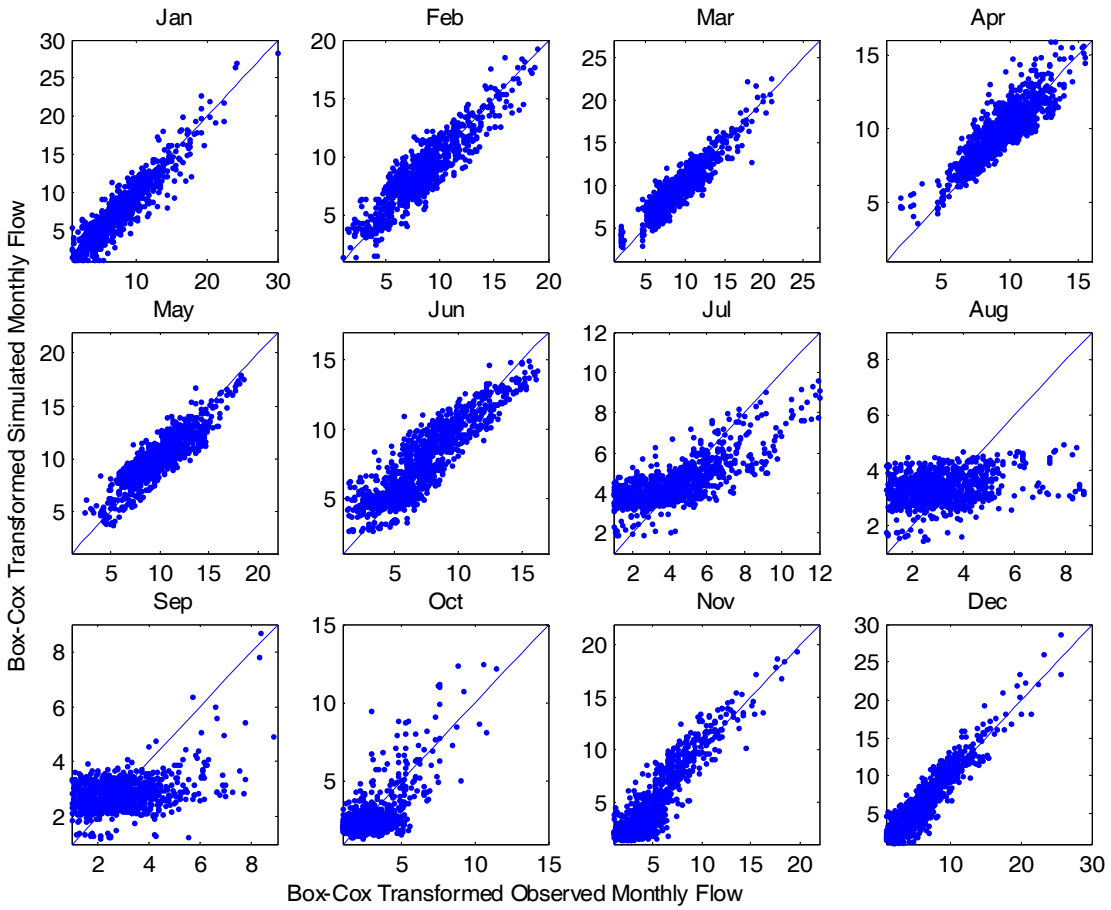


Figure APE-10. Scatter plots of simulated as a function of the observed (estimated FNF) monthly flows for the Trinity Lake inflow

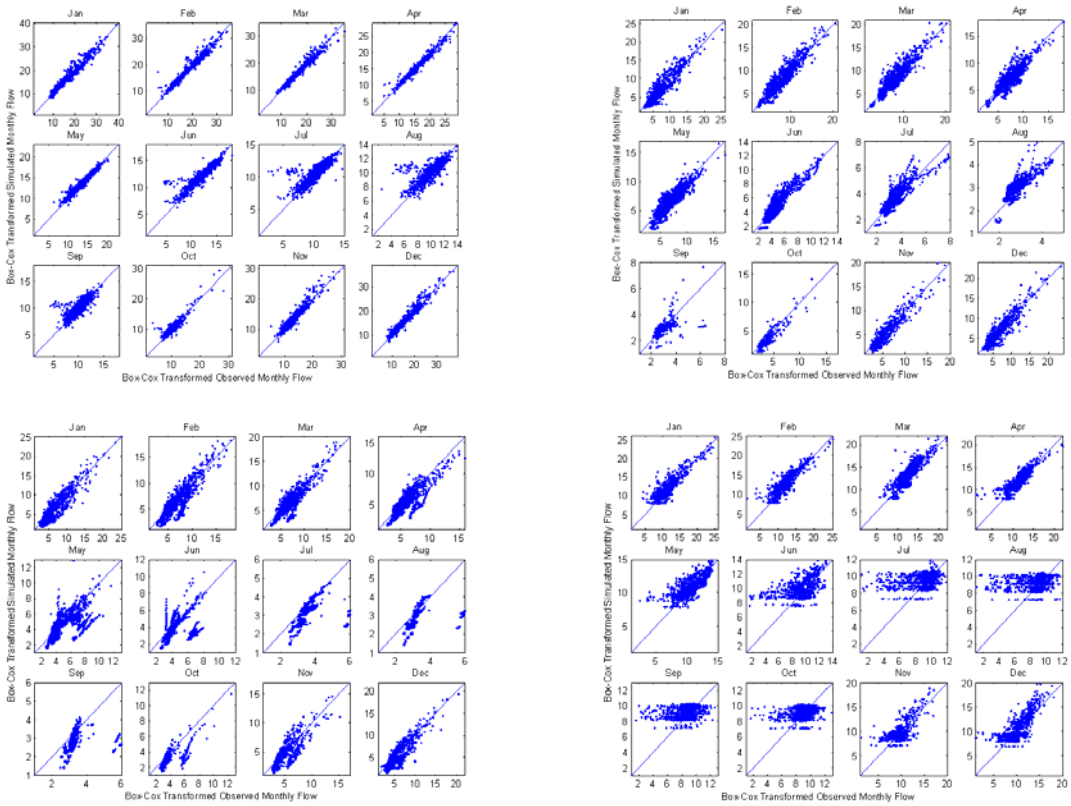


Figure APE-11. As in Figure APE-10 but for sub-basins of the Shasta Reservoir drainage basin

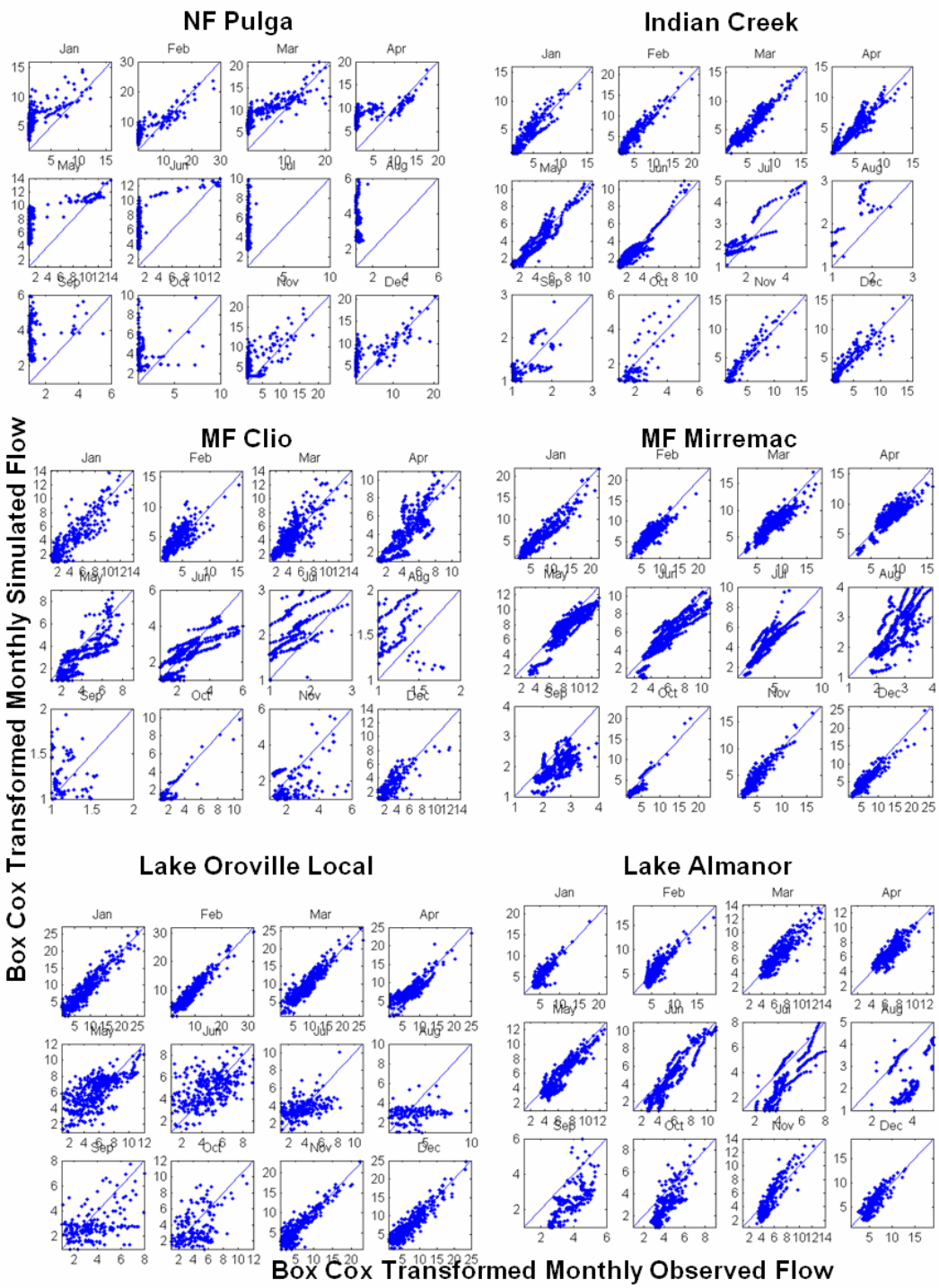


Figure APE-12. As in Figure APE-10 but for sub-basins of the Oroville Reservoir drainage basin

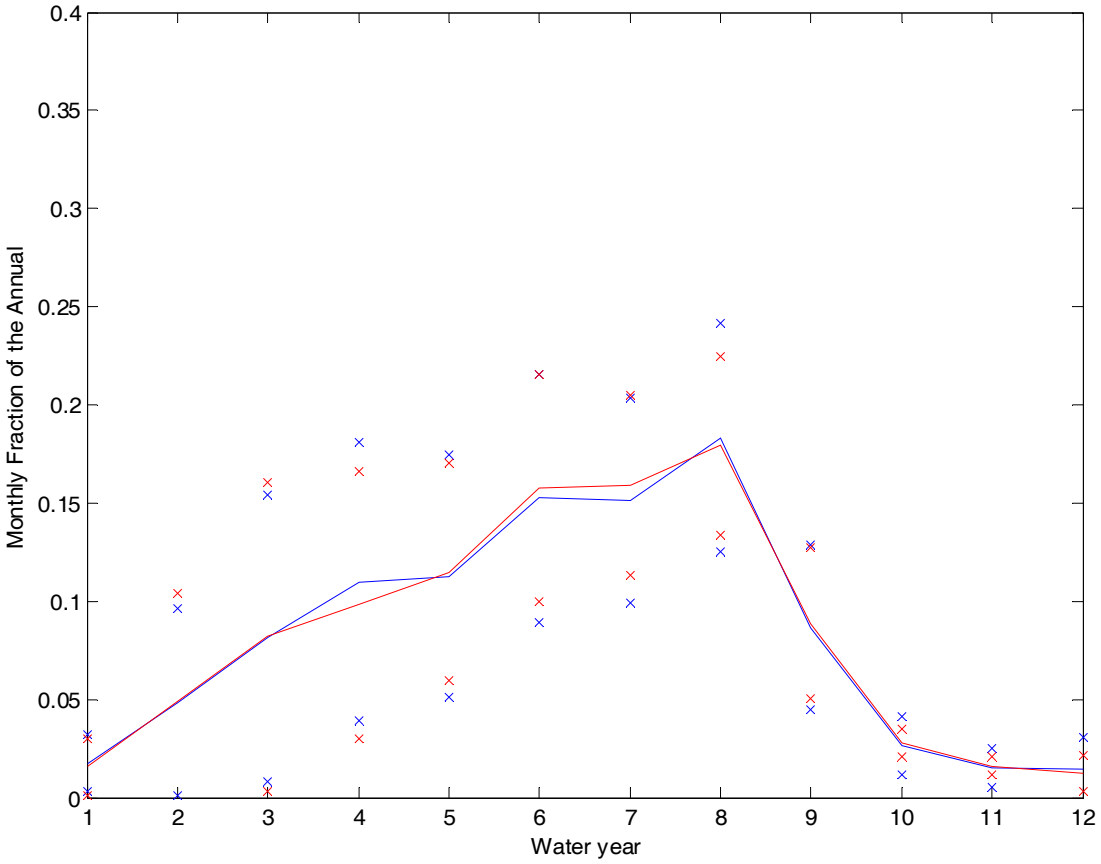


Figure APE-13. Observed and simulated monthly mean (± 1 standard deviation) flow expressed as a fraction of annual flow volume for the Trinity Lake inflow

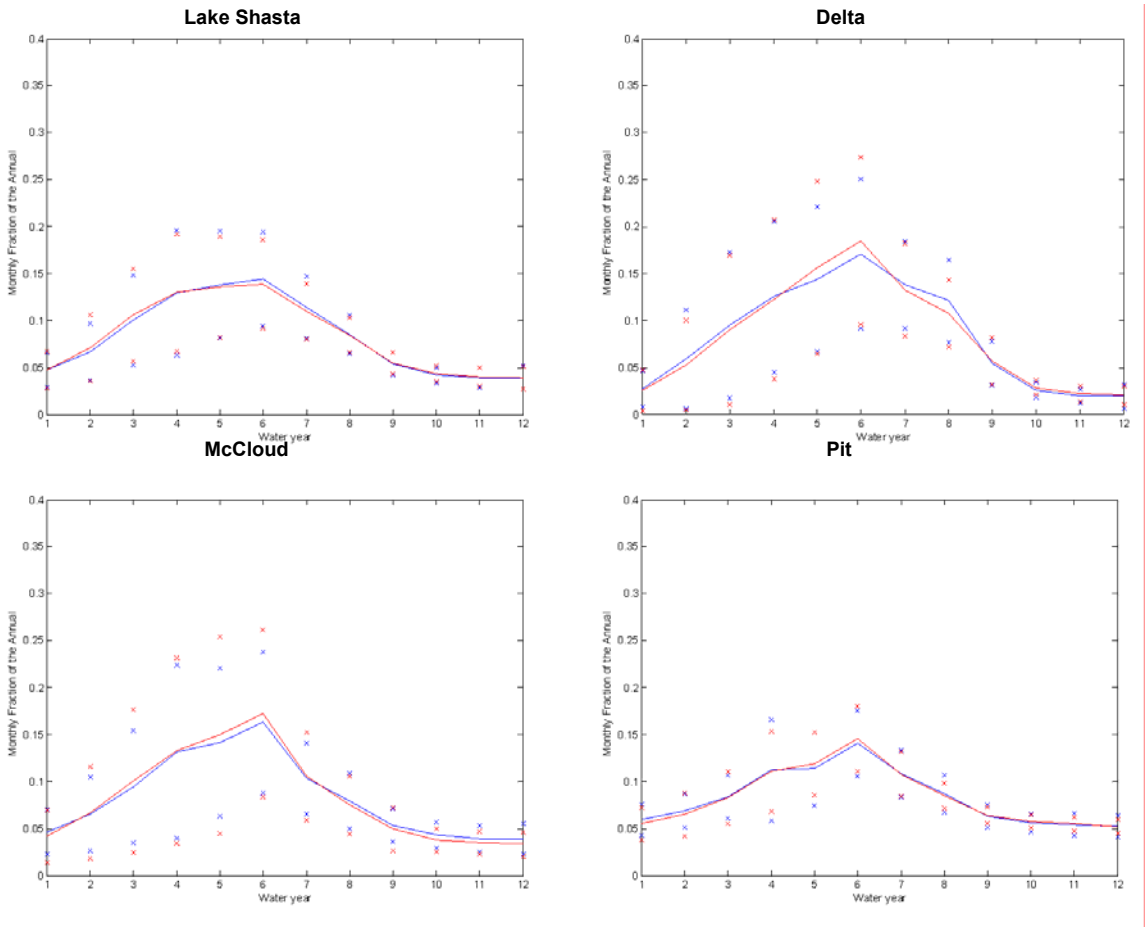


Figure APE-14. As in Figure APE-13 but for sub-basins of the Shasta Reservoir drainage basin

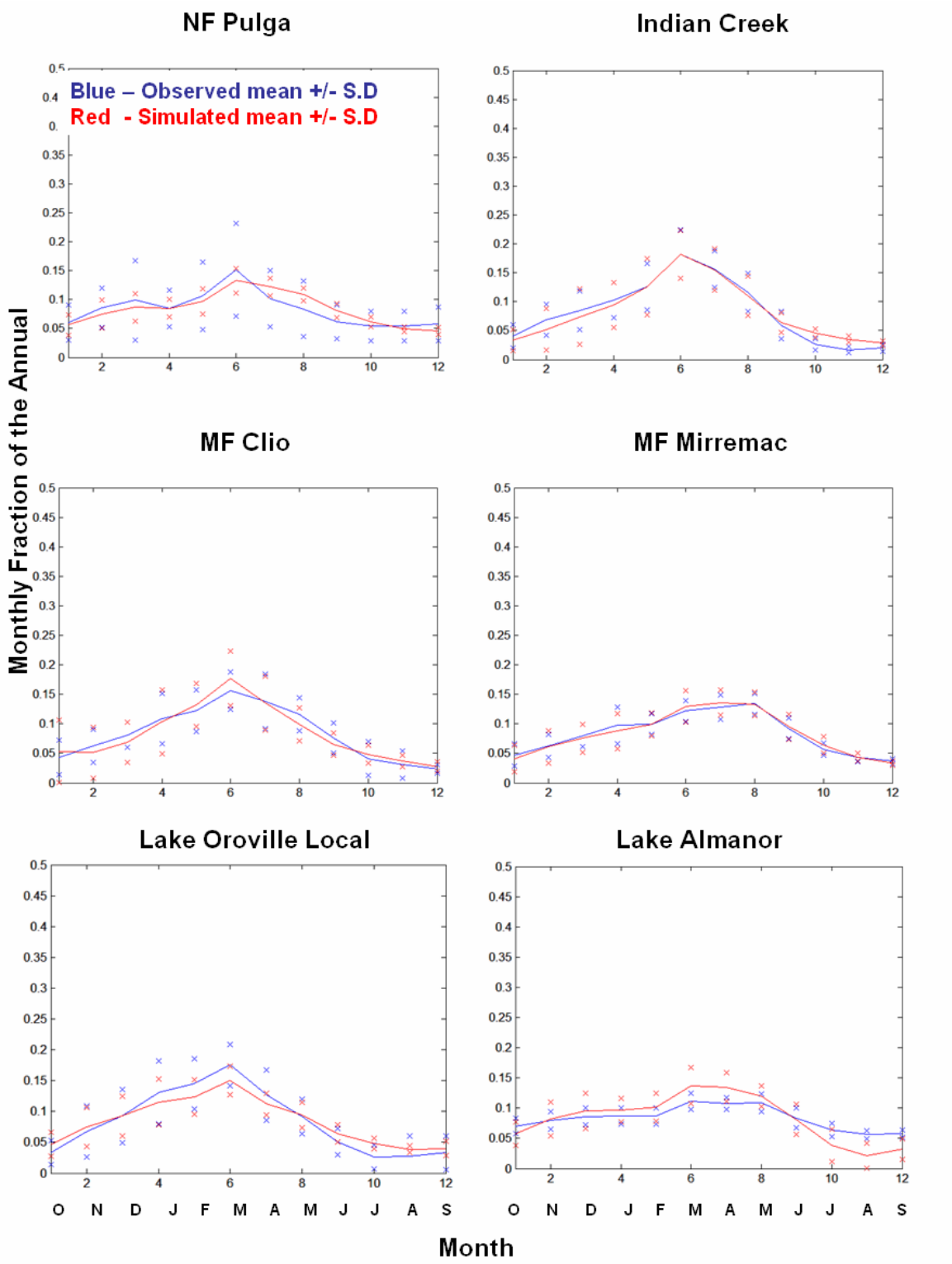


Figure APE-15. As in Figure APE-13 but for sub-basins of the Oroville Reservoir drainage basin

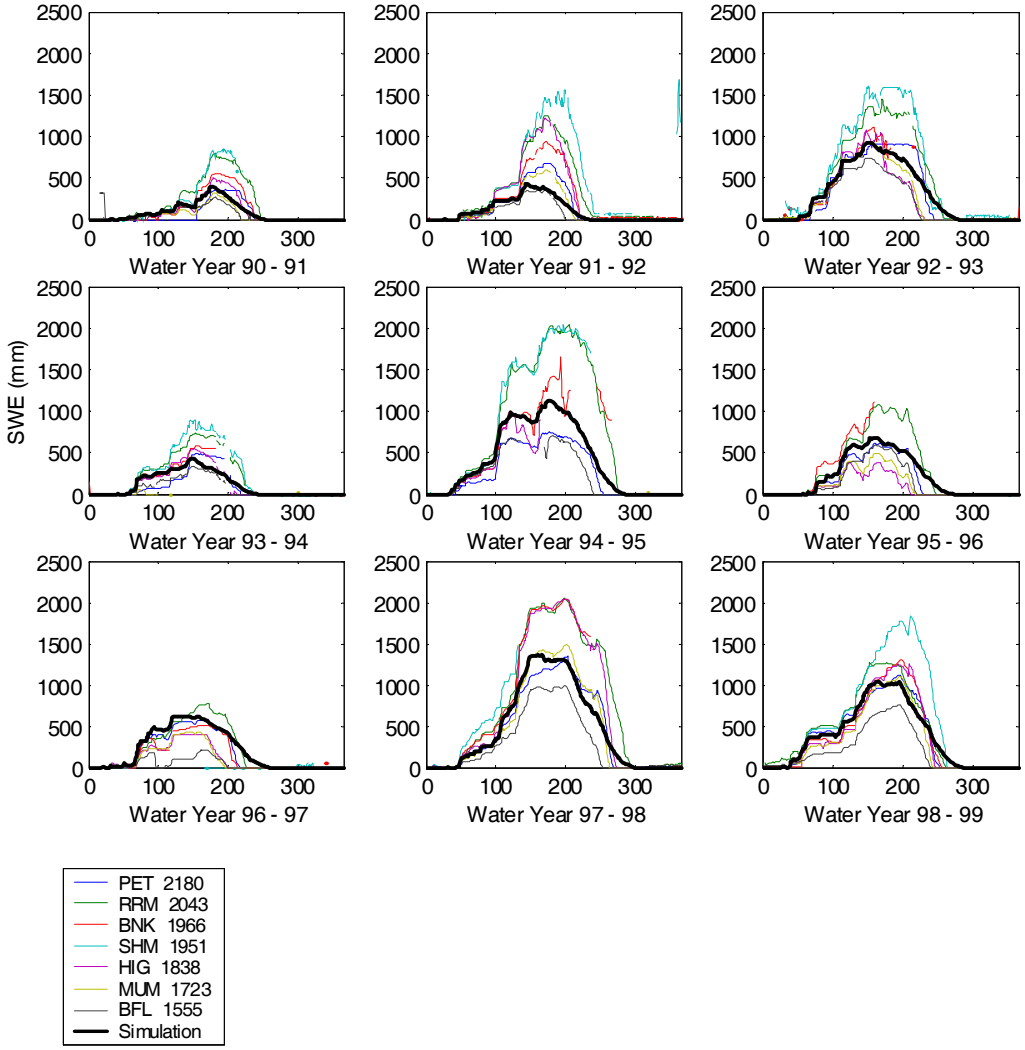


Figure APE-16. Daily snow water equivalent from snow sensors and simulated model snow water equivalent (thick black line) for water years 1990 -1999 for Trinity River basin

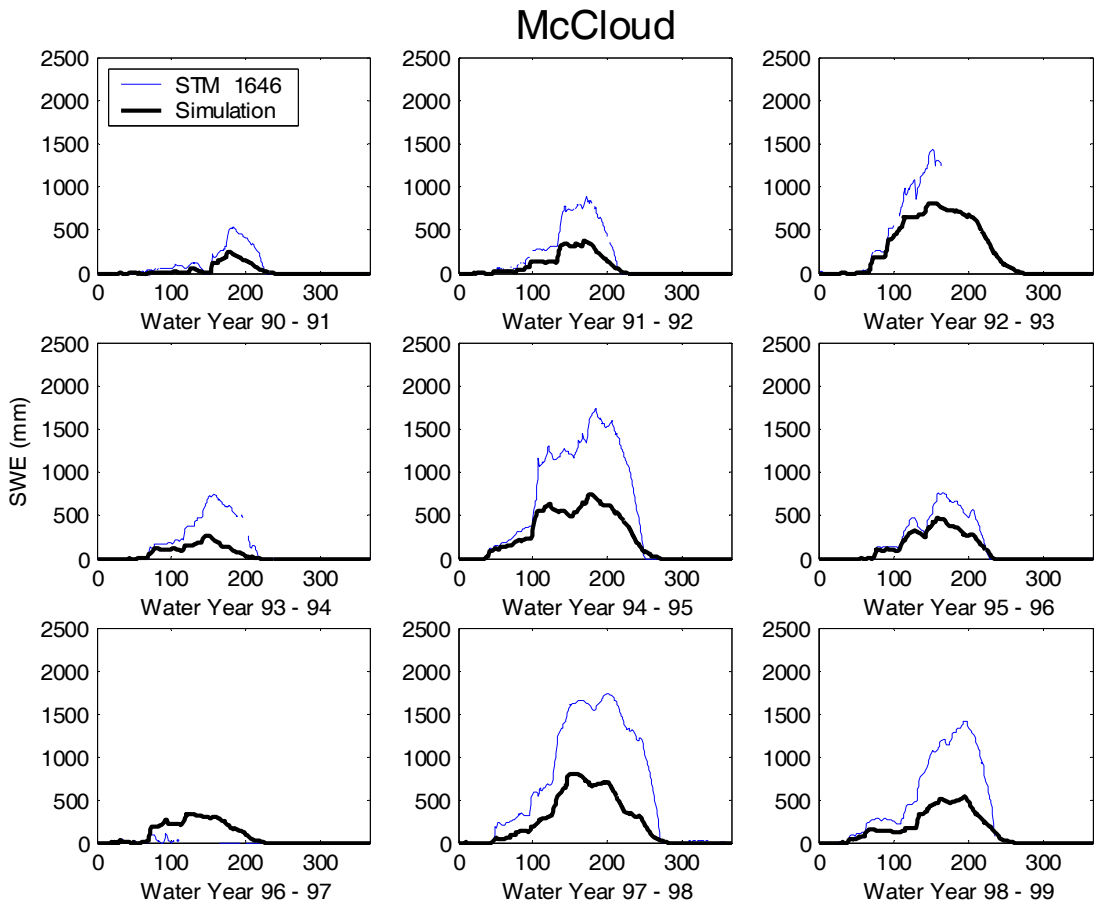


Figure APE-17. As in Figure APE-16 except for stations within the McCloud River sub-watershed of the Shasta Reservoir basin

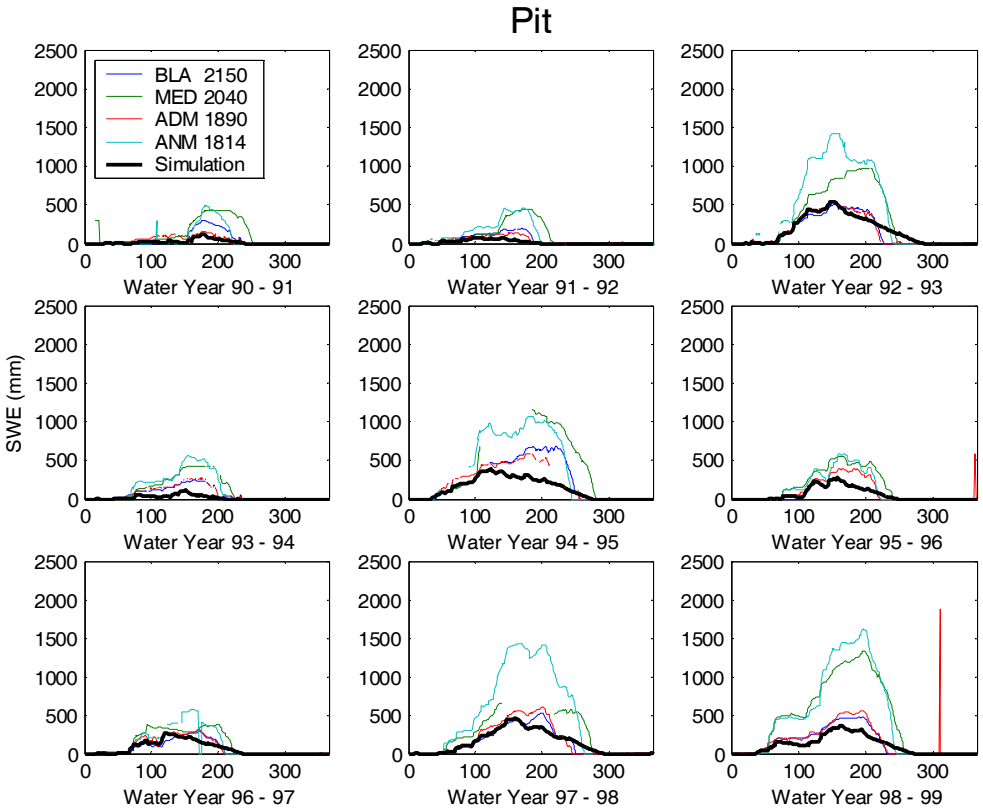


Figure APE-18. As in Figure APE-16 except for stations within the Pit River sub-watershed of the Shasta Reservoir basin

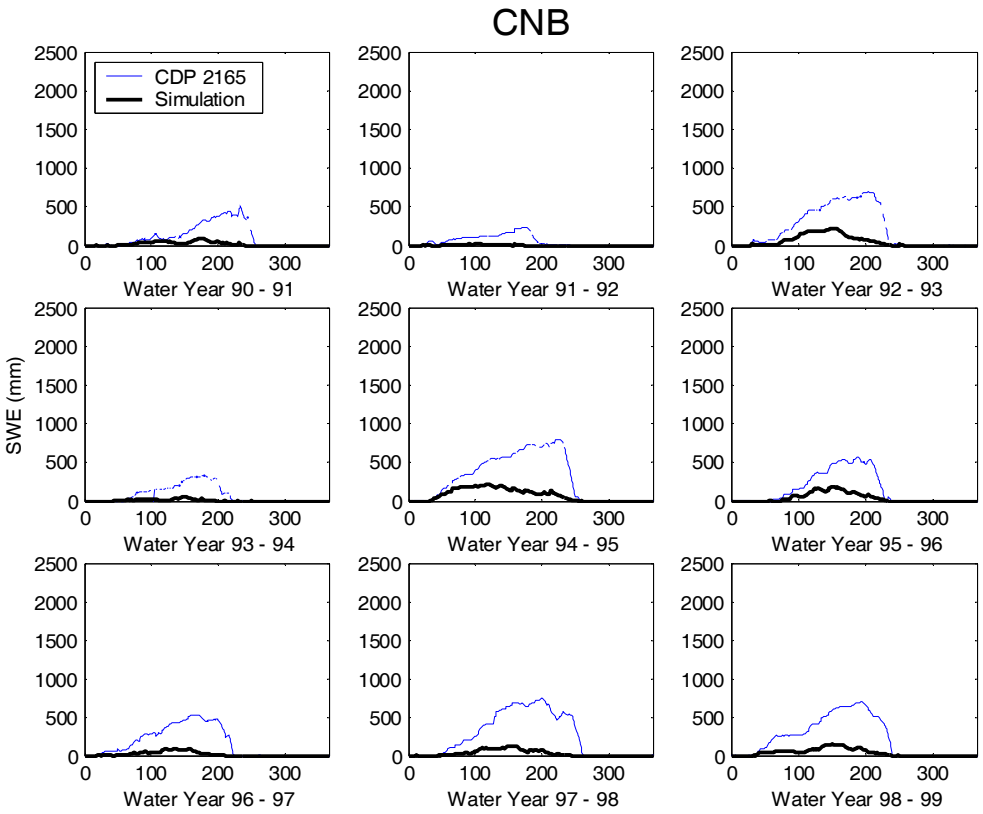


Figure APE-19. As in Figure APE-16 except for stations within the Pit River at Canby sub-watershed of the Shasta Reservoir basin

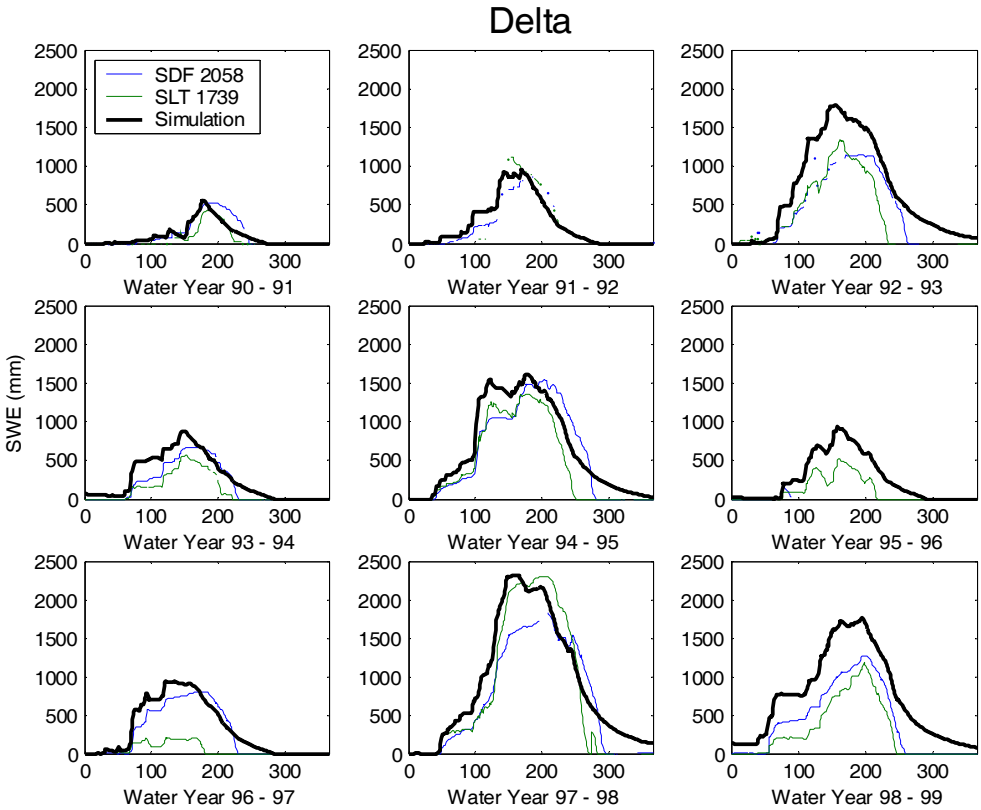


Figure APE-20. As in Figure APE-16 except for stations within the Sacramento River near Delta sub-watershed of the Shasta Reservoir basin

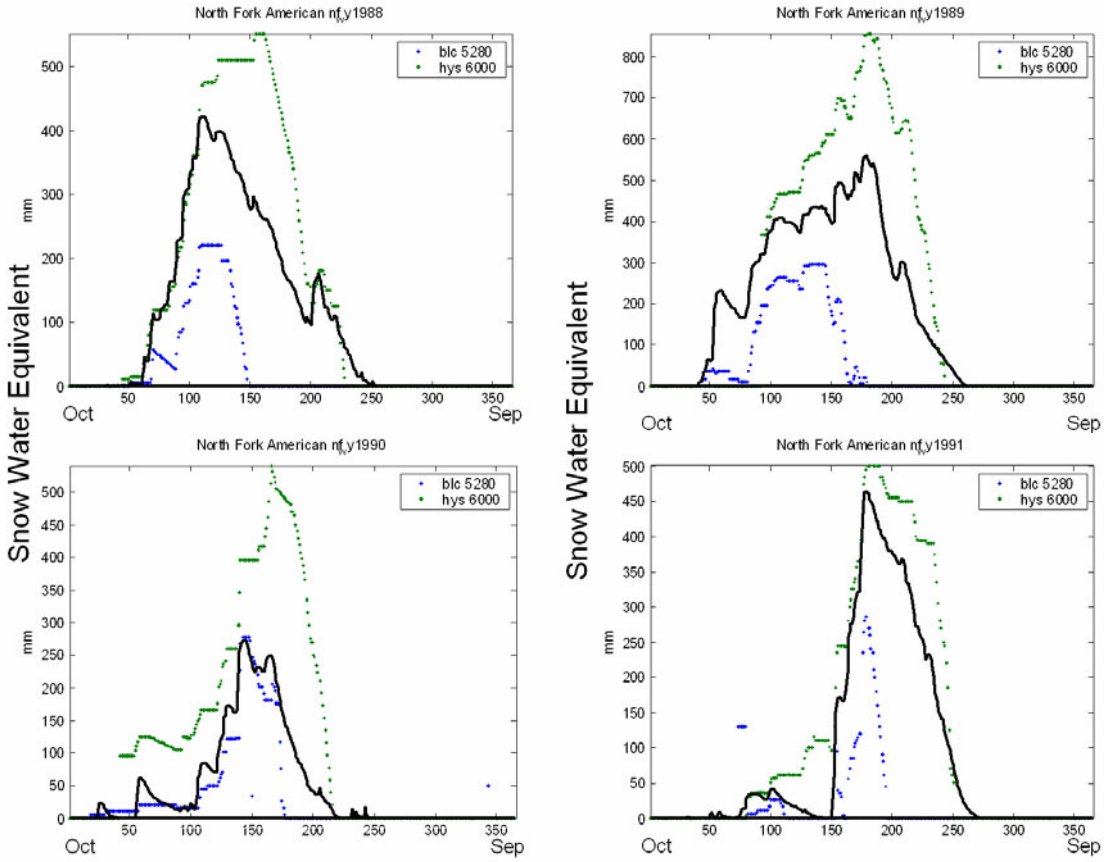


Figure APE-21. As in Figure APE-16 except for stations within the North Fork of the American River sub-watershed of the Folsom Reservoir basin and for Water Years 1998-1991

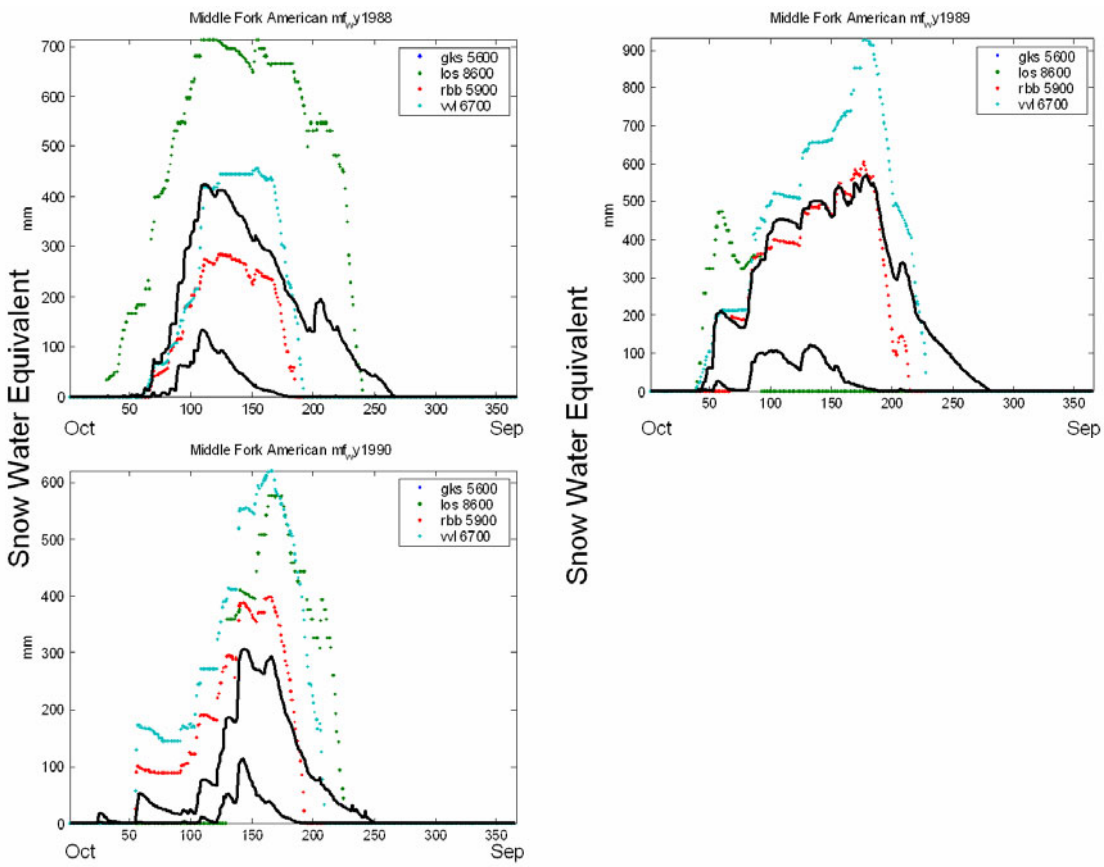


Figure APE-22. As in Figure APE-16 except for stations within the Middle Fork of the American River sub-watershed of the Folsom Reservoir basin and for Water Years 1998-1991

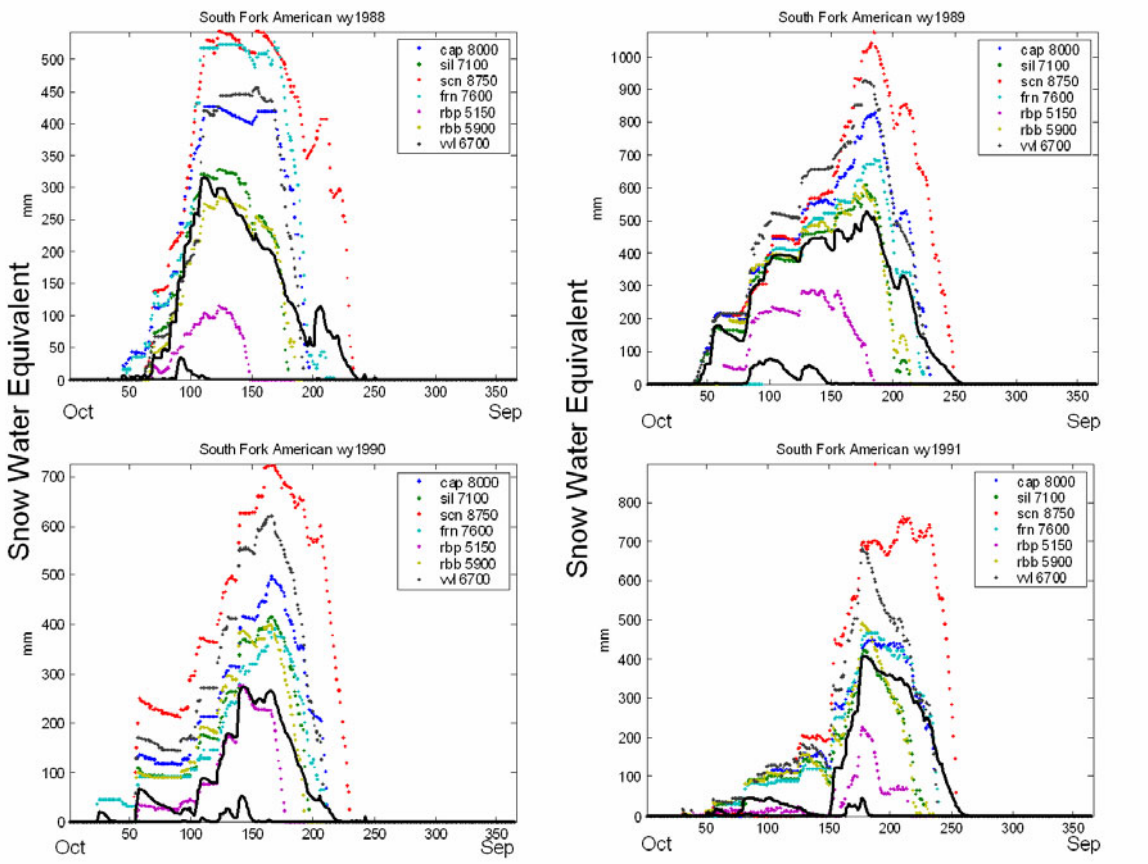
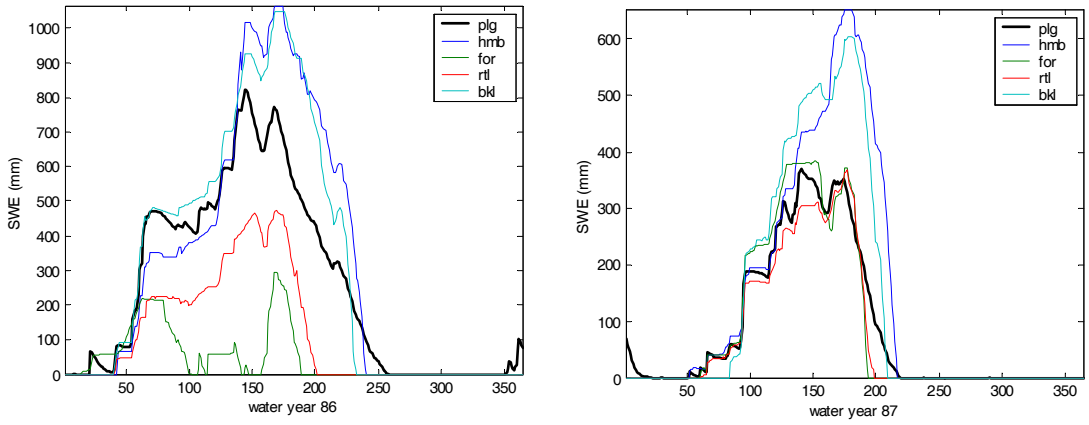


Figure APE-23. As in Figure APE-16 except for stations within the South Fork of the American River sub-watershed of the Folsom Reservoir basin and for Water Years 1998-1991

North Fork Feather, Pulga



Indian Creek

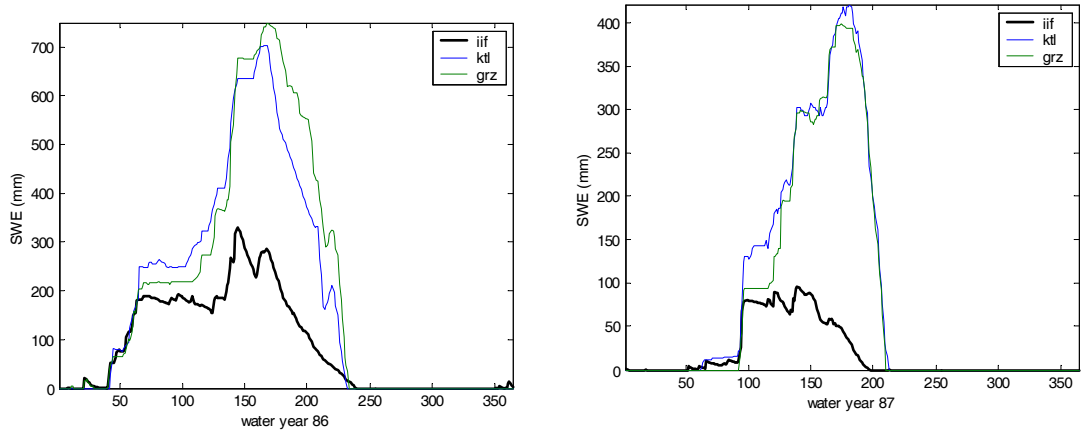
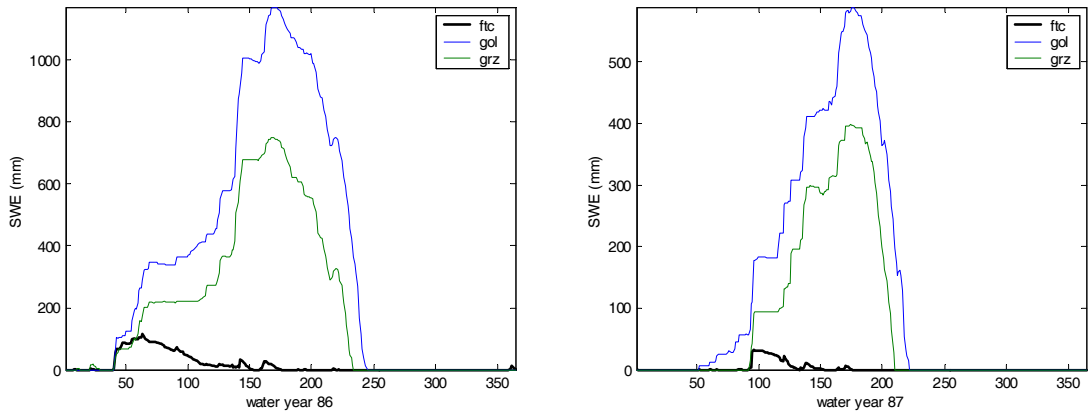


Figure APE-24. As in Figure APE-16 except for stations within the North Fork of the Feather River sub-watershed of the Oroville Reservoir basin and for Water Years 1986-1987

Middle Fork Feather, Clio



Middle Fork Feather, Merrimac

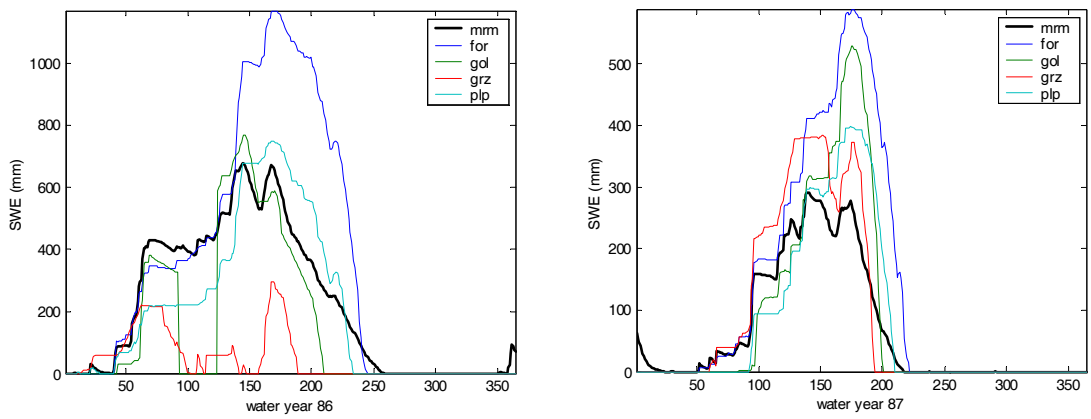


Figure APE-25. As in Figure APE-16 except for stations within the Middle Fork of the Feather River sub-watershed of the Oroville Reservoir basin and for Water Years 1986-1987