Update

DSM1 Suisun Marsh Version Re-calibration

DWR Suisun Marsh Branch

April 24, 1997

- Internet Web Site
- DSM1 (SMVers.) Hydrodynamics Re–calibration status
- DSM1 (SMVers.) Salinity Model Re–calibration status
- Discussion: How Should We Proceed From Here?

Web Access to Re-calibration Results

All re-calibration progress is being shared through the Interagency Ecological Program home page. Maintenance of the home page is a joint effort of IEP File Server staff and DWR staff. Calibration results are available as a link from the IEP home page at "**www.iep.water.ca.gov.**"

The web site now includes links to:

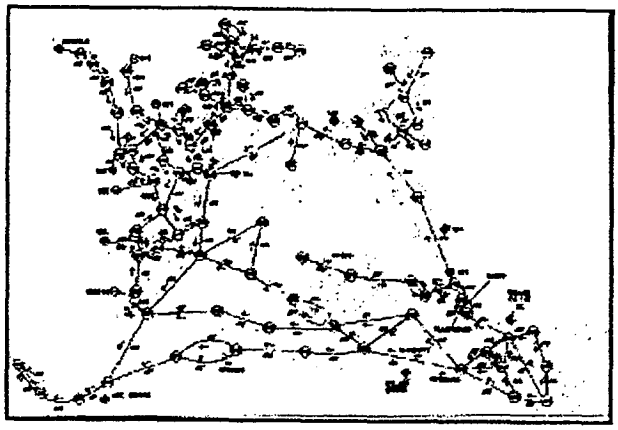
- DSM1 Hydrodynamics Re-calibration results
- DSM1 Salinity Re-calibration results
- Manning's n and Dispersion Coefficient Groupings (Map)
- Three Mile Slough Bathymetry Data
- Background Documents

Comments are encouraged. An email reflector is available:

"dsm1cal.water.ca.gov"

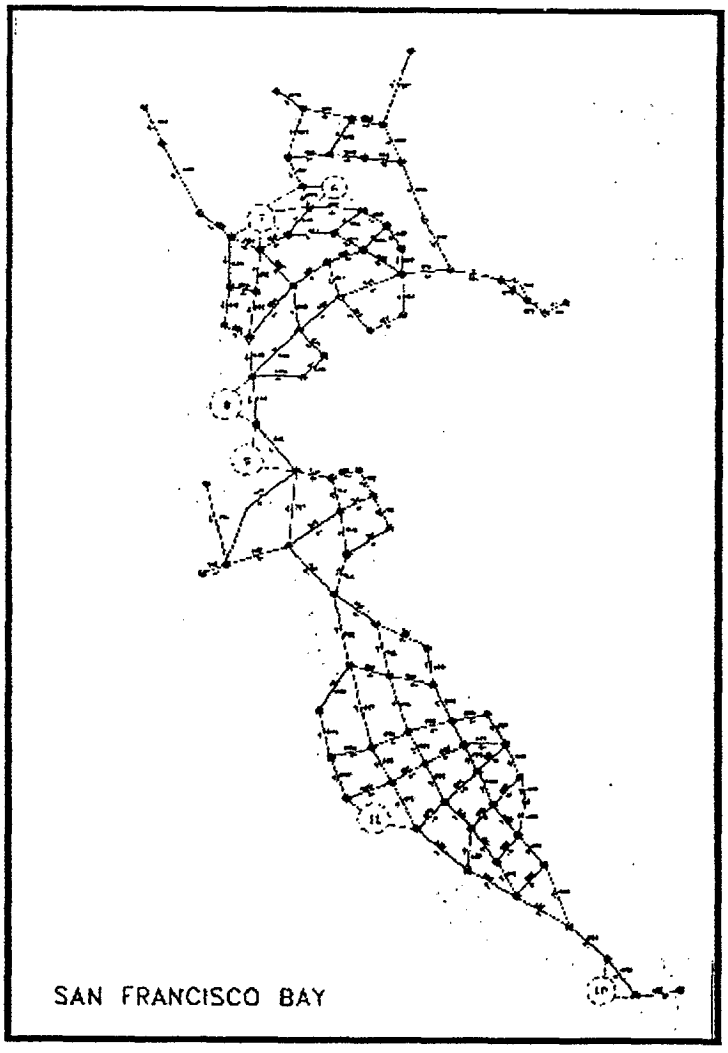
DSM1 Suisun Marsh Version Re-calibration

Suisun Marsh Grid Map

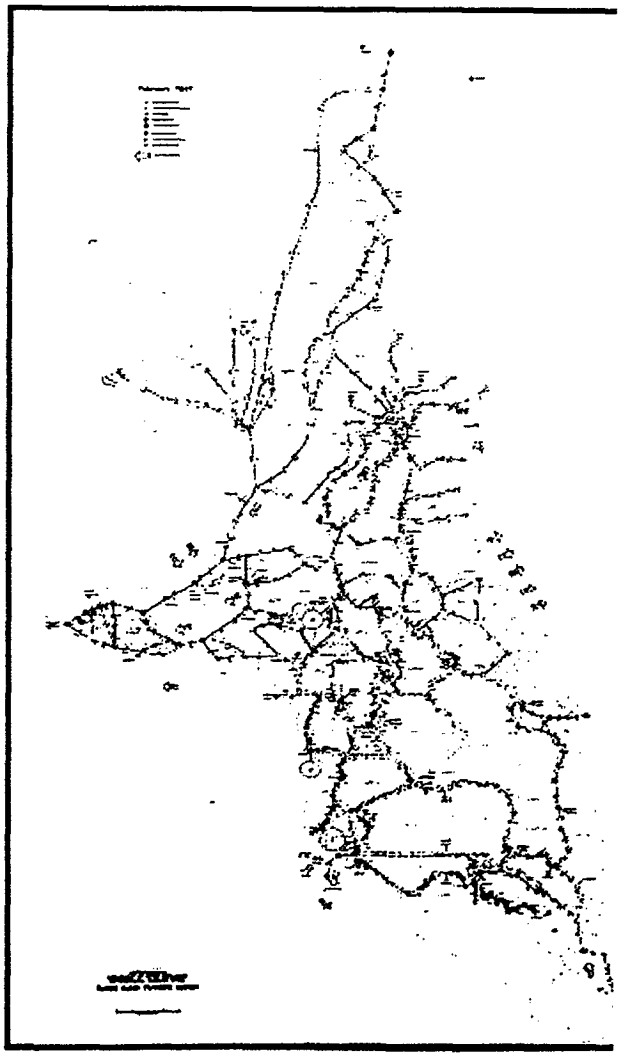


- DSM1 Hydro-calibration
- DSM1 Salinity-calibration
- Manning Coefficient Groups
- Three Mile Slough Info
- Background

San Francisco Bay



Delta Region



[STATUS REPORT] [PLOT DESCRIPTION] [EMAIL]

DSM1 Suisun Marsh Version Hydrodynamics Re-calibration Status

- 37 calibration runs were made for each of three historical periods: May 1988, January 1993, and May 1994.

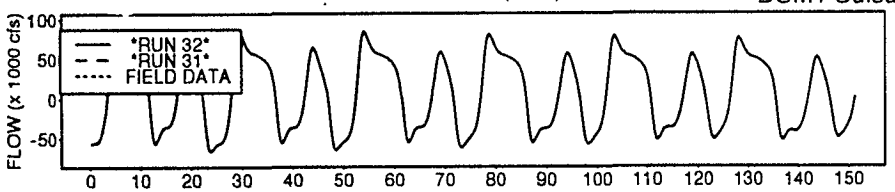
- The calibration is based on 15-minute tidal flow and stage data, and 24.75 hour running average (residual) flow data.

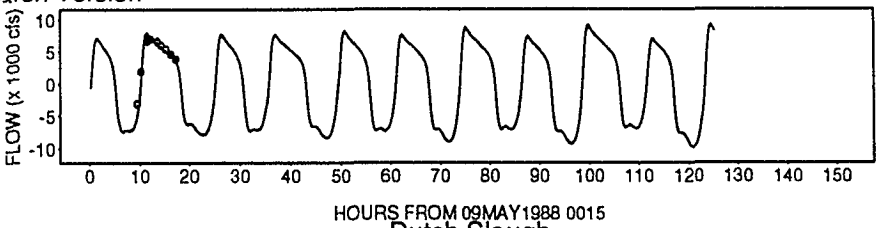
- The hydrodynamics calibration is essentially complete. We expect to make further adjustments in response to feedback from the salinity model calibration.

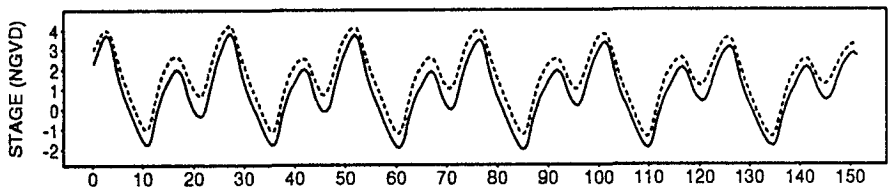
- Calibration results are being reviewed by USBR staff.

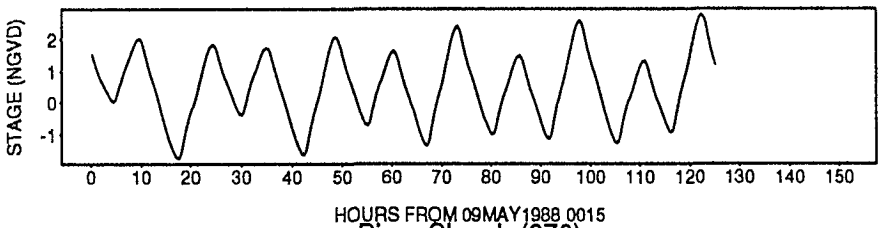
- Future Calibration Refinement Options:
  1) Calibrate model using latest UVM data
  2) Compare model flow-splits to empirical flow-split relations.
  3) Incorporate Three-Mile Slough survey data
  4) Identify areas of greatest calibration support needs.

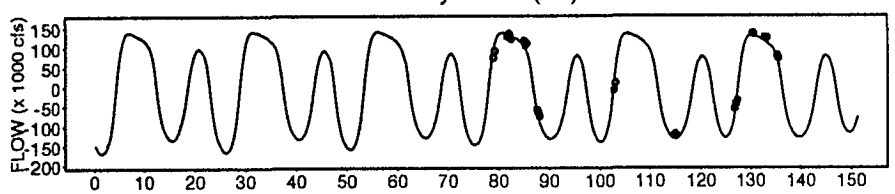
MAY 15 - MAY 21 1988: 'N 32* vs *RUN 31* Page 1
DSM1 Suisun Marsh Version

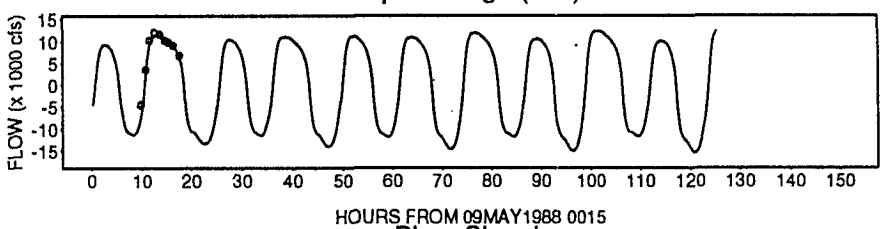


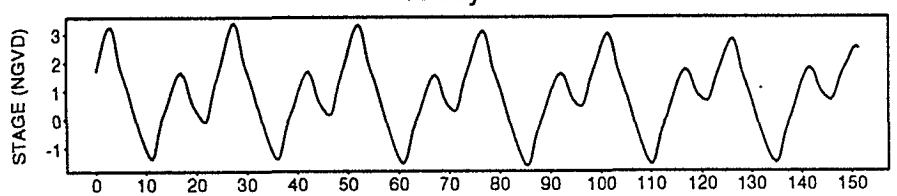


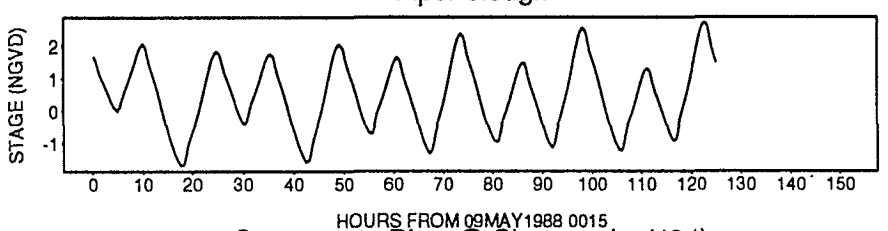


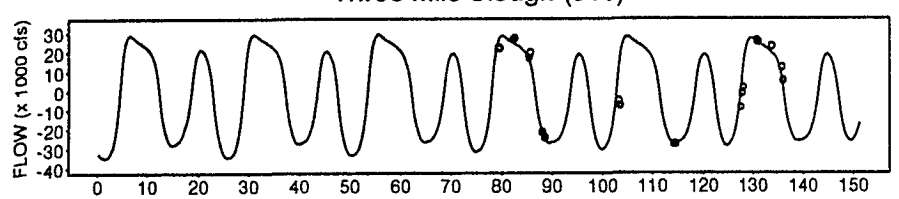


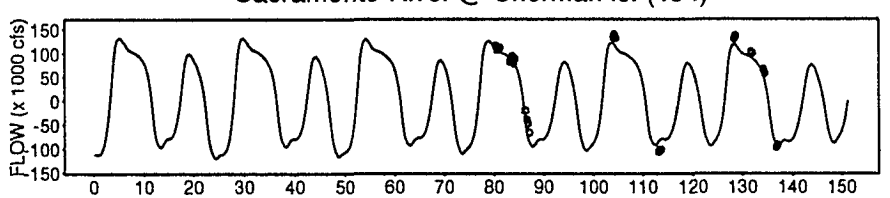


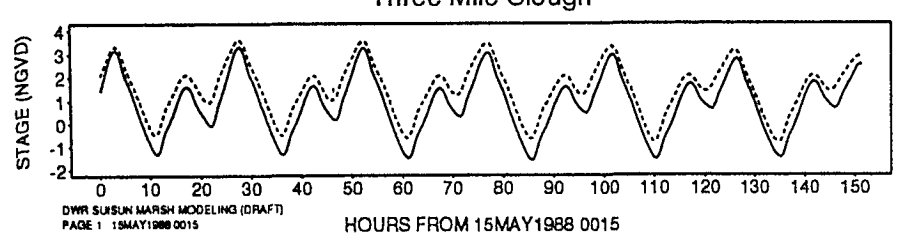


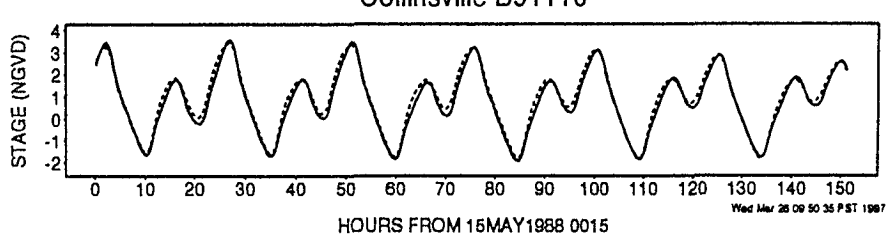








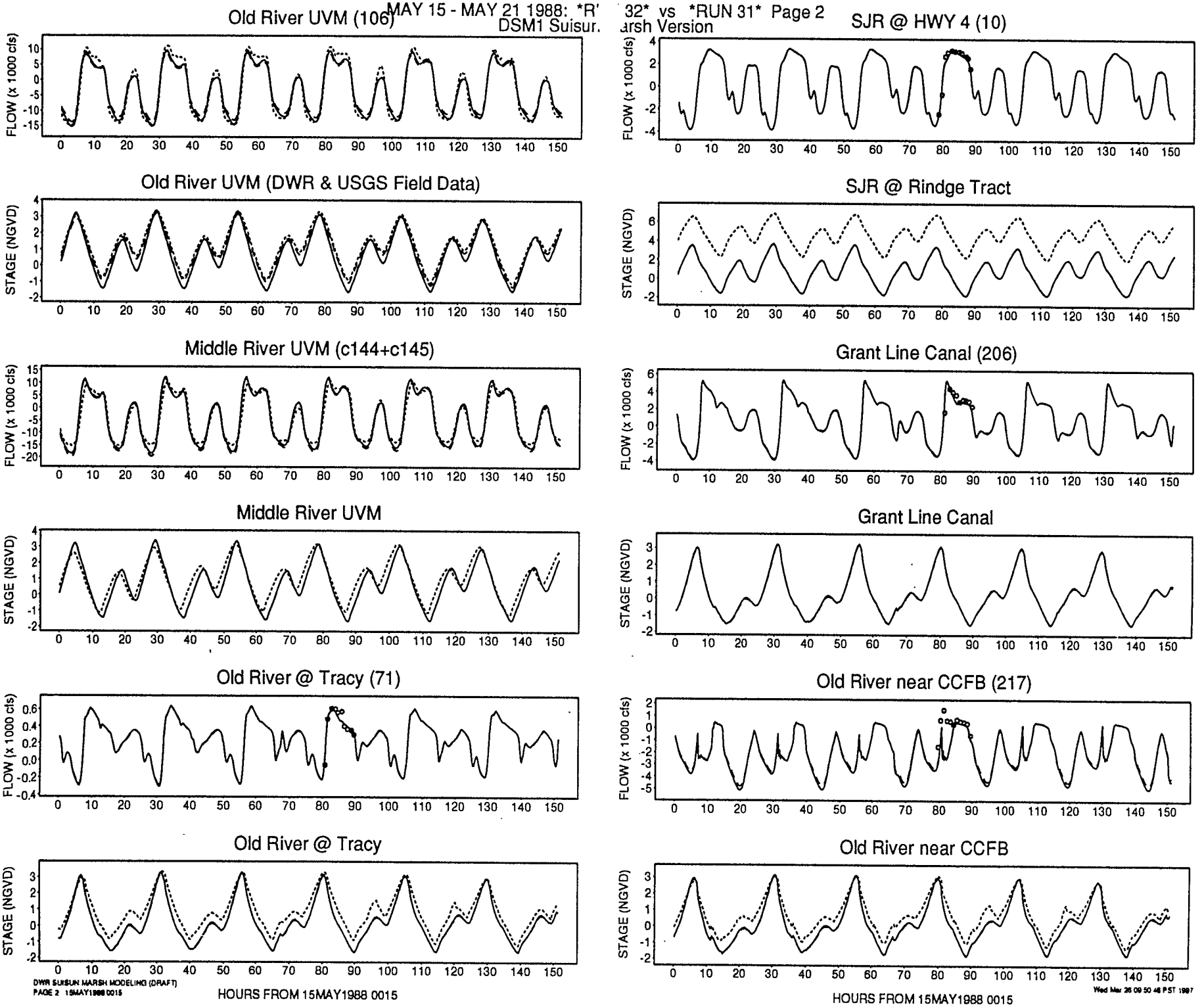




D-006132

D-006132

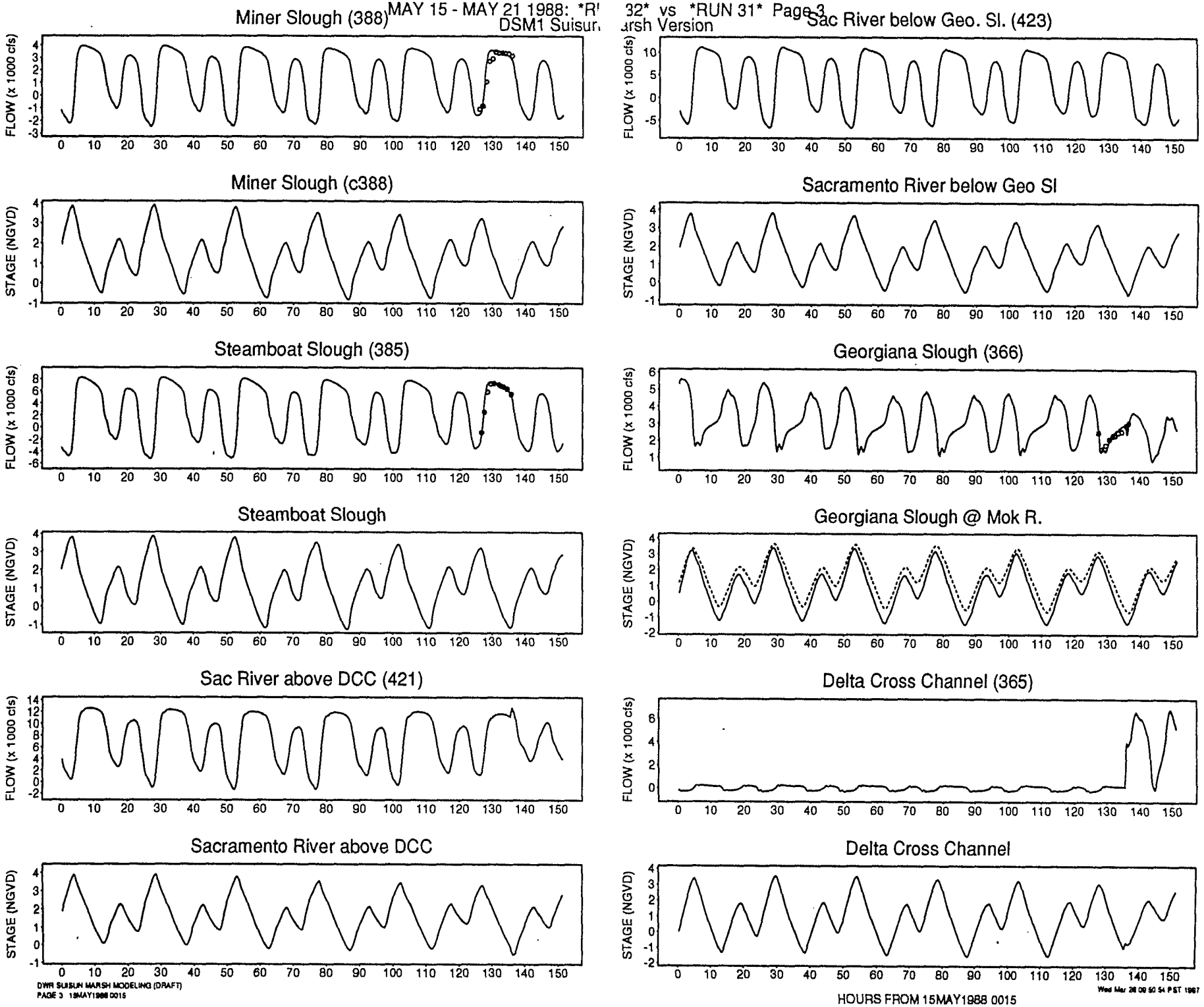
MAY 15 - MAY 21 1988: *R' 32* vs *RUN 31* Page 2
DSM1 Suisur. arsh Version



D-006133

D-006133

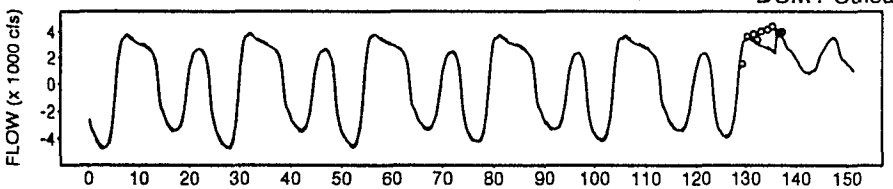
MAY 15 - MAY 21 1988: *R 32* vs *RUN 31* Page 3
DSM1 Suisun Marsh Version

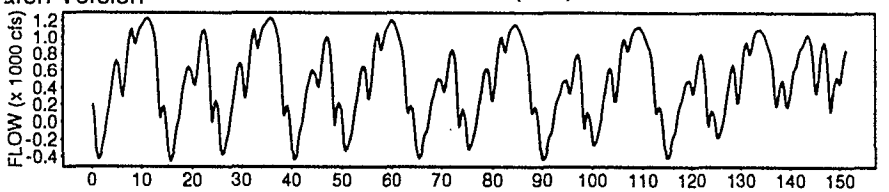


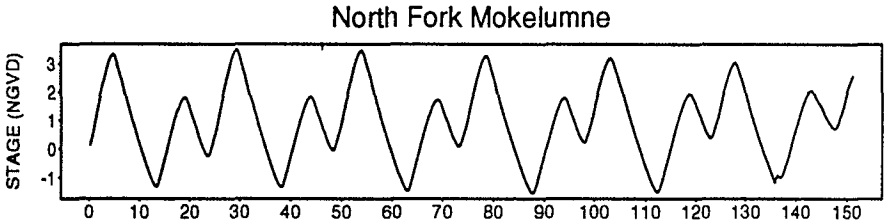
D-006134

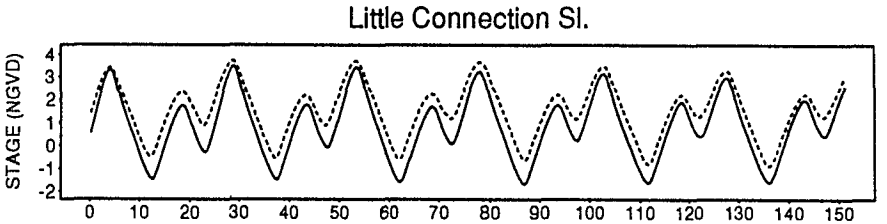
D-006134

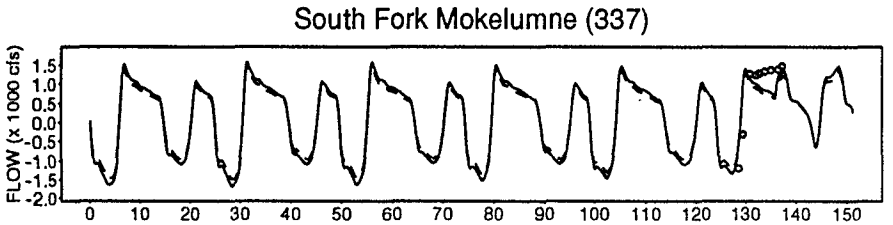
MAY 15 - MAY 21 1988: *RI 32* vs *RUN 31* Page 4
DSM1 Suisun arsh Version

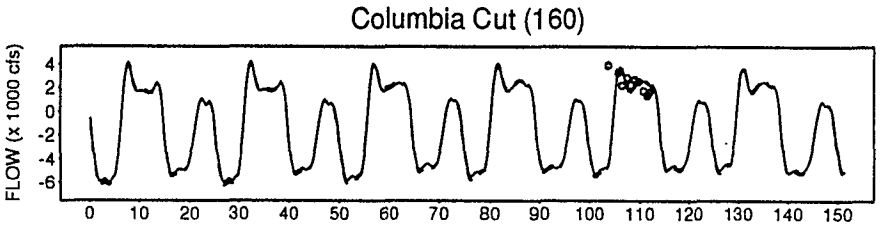


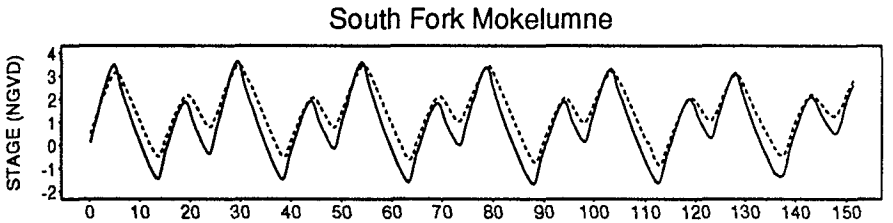


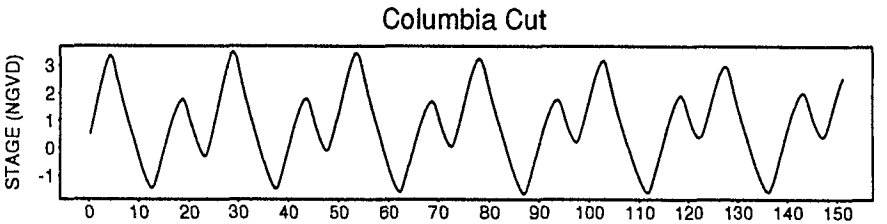


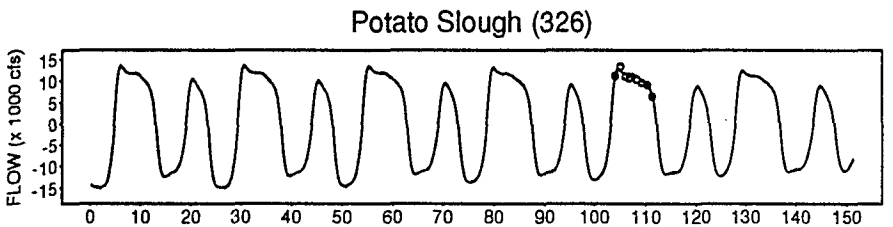


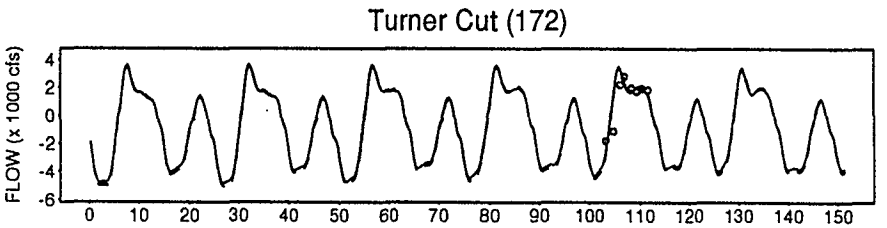


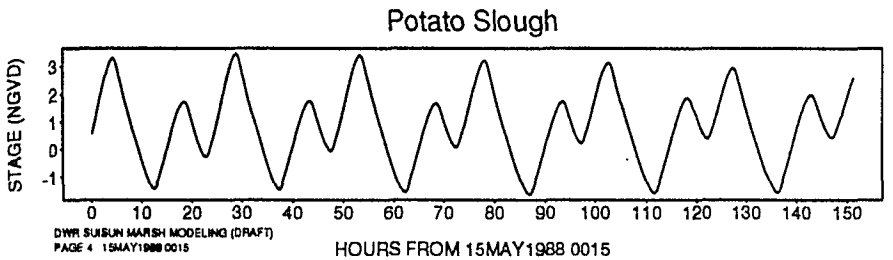


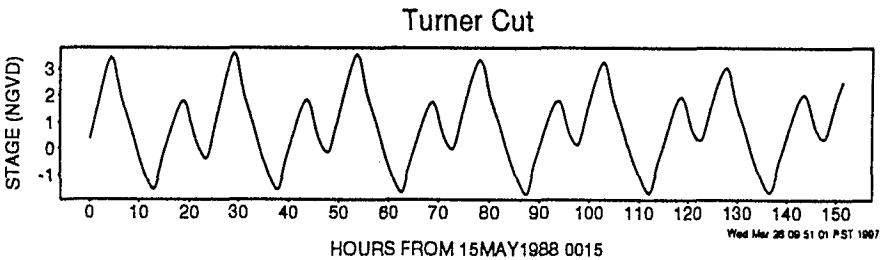






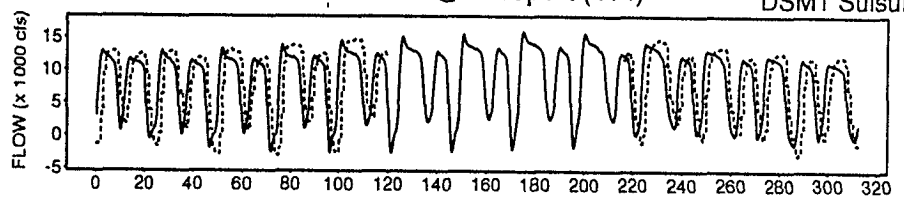


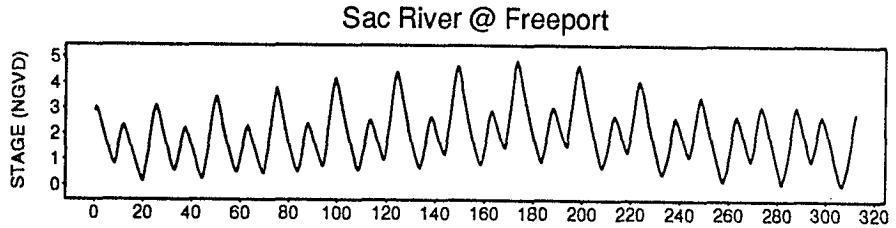


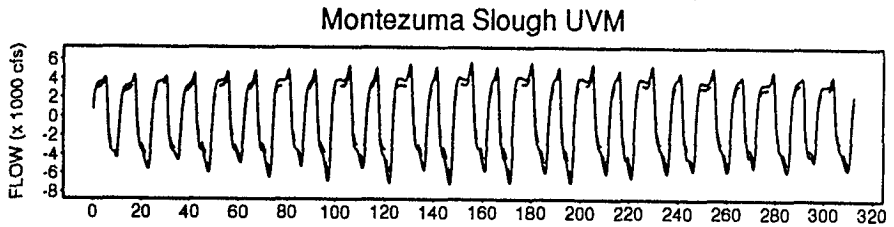


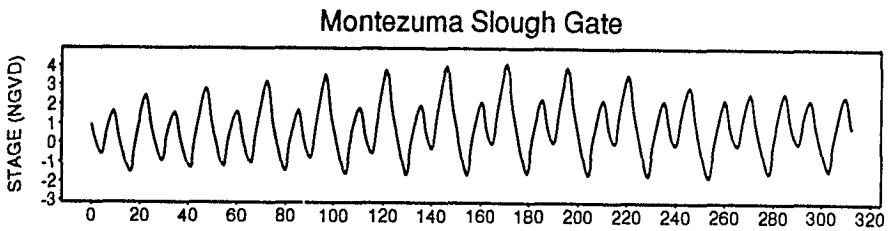
D-006135

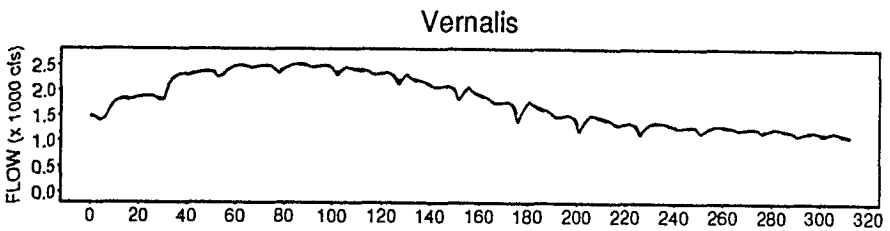
D-006135

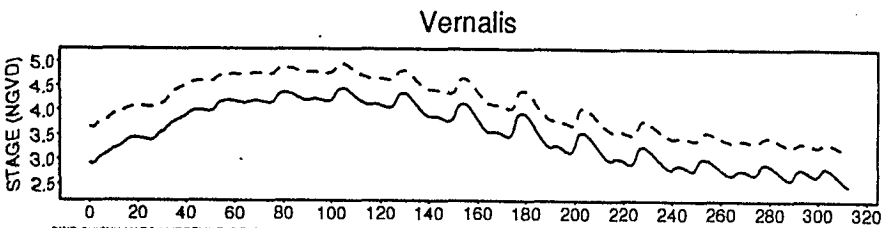


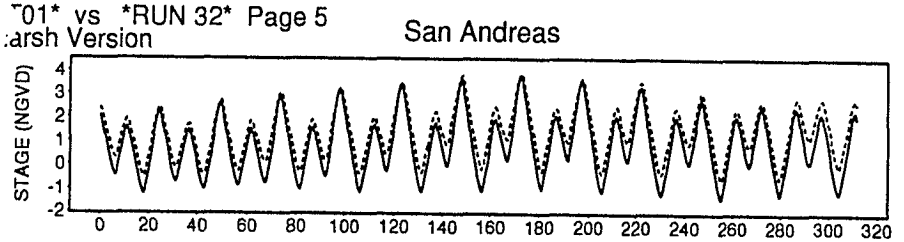


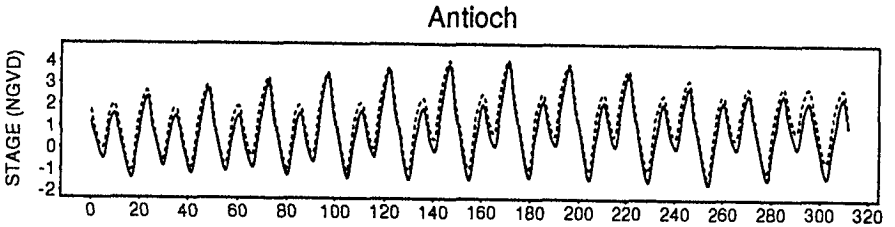


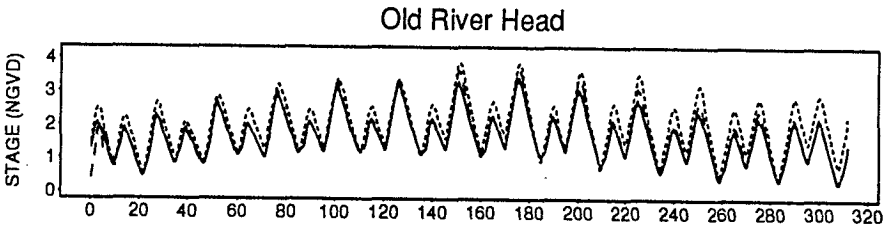


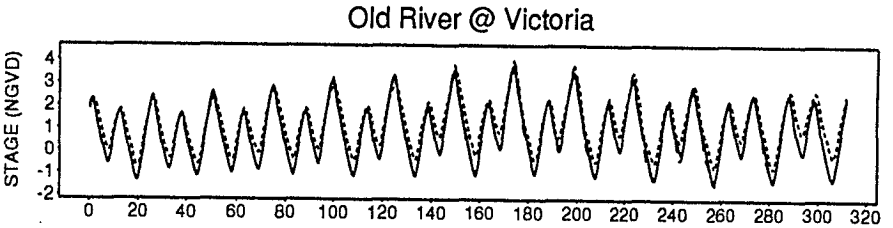


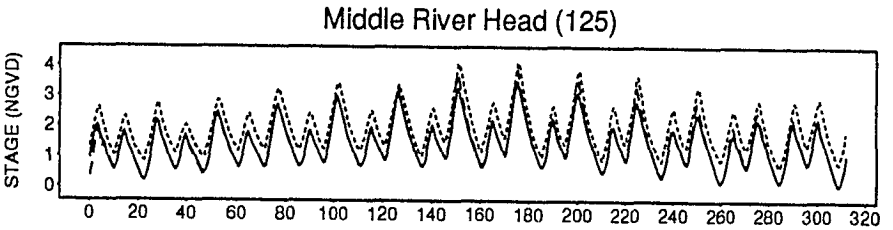


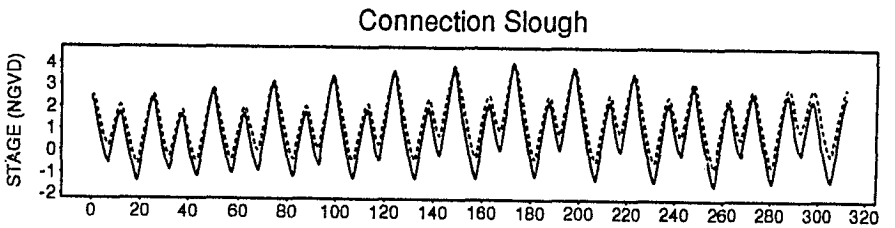












DWR SUISUN MARSH MODELING (DRAFT)
PAGE 5 19MAY1994 0015

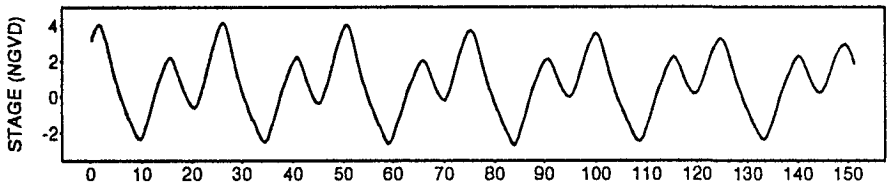
HOURS FROM 19MAY1994 0015

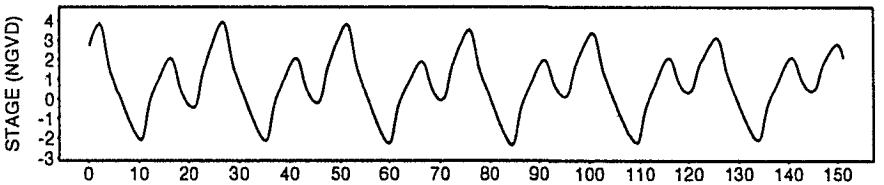
Thu Apr 17 11 39 10 PDT 1997

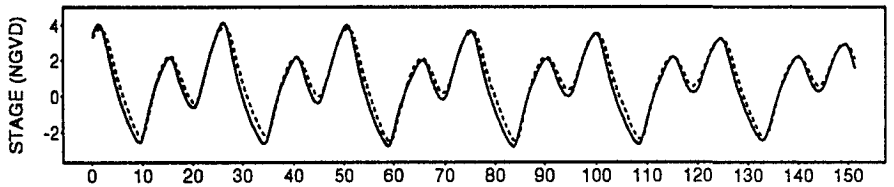
HOURS FROM 19MAY1994 0015

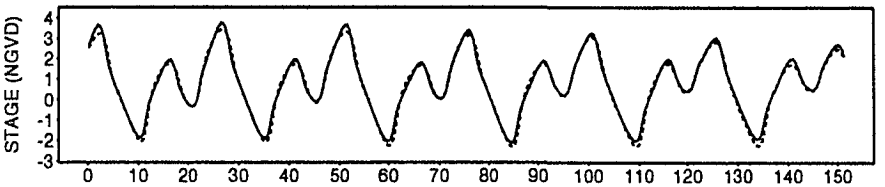
D-006136

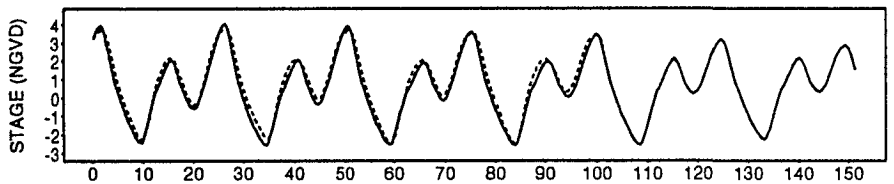
MAY 15 - MAY 21 1988: *RI 32* vs *RUN 31* Page 7
DSM1 Suisun Marsh Version

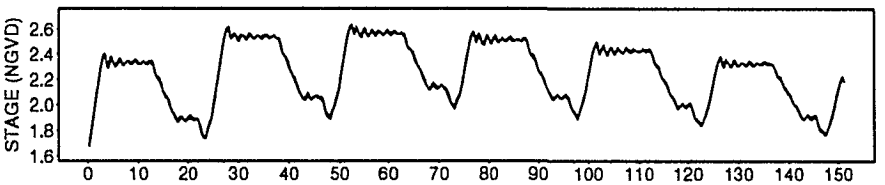


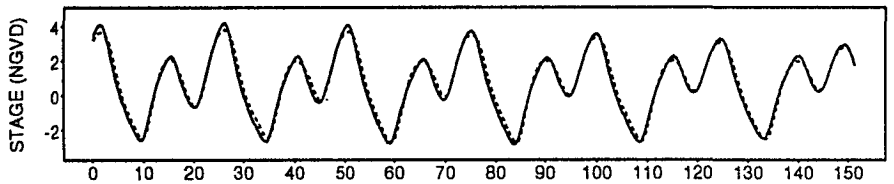


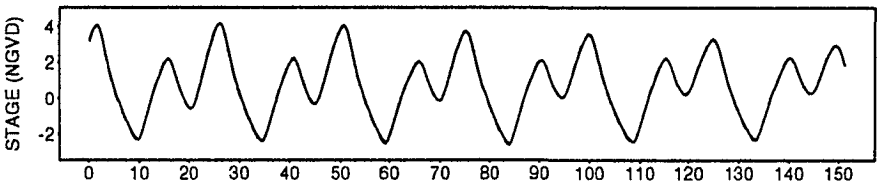


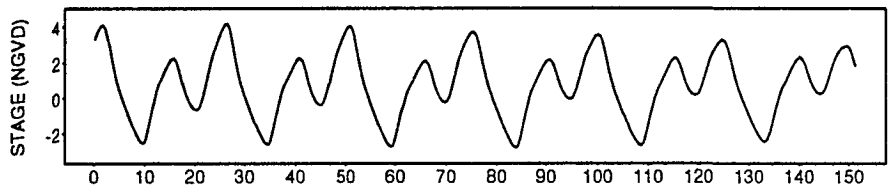


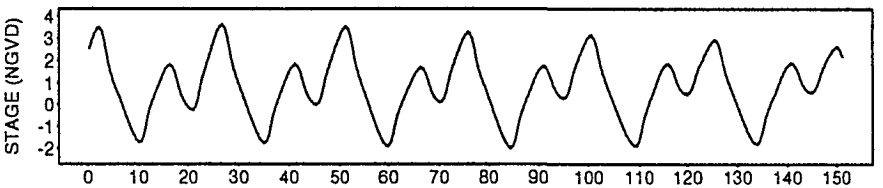


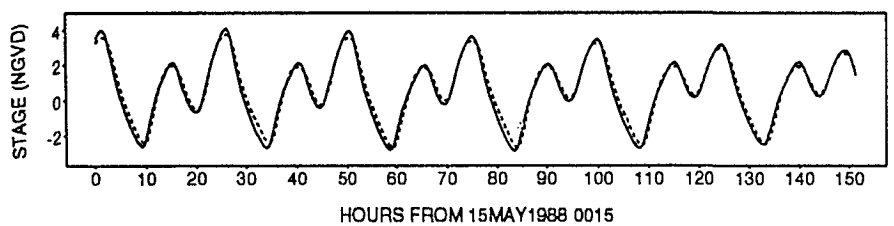


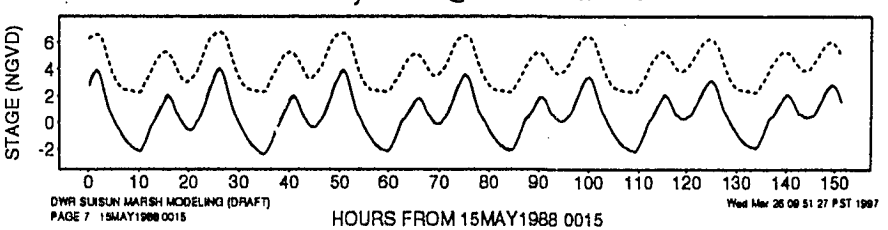






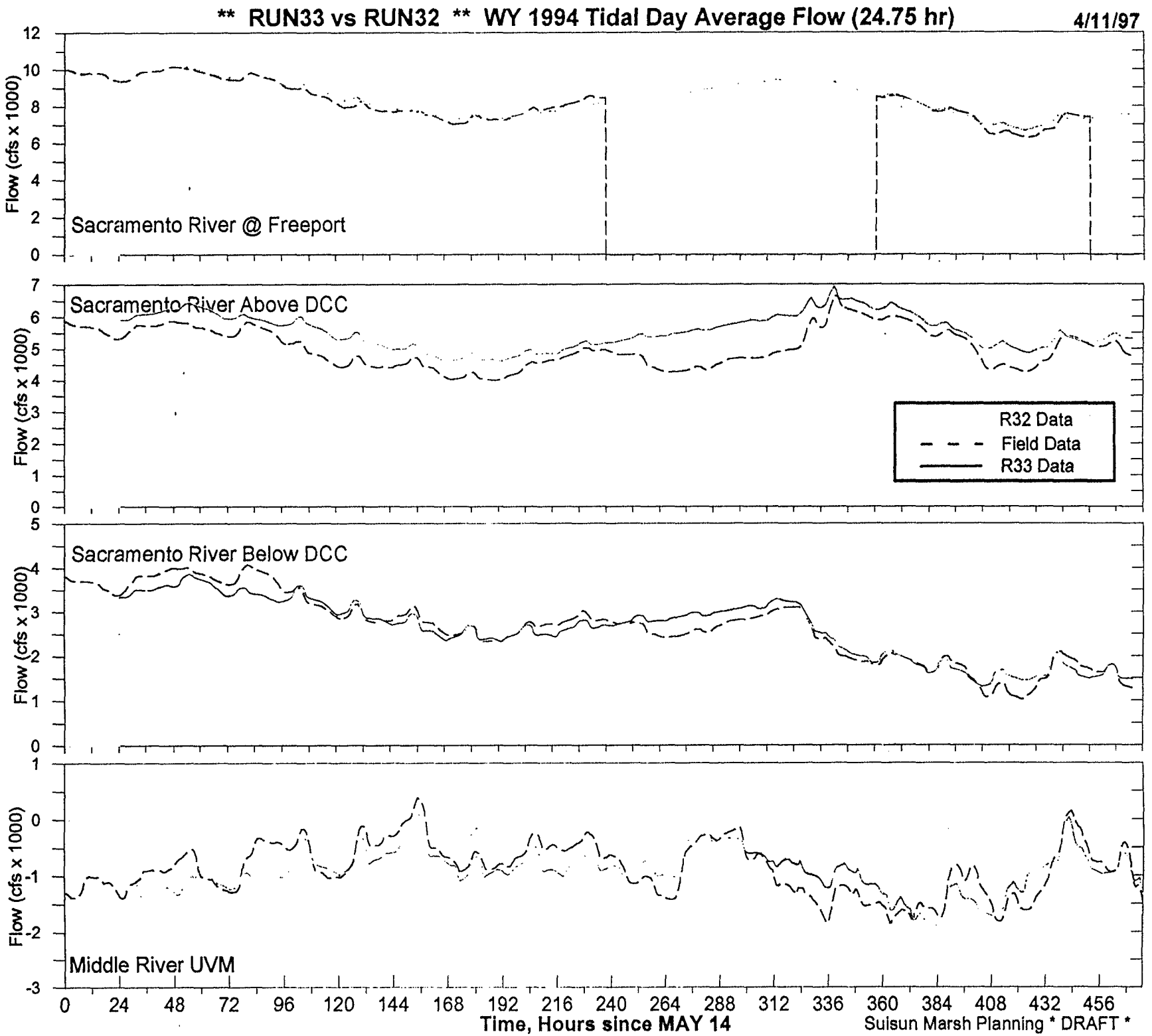






D-006137

D-006137



D-006138

D-006138

DSM1 Suisun Marsh Version Salinity Model
Re–calibration Status

Calibration period:

- Initialize model (warm up) using historical water year 1992 hydrology and facilities operations.

- Calibrate based on observed summer 1992 through September 1994 Suisun Bay/Marsh and Delta salinity.

Data:

- Use continuous EC converted to TDS data (water year type equation specific).
- Calibrate tidal day average salinity against 45 Marsh and Delta stations.

Calibraiton Strategy:

- Calibrate from west to east

Status:

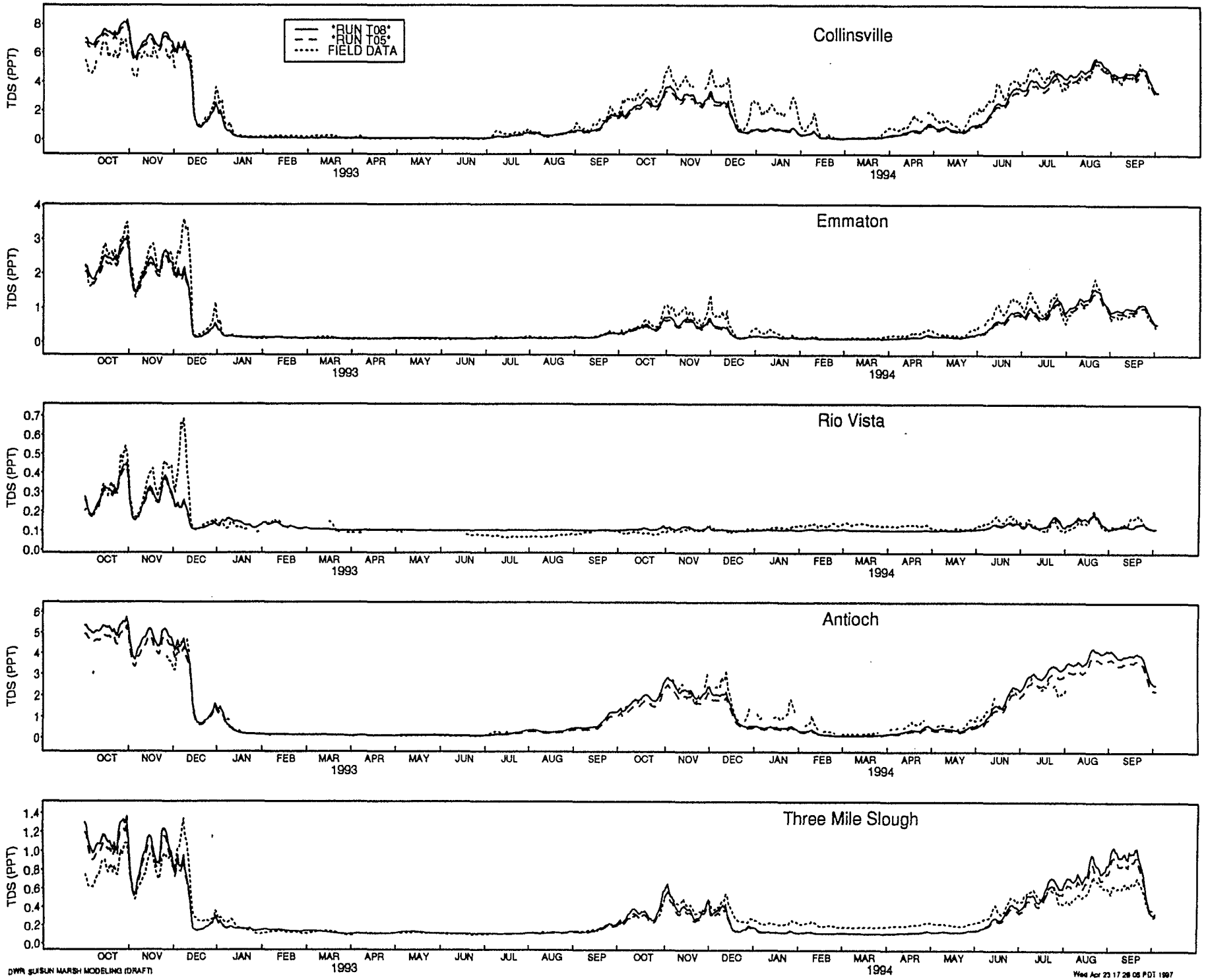
- Nine three–year calibration runs have been made.
- Additional field data is being prepared

Work Remaining:

- About 1 month is needed for adequate salinity calibration. Subsequently, both hydrodynamics and salinity will be verified against an independent data set. A final report to CALFED will be prepared.

Discussion: Where to?

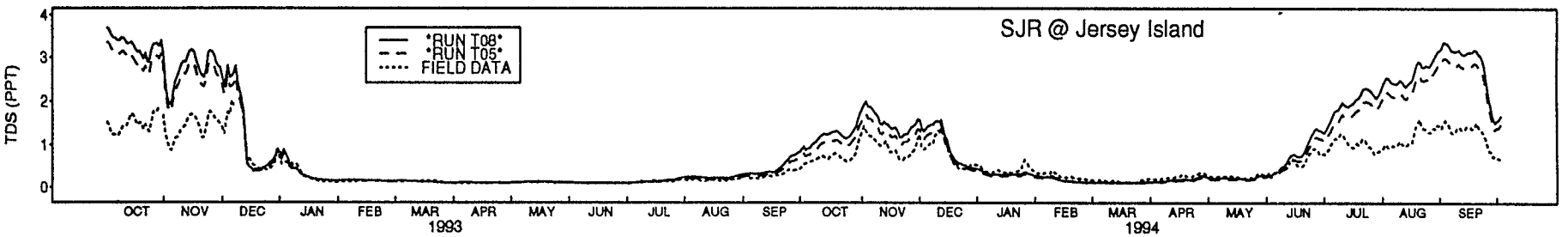
DSM1 Suisun Marsh Version Re-calibration - Tidal Day Average Salinity; WATER YEARS 1993 & 1994: *RUN T08* vs *RUN T05* Page 1

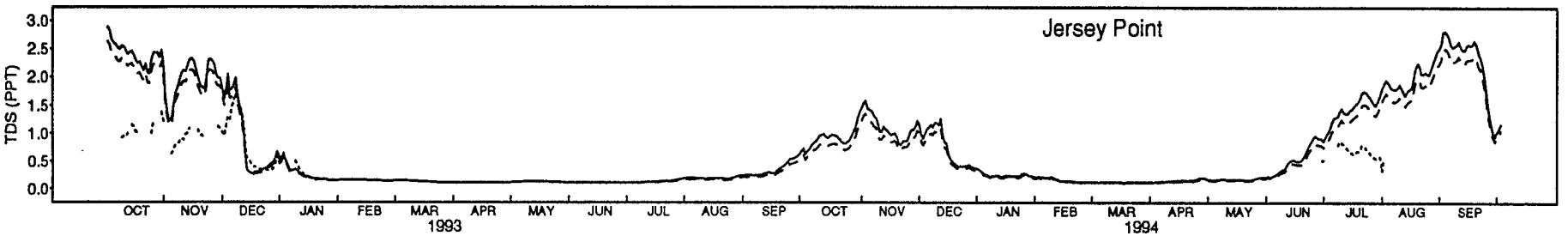


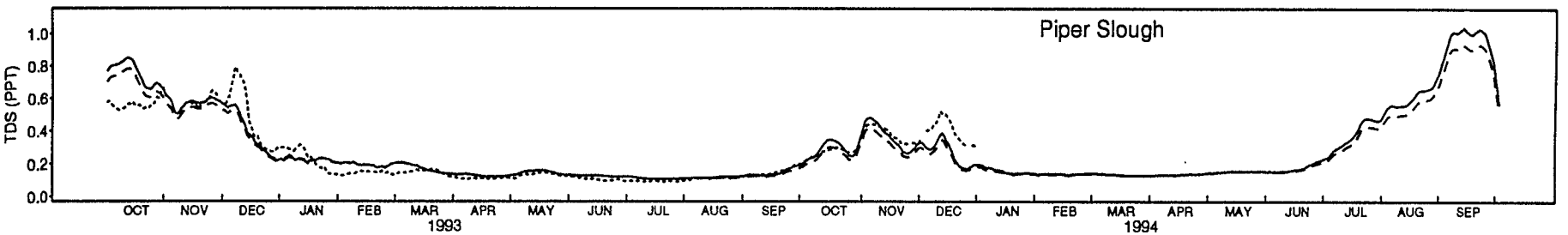
D-006140

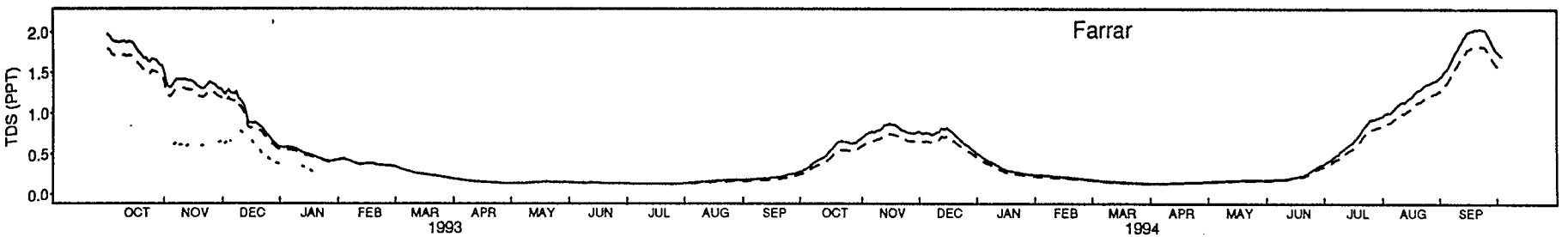
D-006140

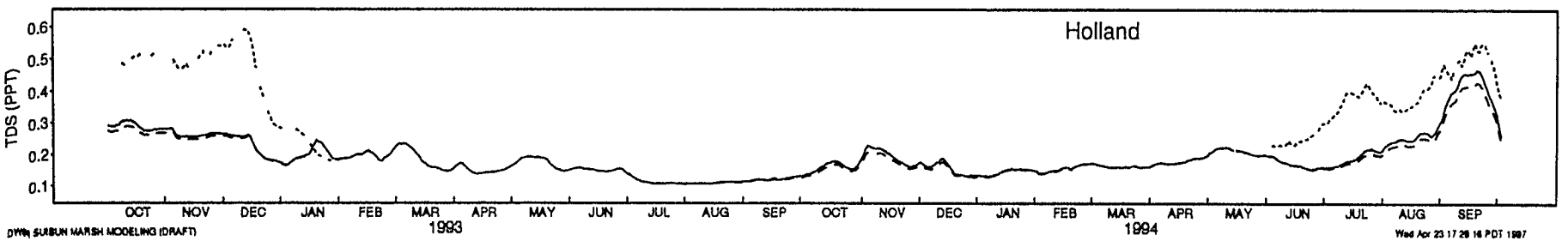
DSM1 Suisun Marsh Version Re-calibration - Tidal Day Average Salinity; WATER YEARS 1993 & 1994: *RUN T08* vs *RUN T05* Page 2











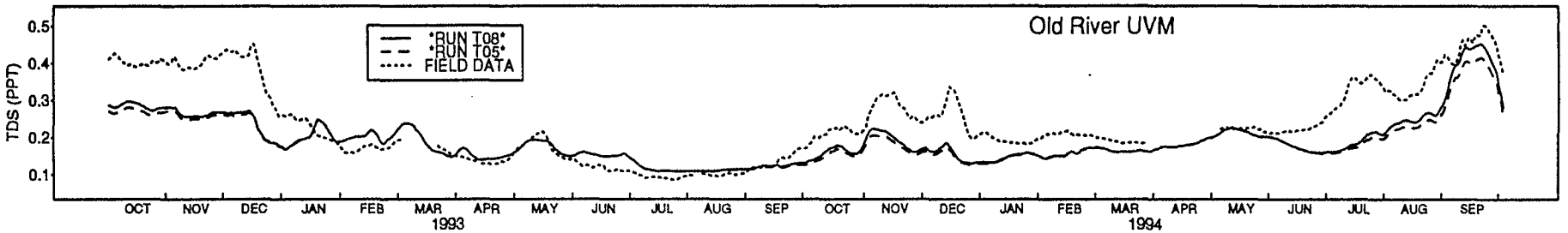
DWR SUISUN MARSH MODELING (DRAFT)

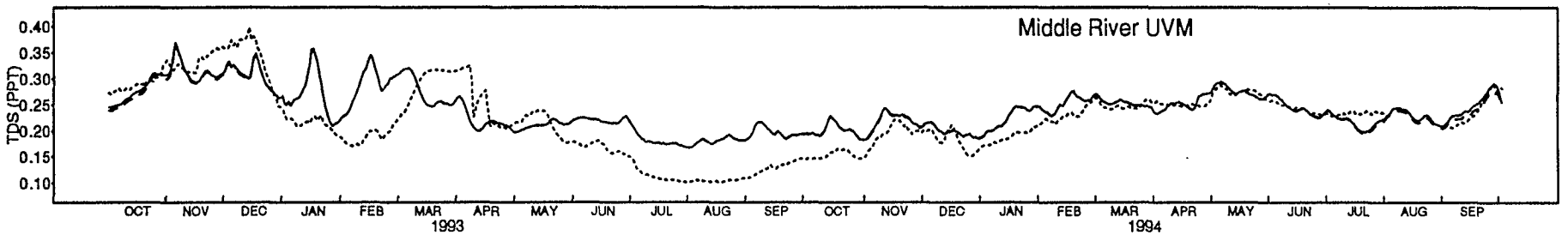
Wed Apr 23 17:28:16 PDT 1997

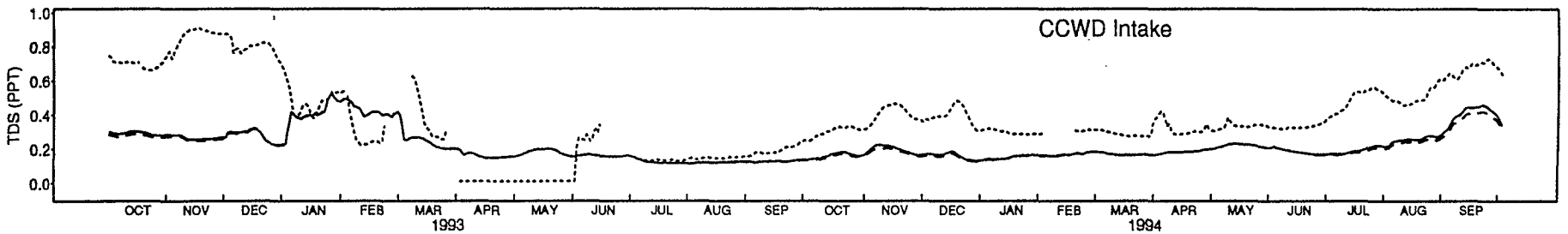
D-006141

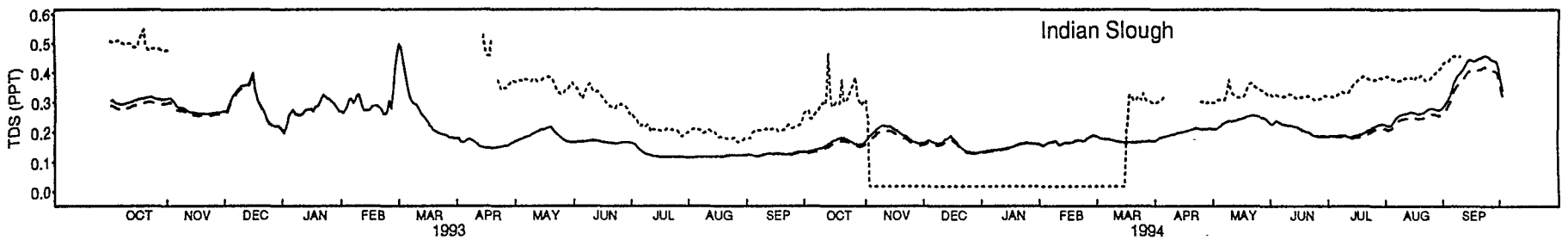
D-006141

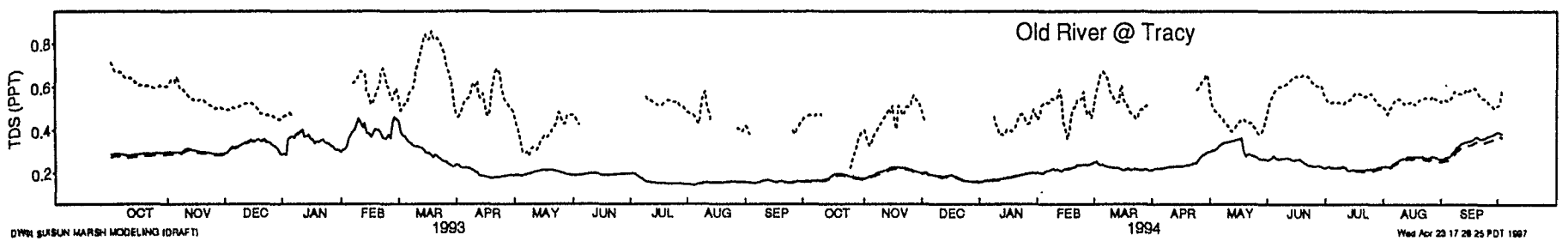
DSM1 Suisun Marsh Version Re-calibration - Tidal Day Average Salinity; WATER YEARS 1993 & 1994: *RUN T08* vs *RUN T05* Page 3











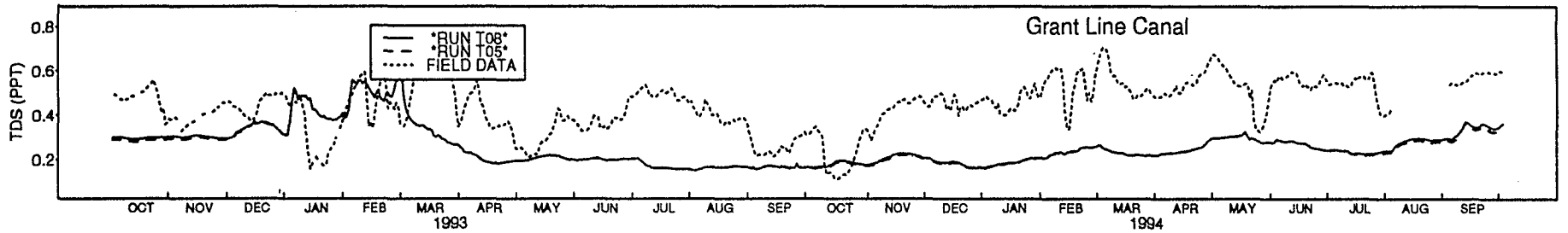
DWR SUISUN MARSH MODELING (DRAFT)

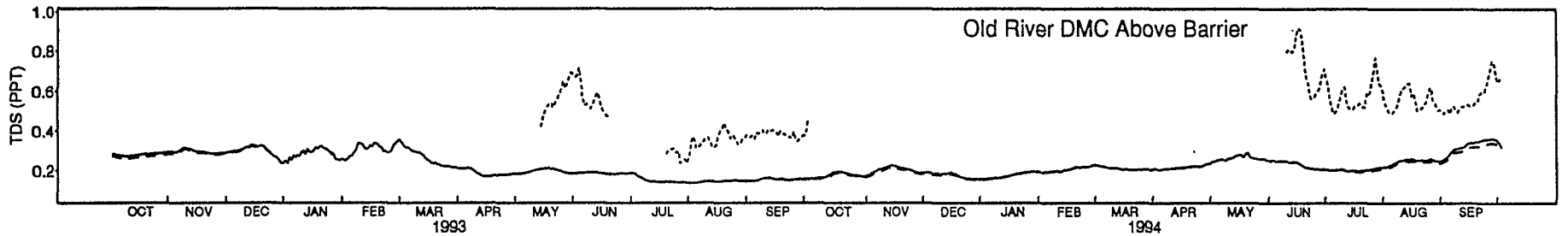
Wed Apr 23 17 28 25 PDT 1997

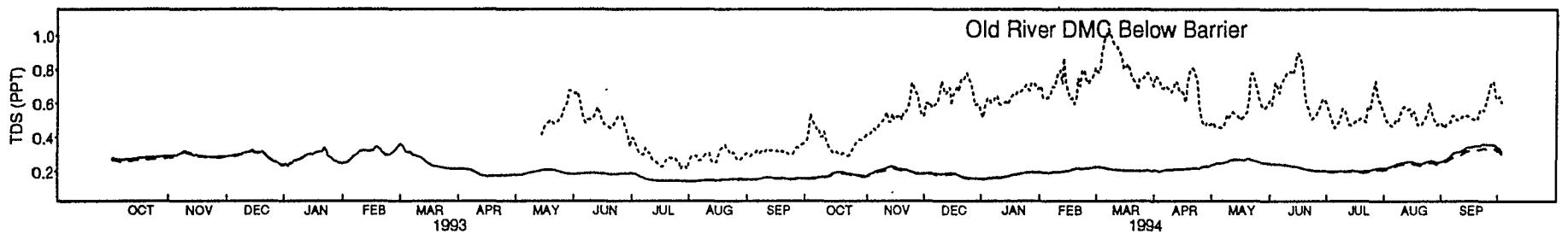
D-006142

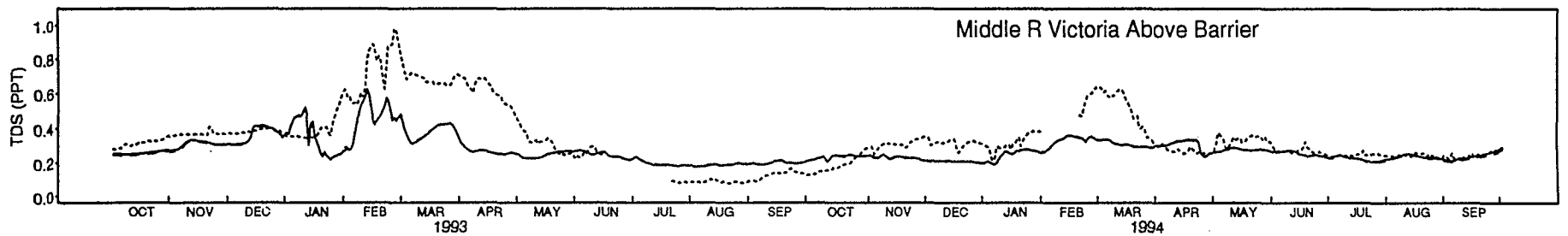
D-006142

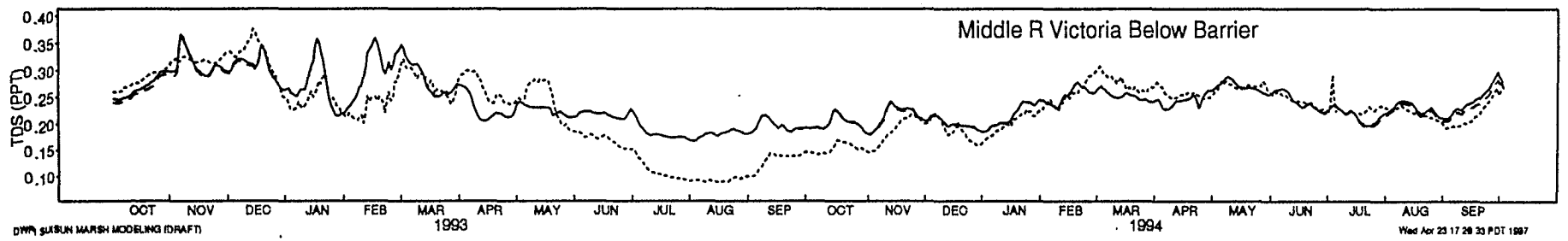
DSM1 Suisun Marsh Version Re-calibration - Tidal Day Average Salinity; WATER YEARS 1993 & 1994: *RUN T08* vs *RUN T05* Page 4











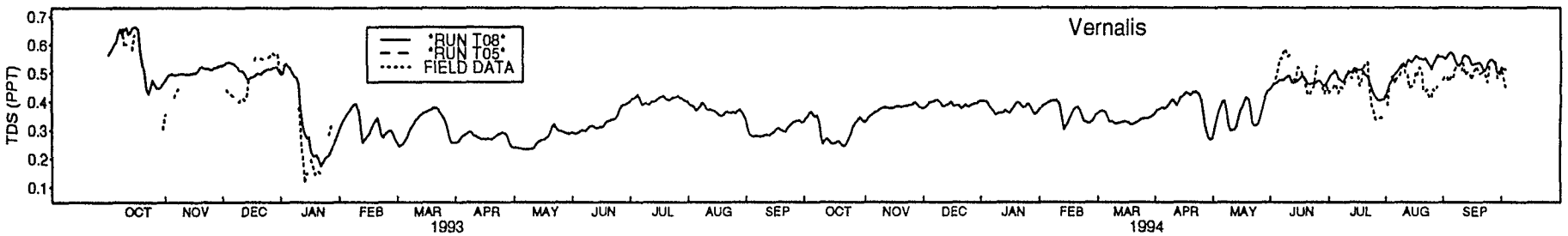
DWR SUISUN MARSH MODELING (DRAFT)

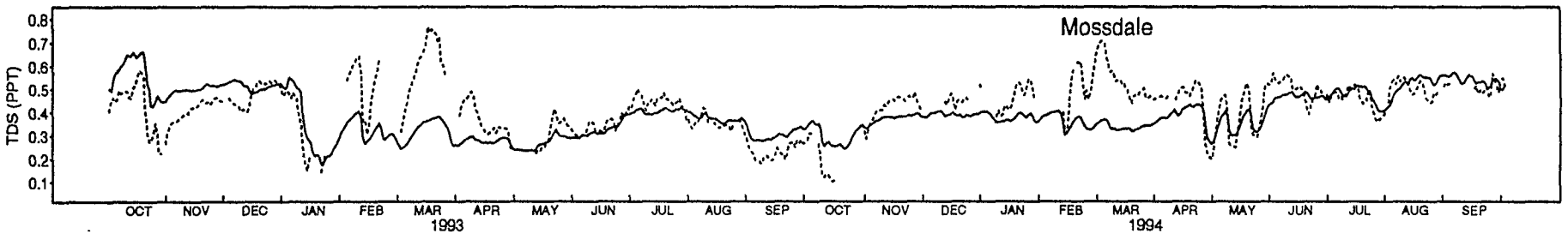
Wed Apr 23 17 29 33 PDT 1997

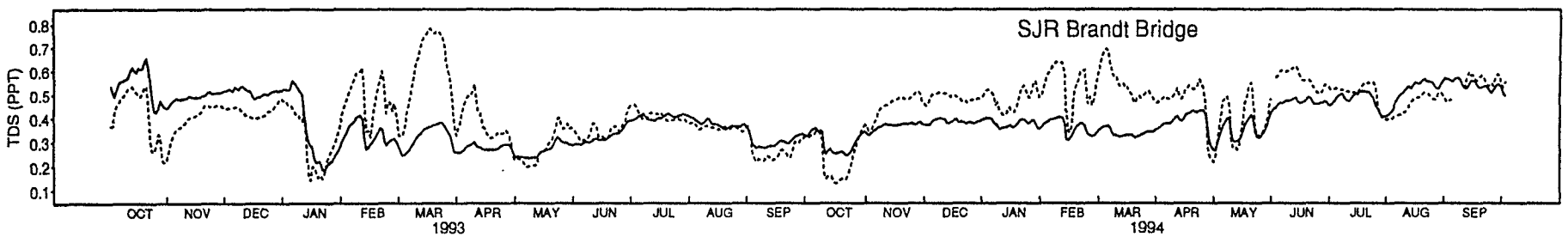
D-006143

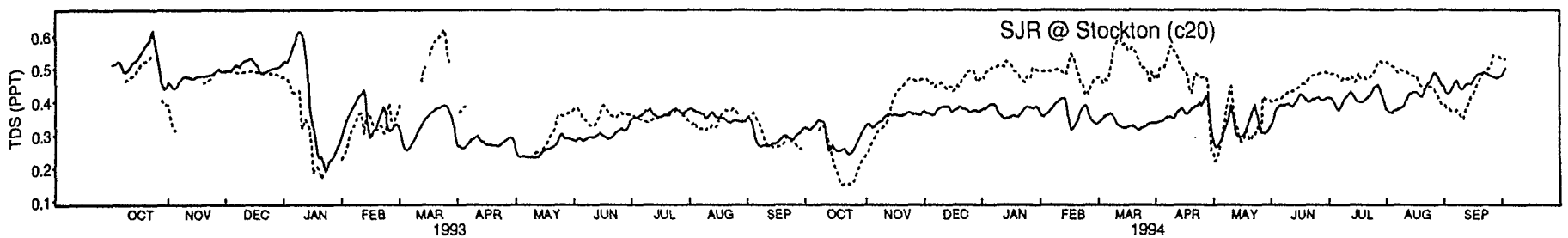
D-006143

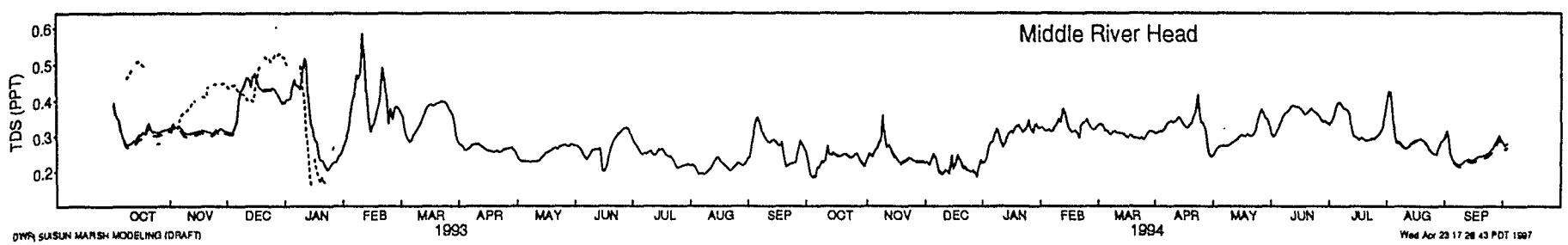
DSM1 Suisun Marsh Version Re-calibration - Tidal Day Average Salinity; WATER YEARS 1993 & 1994: *RUN T08* vs *RUN T05* Page 5











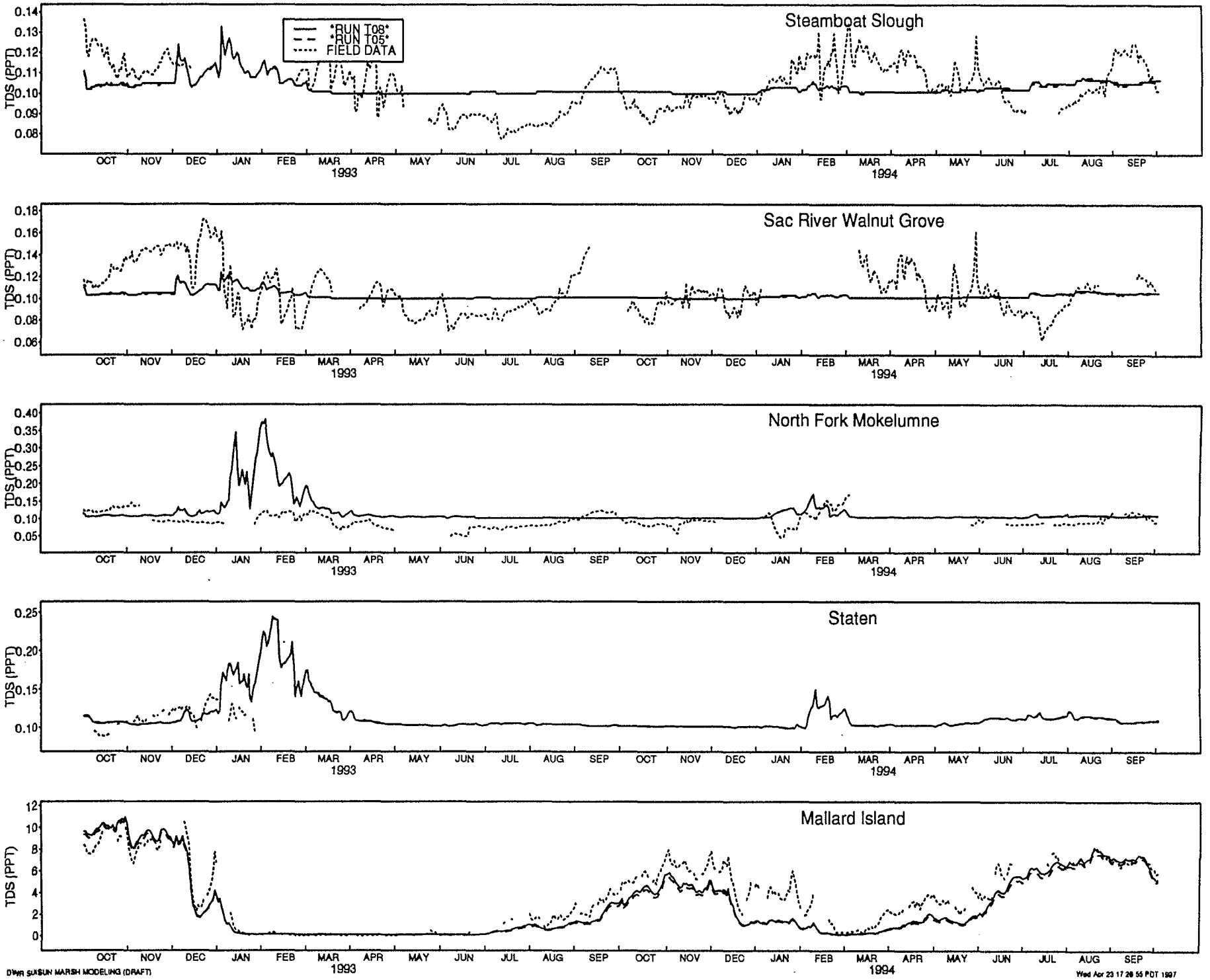
DWR SUISUN MARSH MODELING (DRAFT)

Wed Apr 23 17 26 43 PDT 1997

D-006144

D-006144

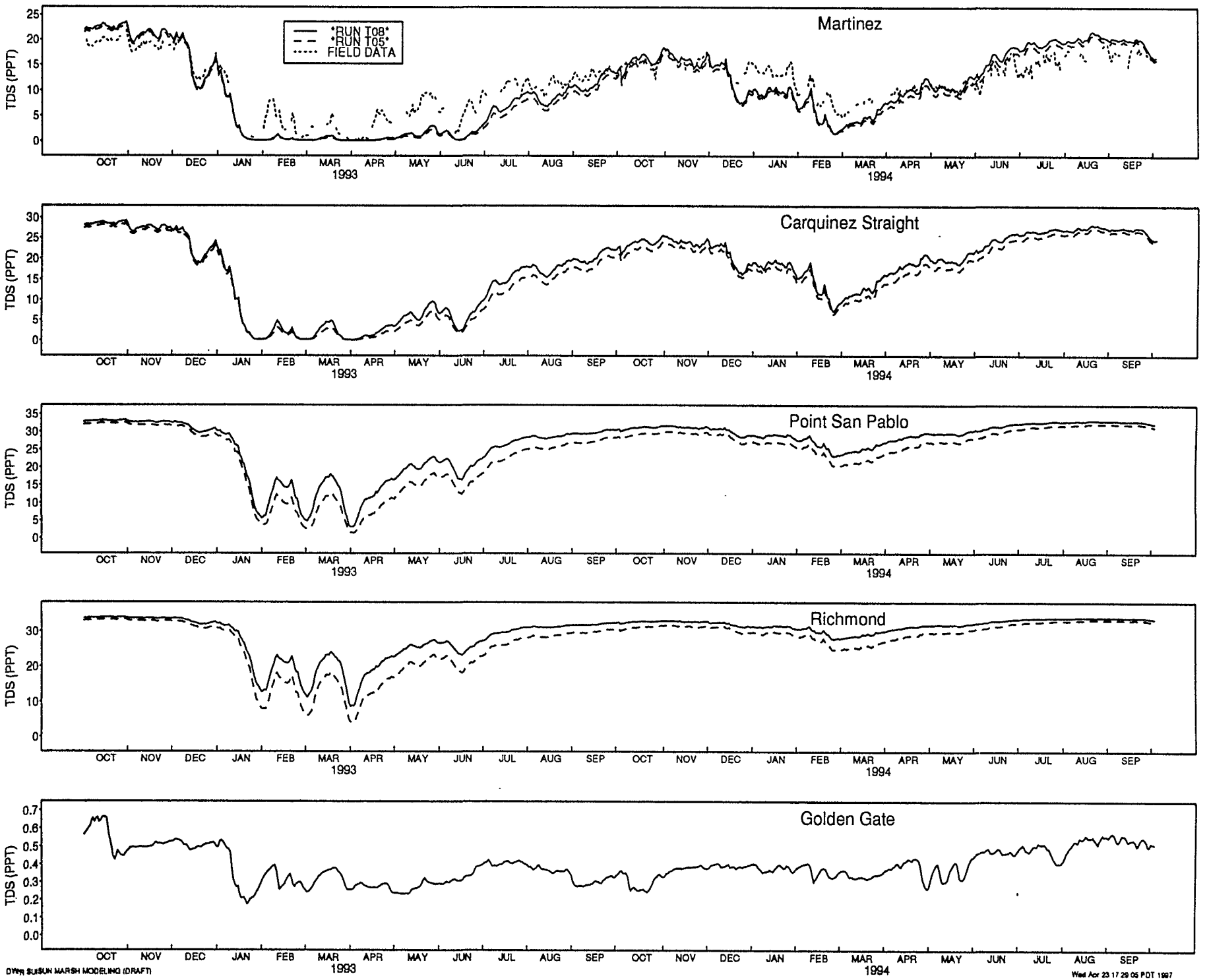
DSM1 Suisun Marsh Version Re-calibration - Tidal Day Average Salinity; WATER YEARS 1993 & 1994: *RUN T08* vs *RUN T05* Page 6



D-006145

D-006145

DSM1 Suisun Marsh Version Re-calibration - Tidal Day Average Salinity; WATER YEARS 1993 & 1994: *RUN T08* vs *RUN T05* Page 7



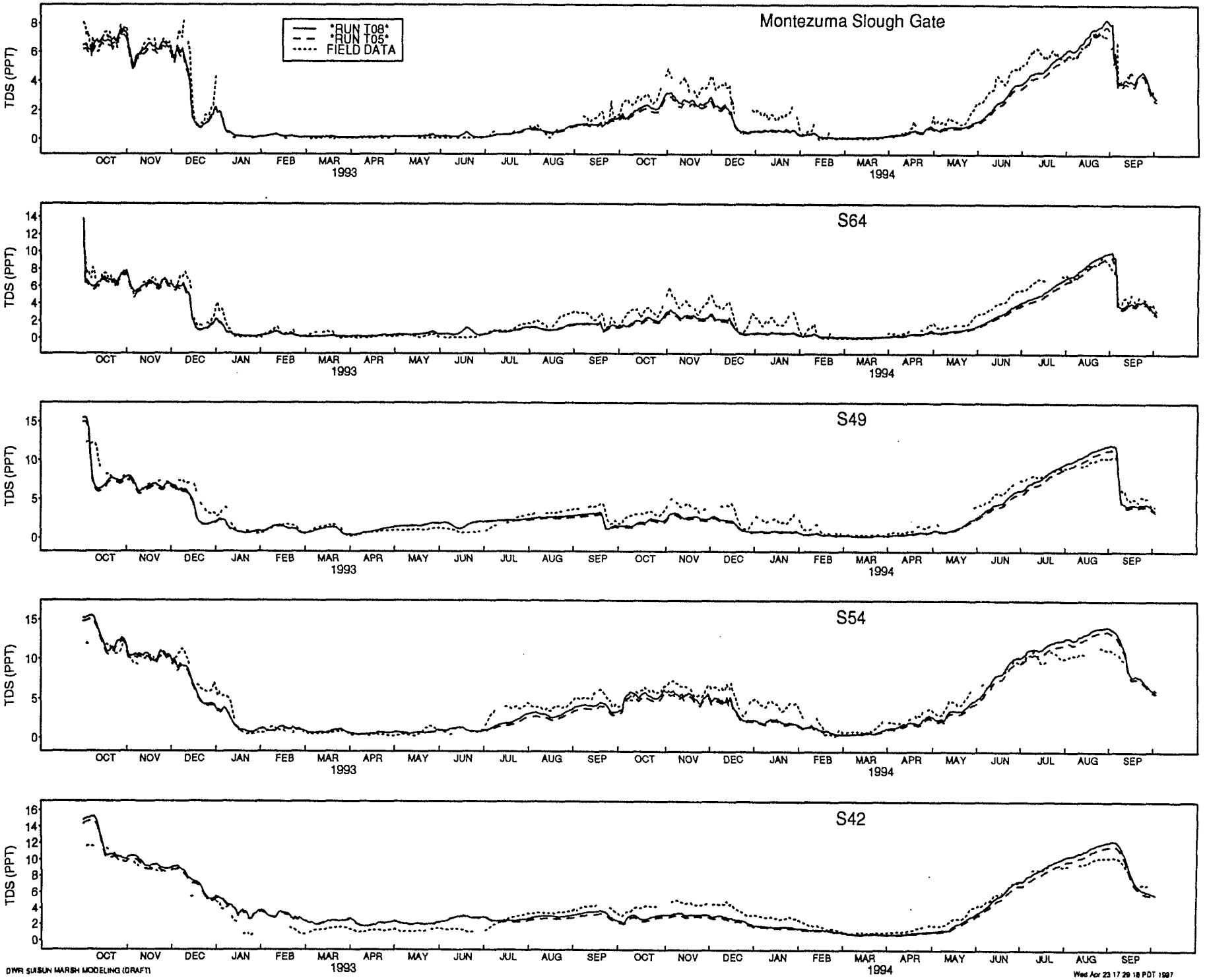
DWR SUISUN MARSH MODELING (DRAFT)

Wed Apr 23 17:29:05 PDT 1997

D-006146

D-006146

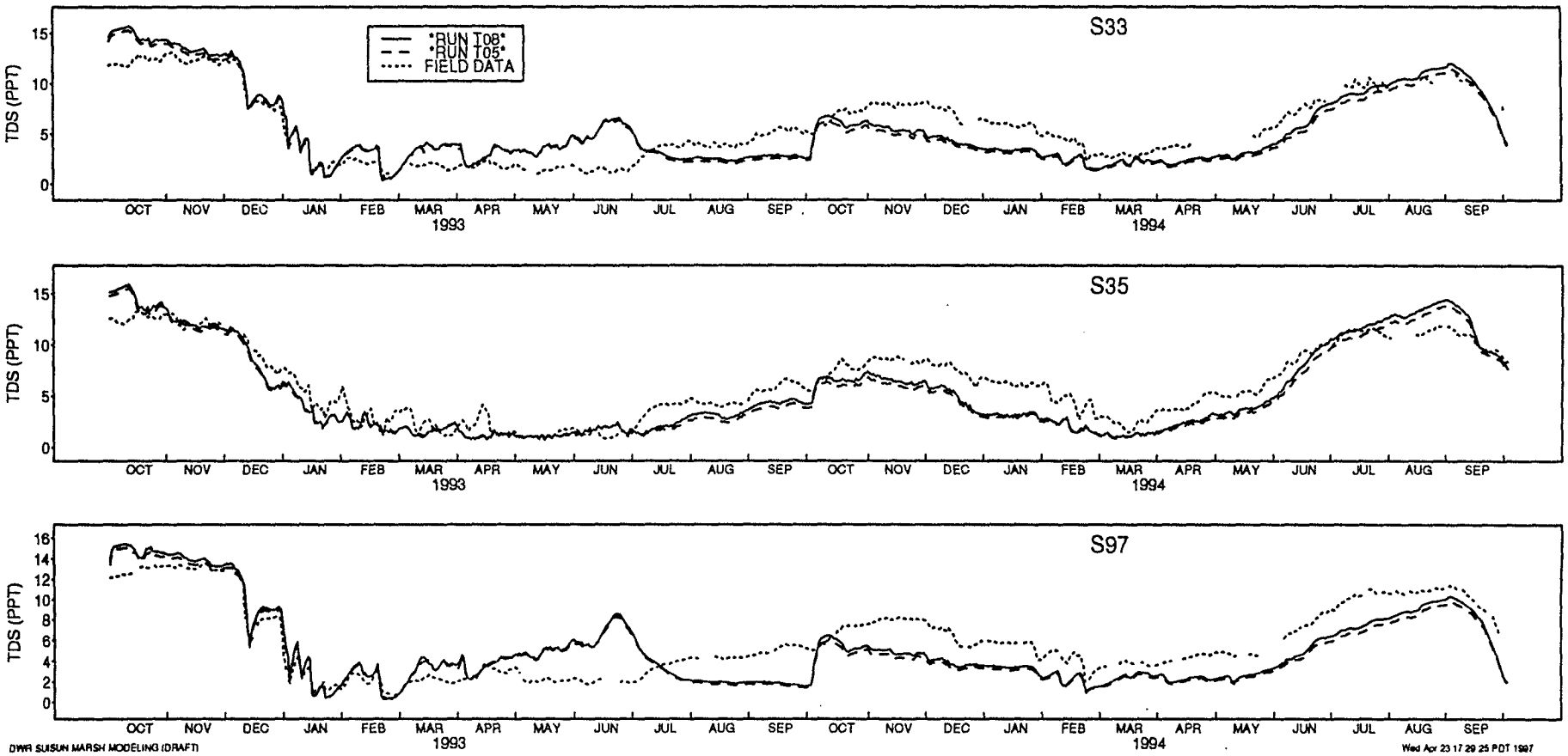
DSM1 Suisun Marsh Version Re-calibration - Tidal Day Average Salinity; WATER YEARS 1993 & 1994: *RUN T08* vs *RUN T05* Page 8



D-006147

D-006147

DSM1 Suisun Marsh Version Re-calibration - Tidal Day Average Salinity; WATER YEARS 1993 & 1994: *RUN T08* vs *RUN T05* Page 9



D-006148

D-006148