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State Mussel Watch

Trends in Selected Organic and Trace Metals 1977 - 2010

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Summary of Data

- Three datasets used:
  - State Mussel Watch (incl. Endowment)
  - Regional Monitoring Program
  - NOAA National Mussel Watch
- Analytical methods changed over time
  - Consistent over the past 15 years
- Organics summed per RMP methods

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Statistical Approach

- Linear regression analysis
  - Log-transformed concentrations
  - SMW
    - Lipid weight organics
    - Dry weight metals
  - NMW
    - Dry weight metals and organics
- Calculated log-decay half lives
  - Number of years for conc. to decline by 50%

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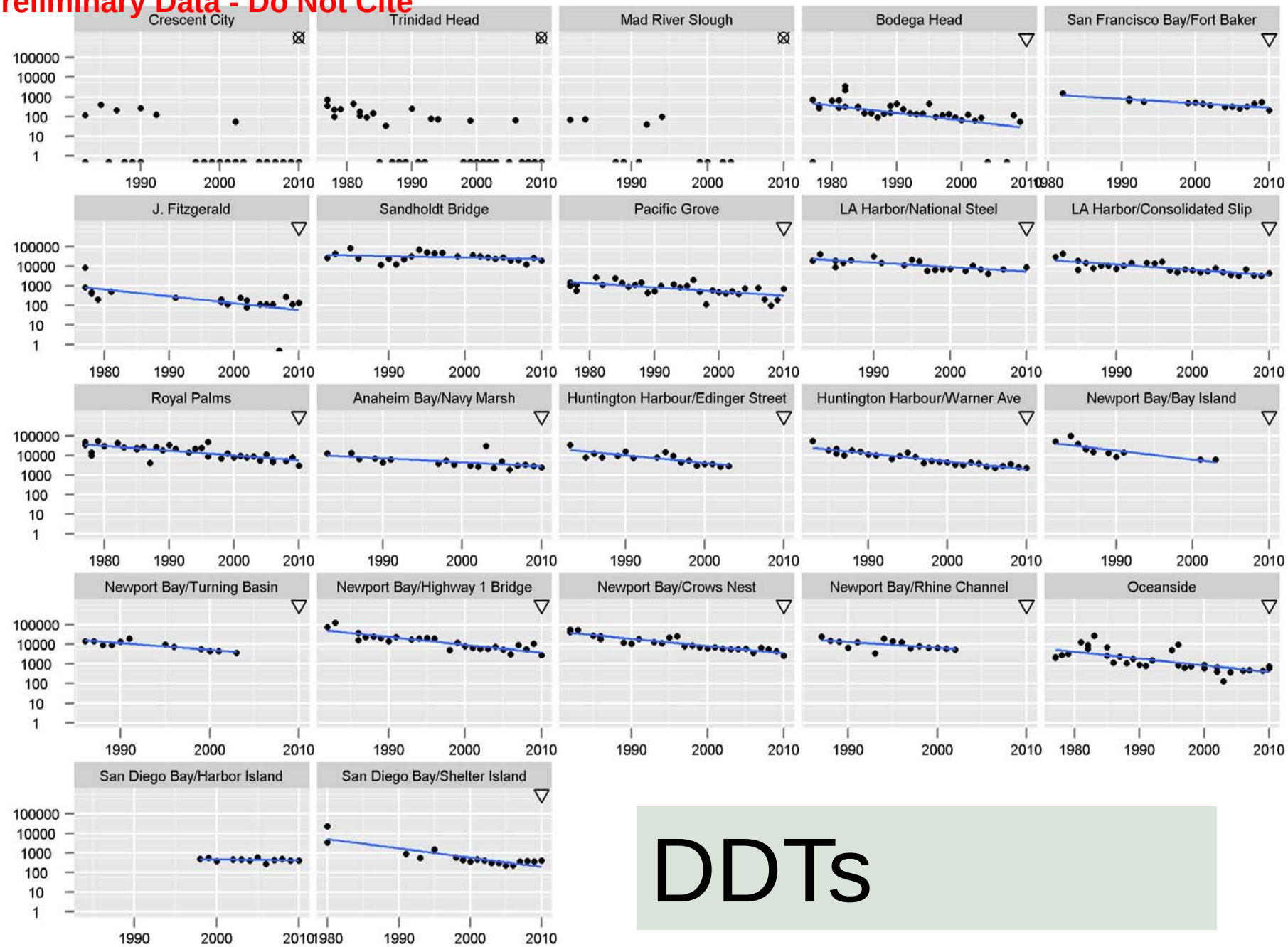

DDTs

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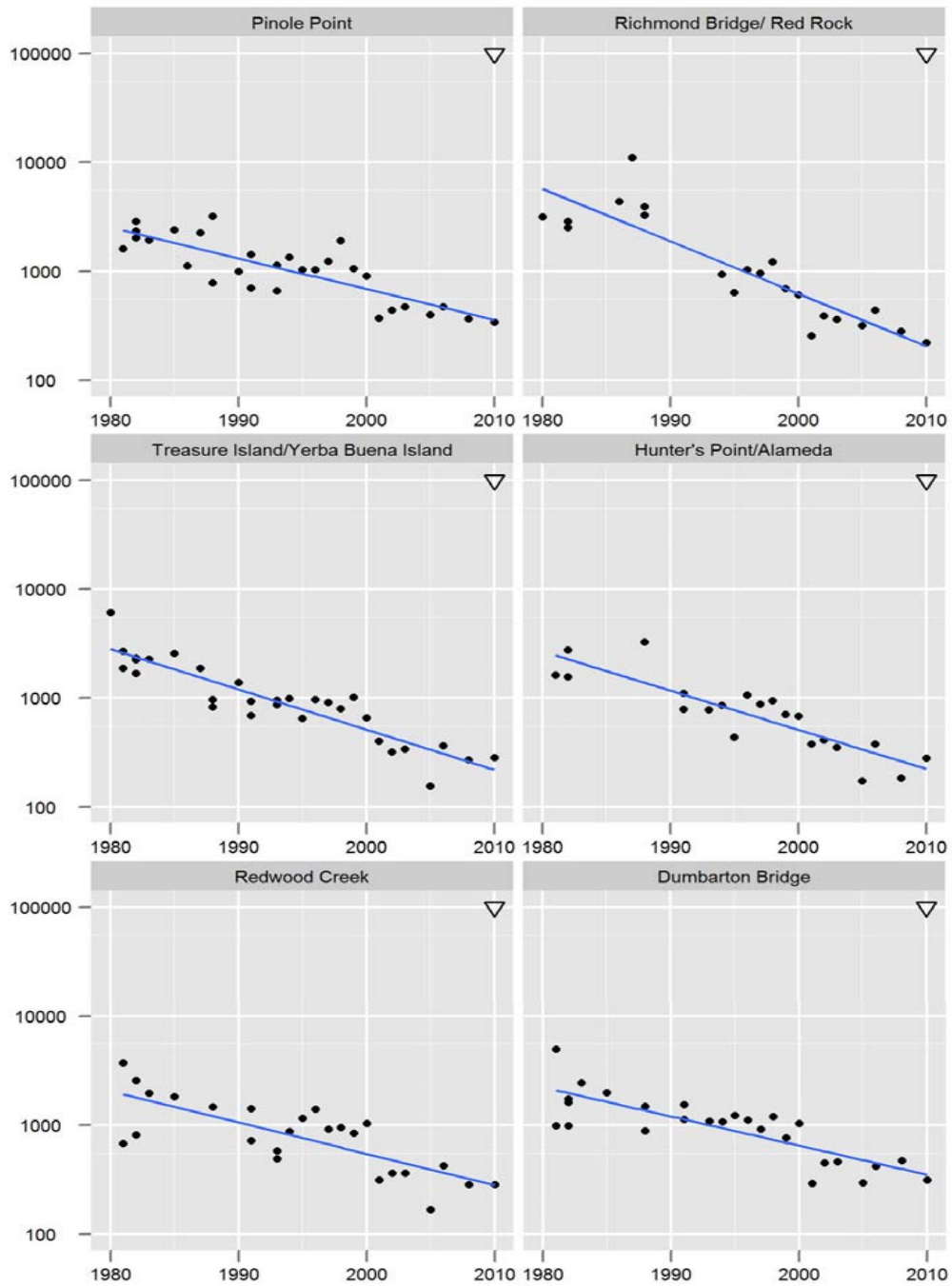
RMP DDTs



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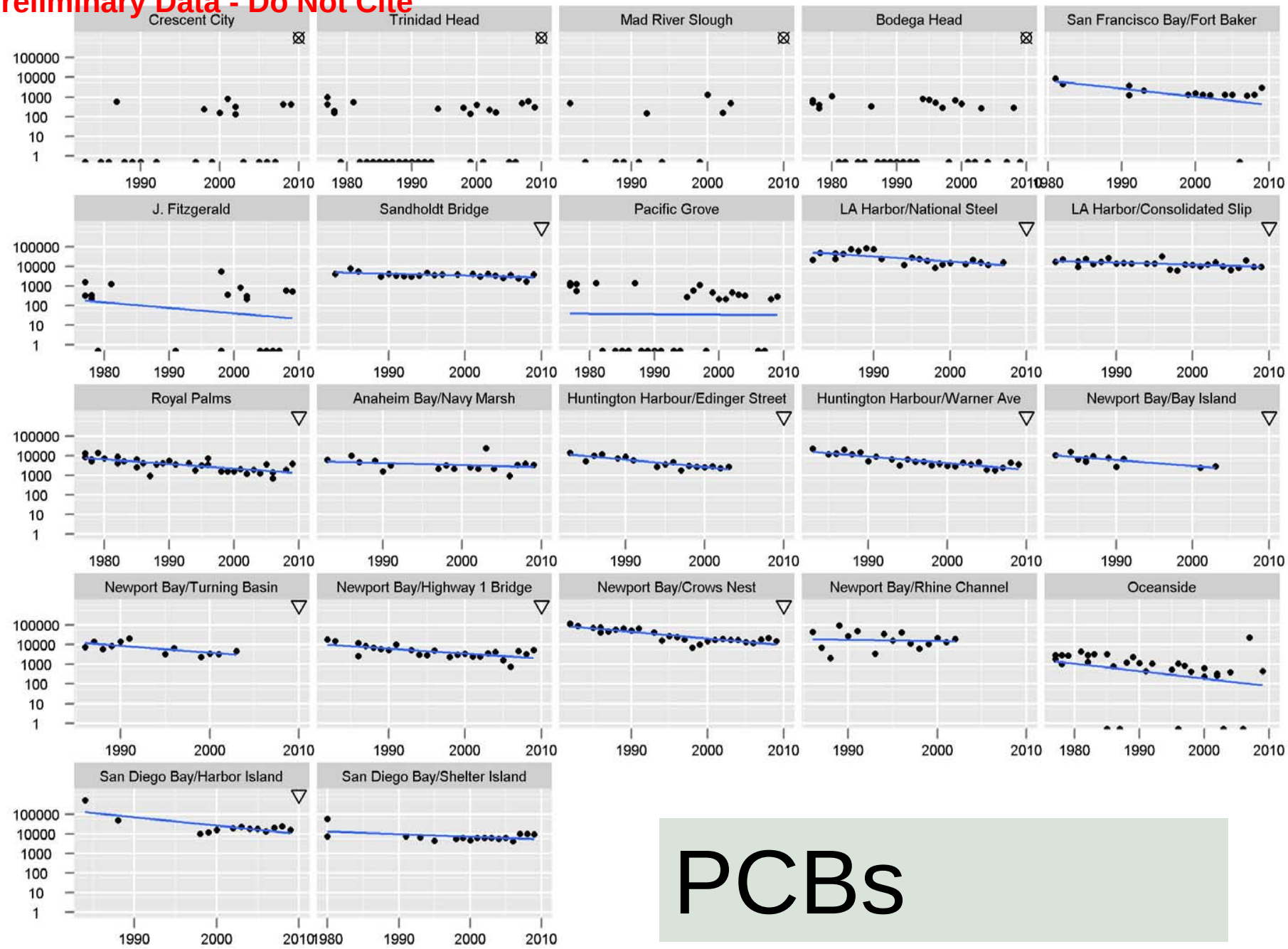

PCBs

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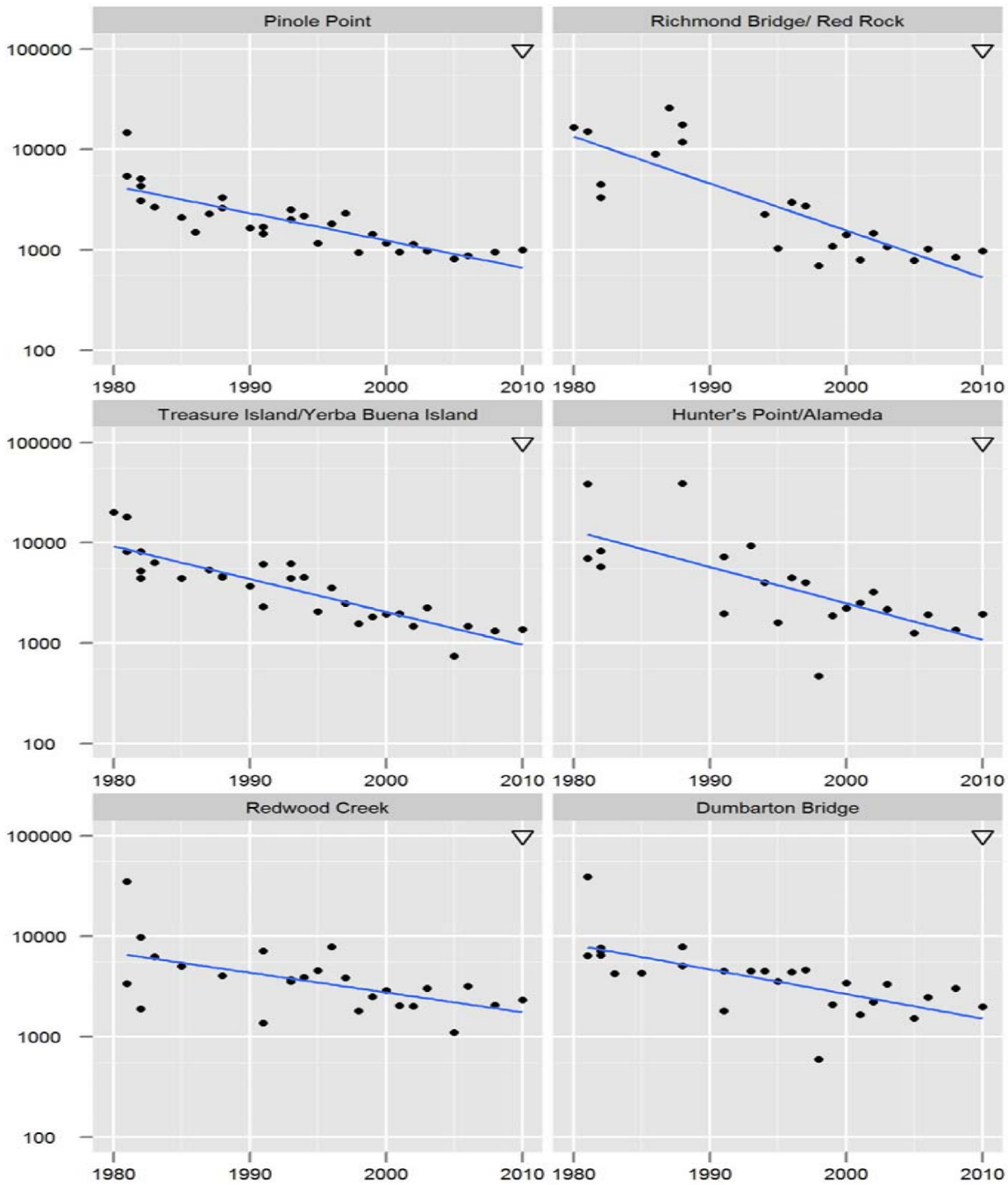
RMP PCBs



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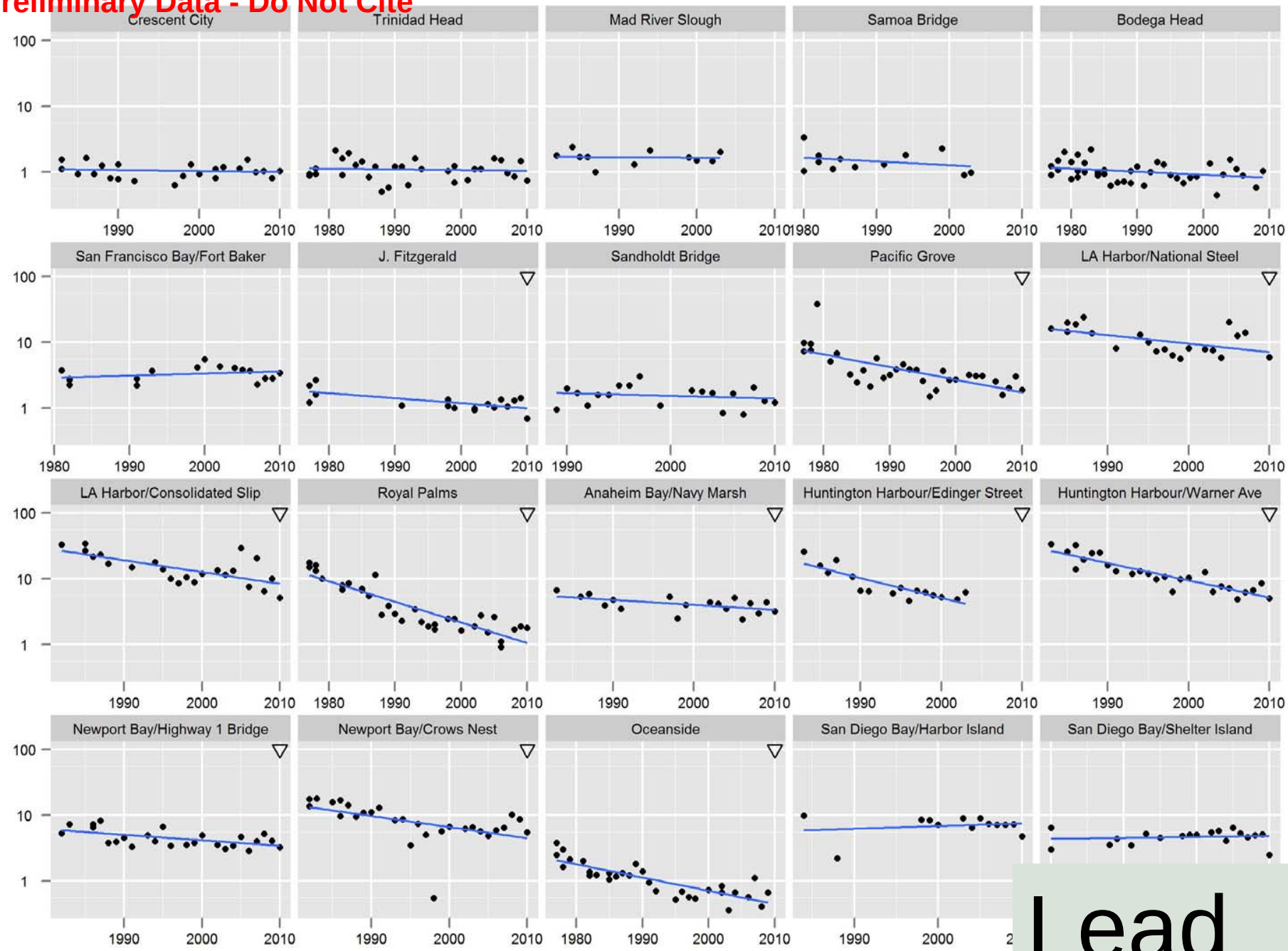

Lead

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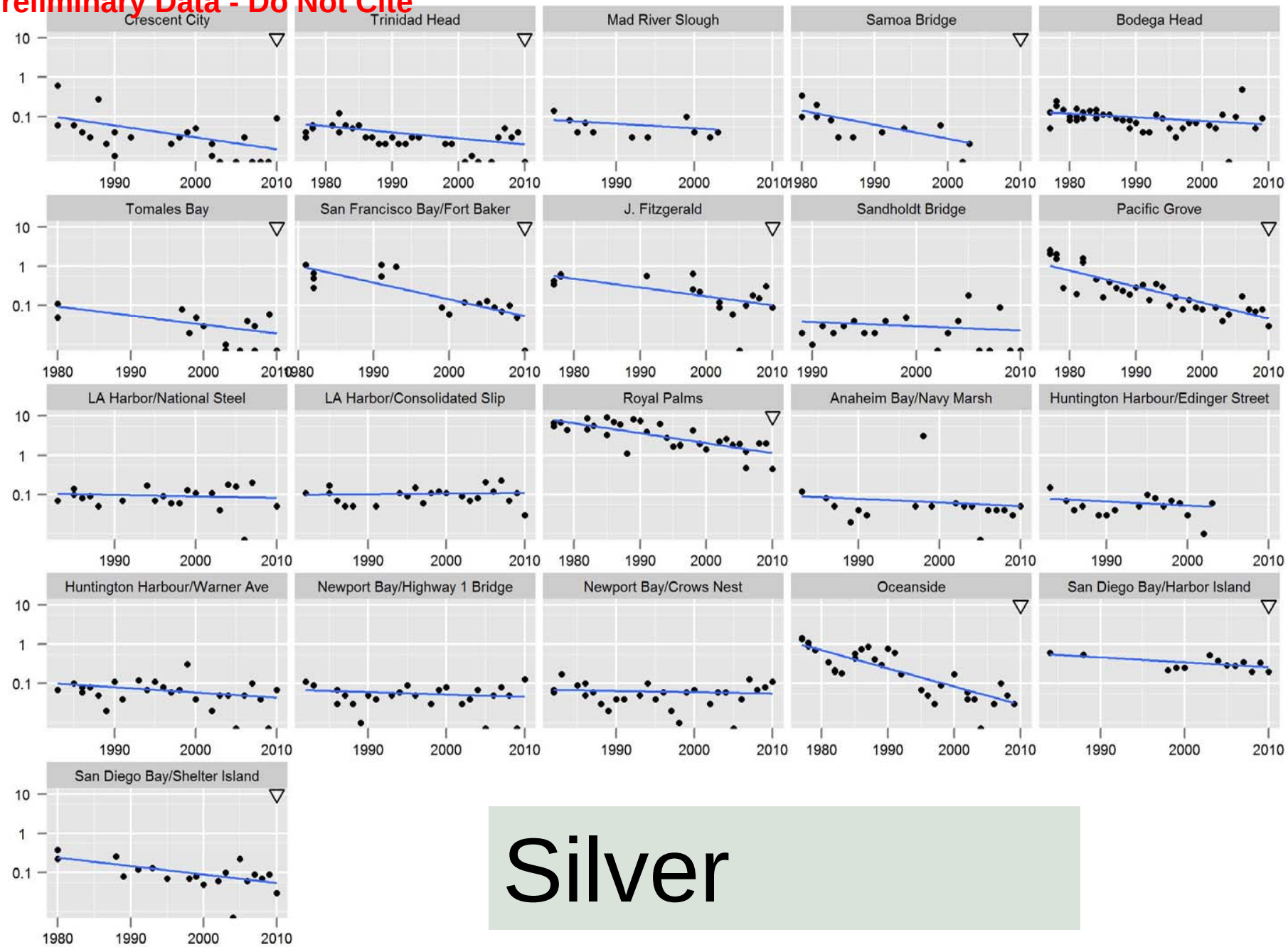

Silver

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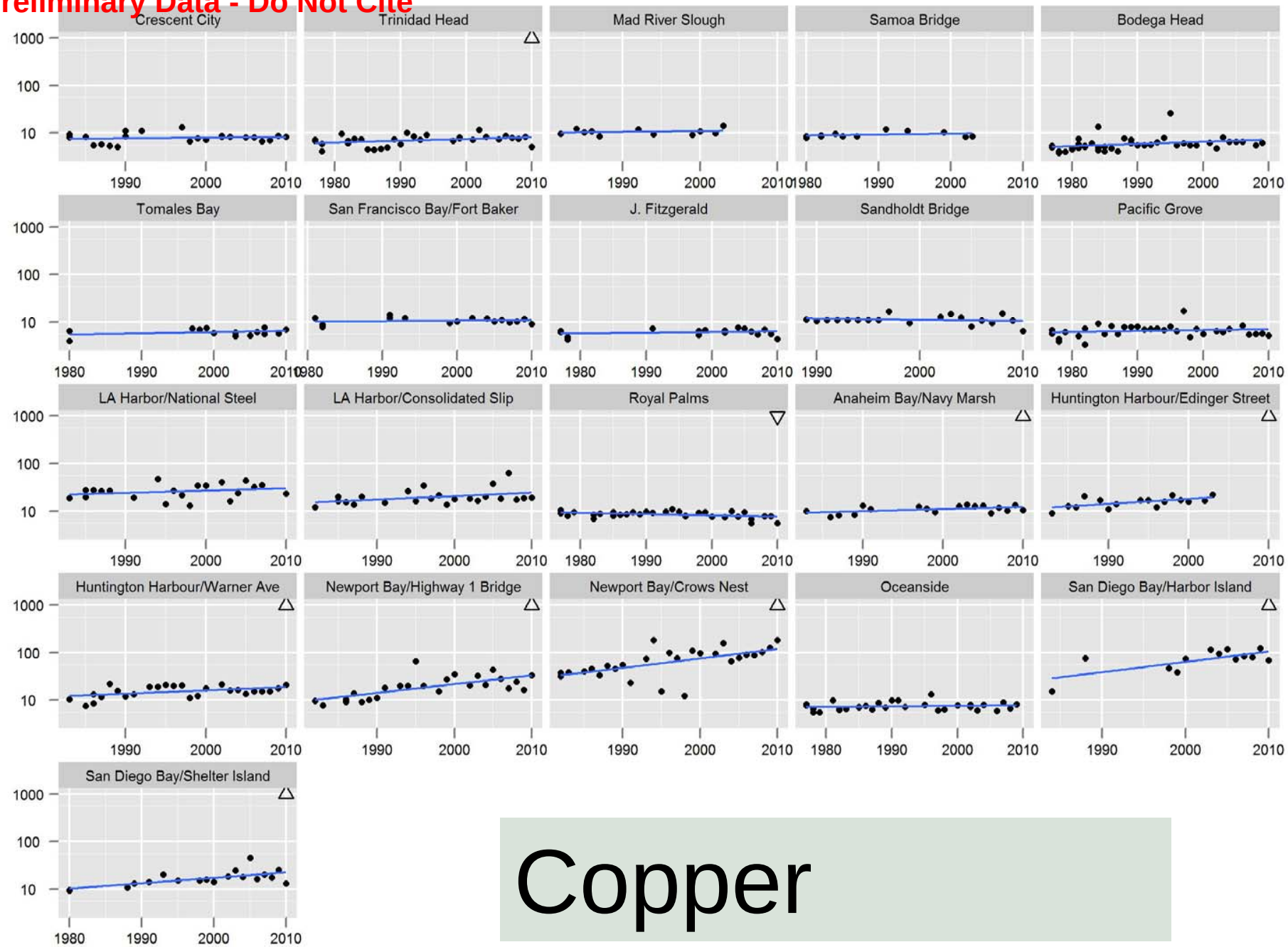

Copper

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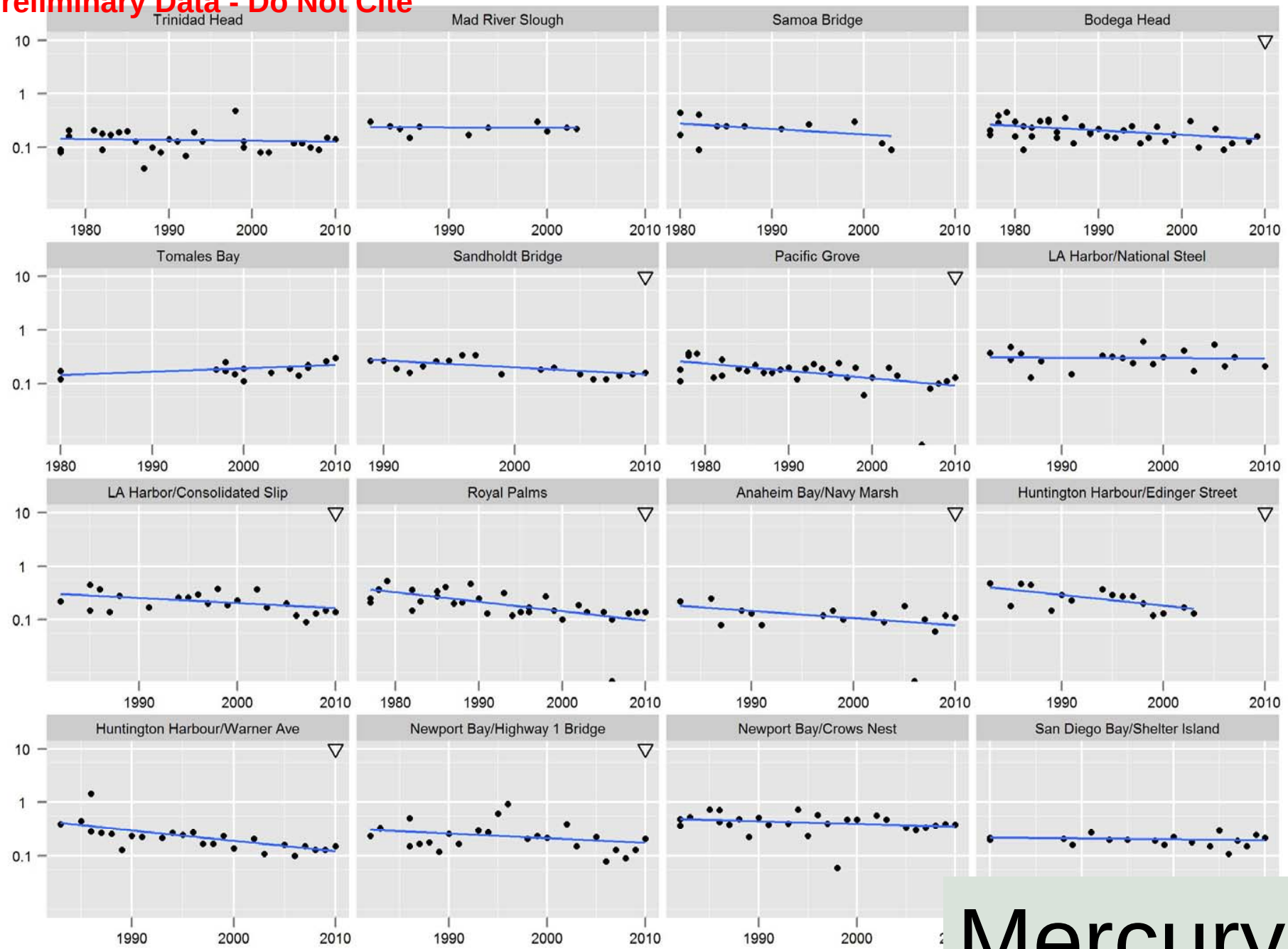

Mercury

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SMW Trend Summary

- SMW stations showing significant declines in both northern and southern California, particularly for PCBs and DDTs (50% decline ~ 10 years)
- RMP stations have similar half lives to steepest declines in southern California
- Numerous metals have declined at SMW stations (particularly, lead and silver)
- Increasing trends in copper