

Atmospheric deposition measurements for the Harris Chain of Lakes

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Atmospheric deposition measurements

- **Two components:**
 - **Wet deposition – rainfall**
 - **Dry deposition – wind blown dust, pollen, insects, etc.**
- **Measured with wet-dry deposition collectors – two located near Lake Apopka**



Moisture sensor

Sample cover

Dry Sample bucket

Wet Sample bucket

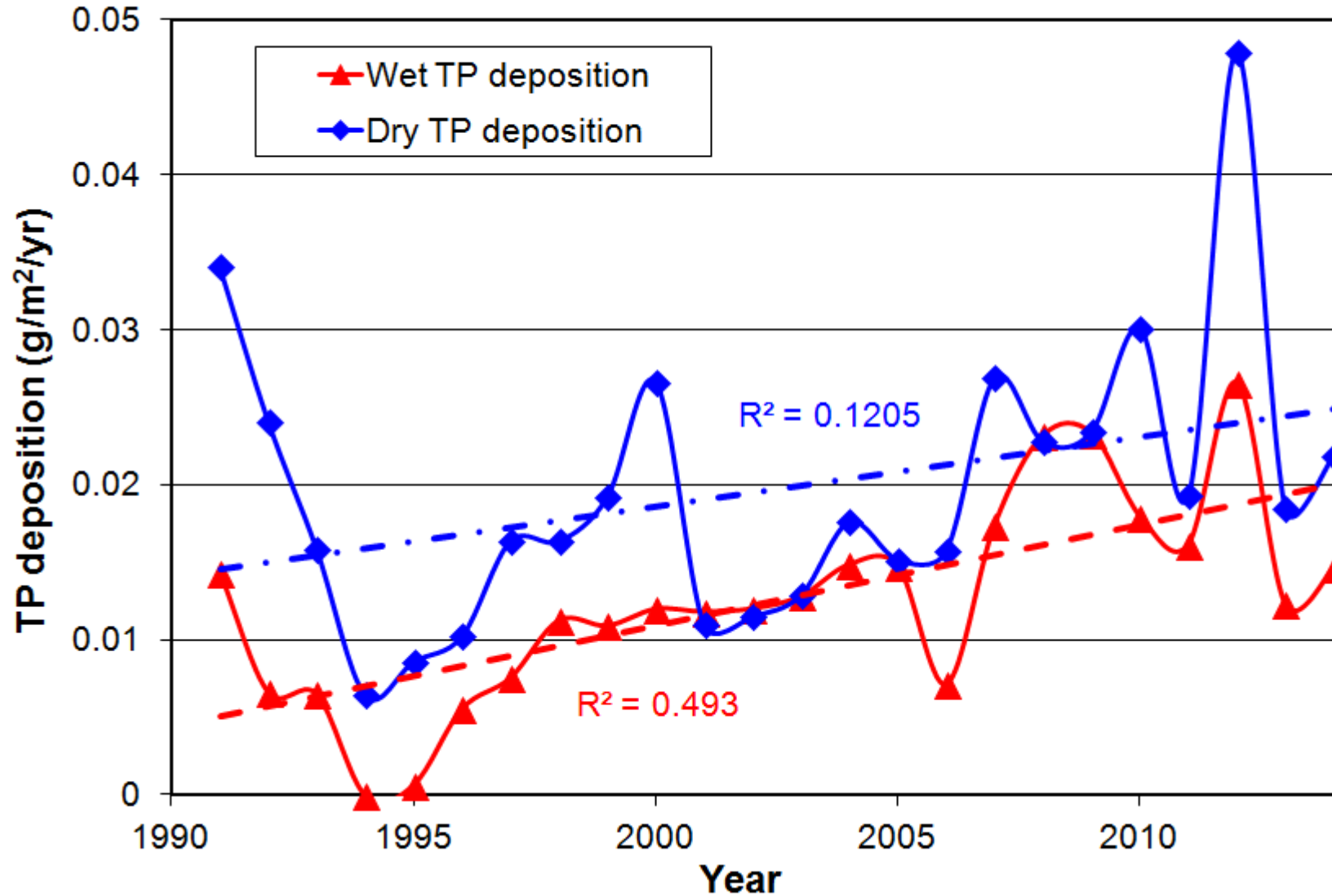
AeroChem Metrics (model 301) automatic sensing wet/dry precipitation collector

Atmospheric deposition calculations

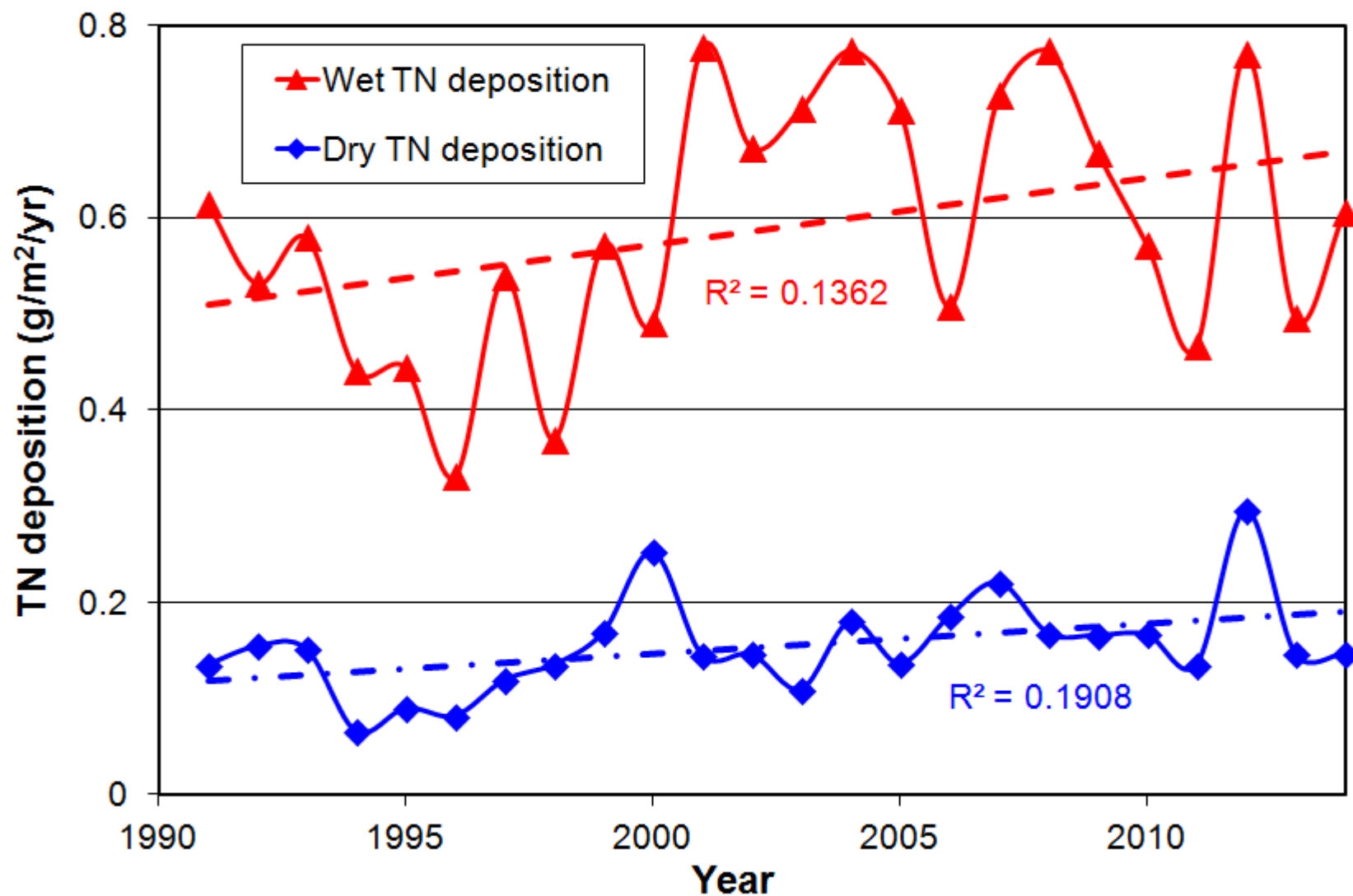
- Wet deposition – nutrient concentrations in rainfall multiplied by estimated rainfall to lakes (inches of rain per year times lake surface area)
- Dry deposition – nutrient accumulation rates multiplied by lake surface area



Annual medians of TP wet and dry deposition



Annual medians of TN wet and dry deposition



Median atmospheric deposition rates

Time period	TP (g/m ² /y)	TN (g/m ² /y)
1991-2000 (TMDL baseline)	0.0258	0.672
2010-2014	0.0365	0.738
Percent change	+42%	+9.9%

