

Ozone Project



Presented and prepared by:

Alison Bays

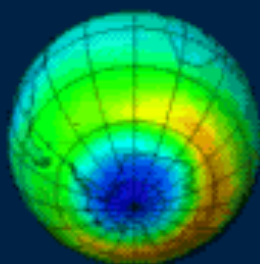
Caroline Doepke

Robin Roark

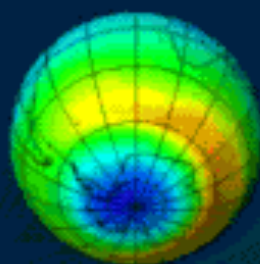
**Ozone: What is it and
why do we care about it?**



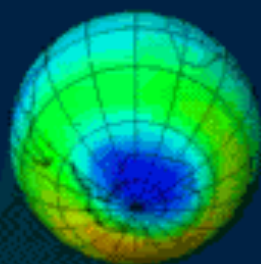




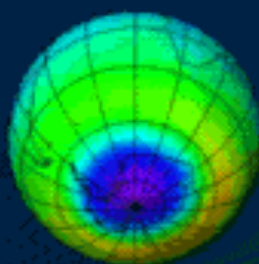
Oct 1980



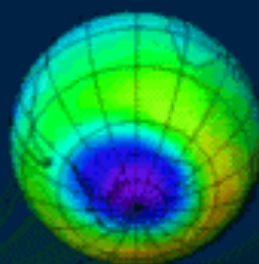
Oct 1981



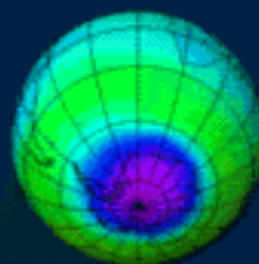
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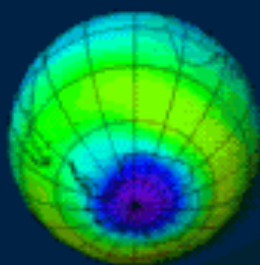
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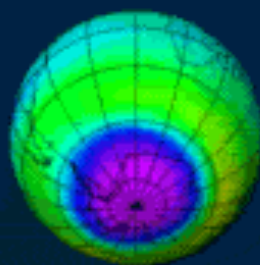
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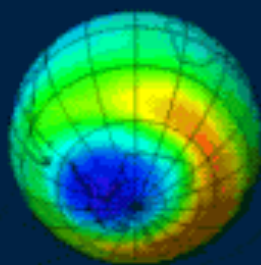
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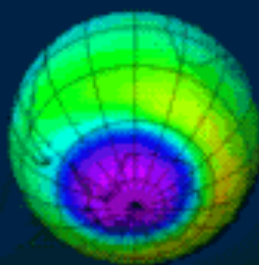
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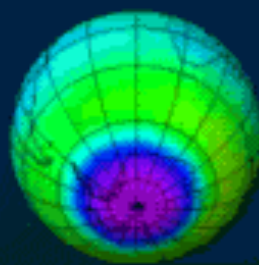
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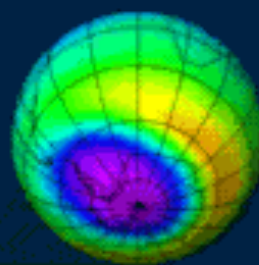
Oct 1988



Oct 1989



Oct 1990



Oct 1991



The World



-70 to -50 $y = -1.65x + 3601.3$ $R^2 = 0.697$

-10 to -30 $y = -0.277x + 821.69$ $R^2 = 0.107$

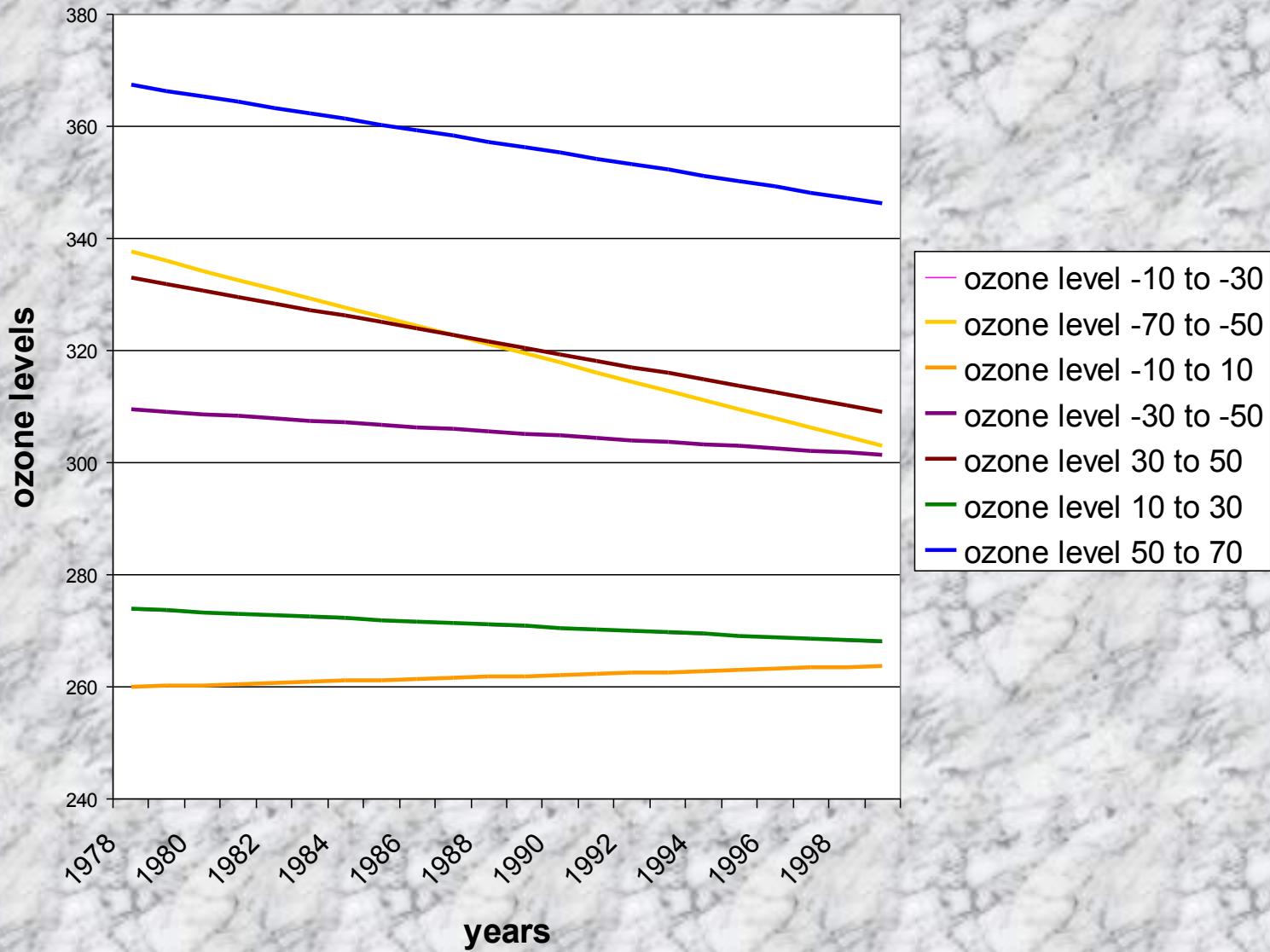
-10 to 10 $y = 0.1796x - 95.279$ $R^2 = 0.0636$

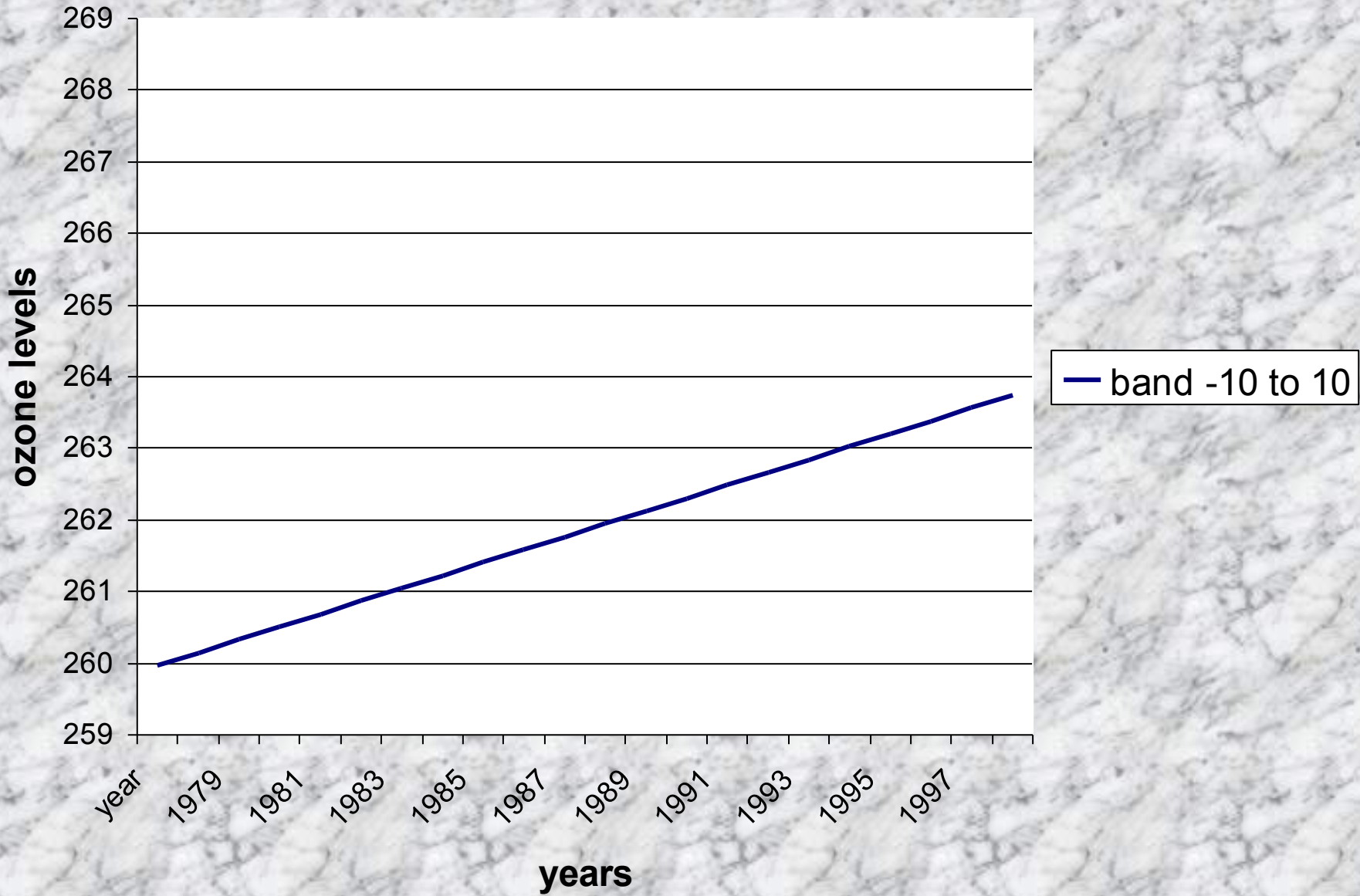
-30 to -50 $y = -0.3837x + 1068.4$ $R^2 = 0.1215$

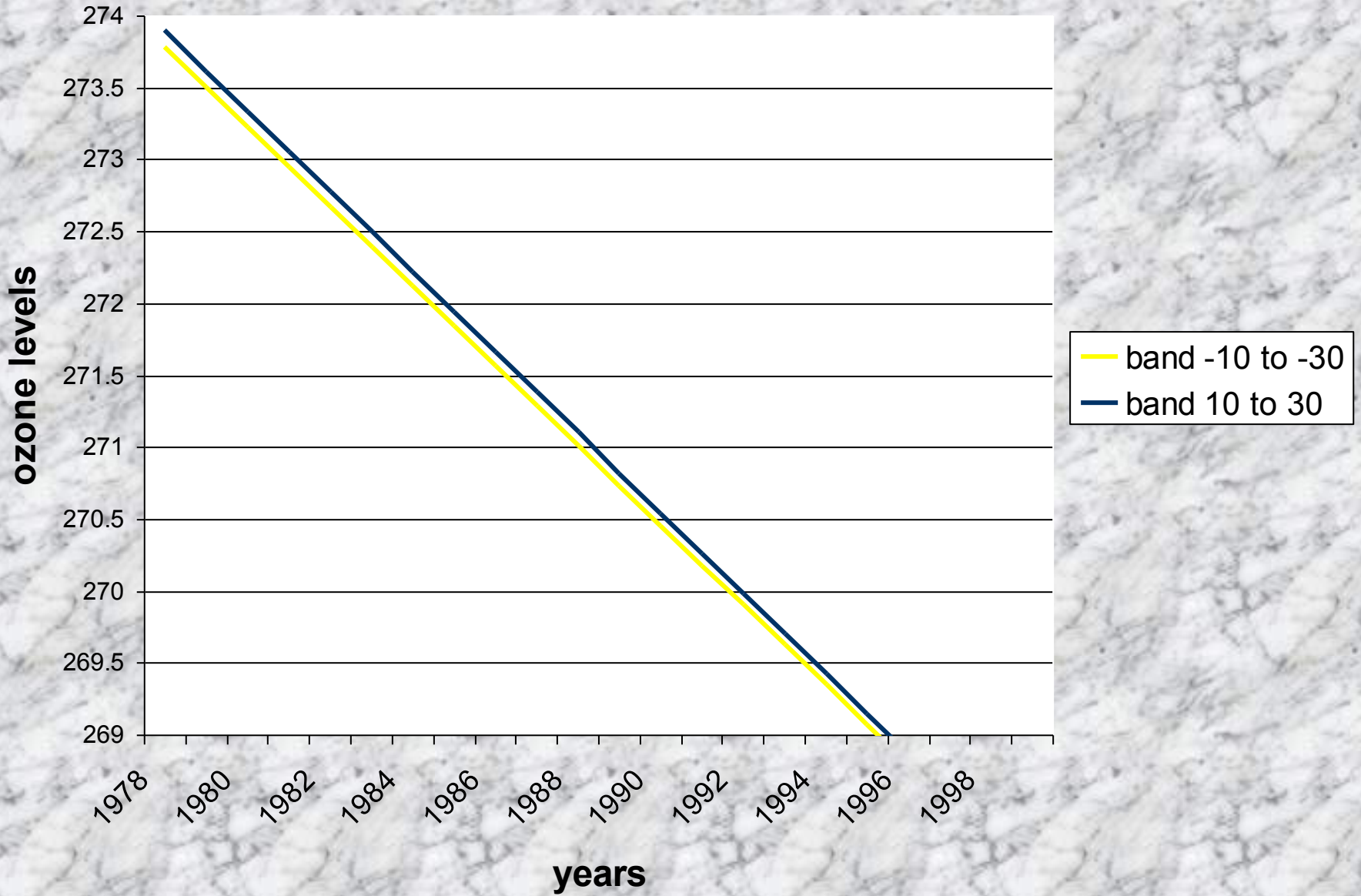
30 to 50 $y = -1.1366x + 2581.2$ $R^2 = 0.2152$

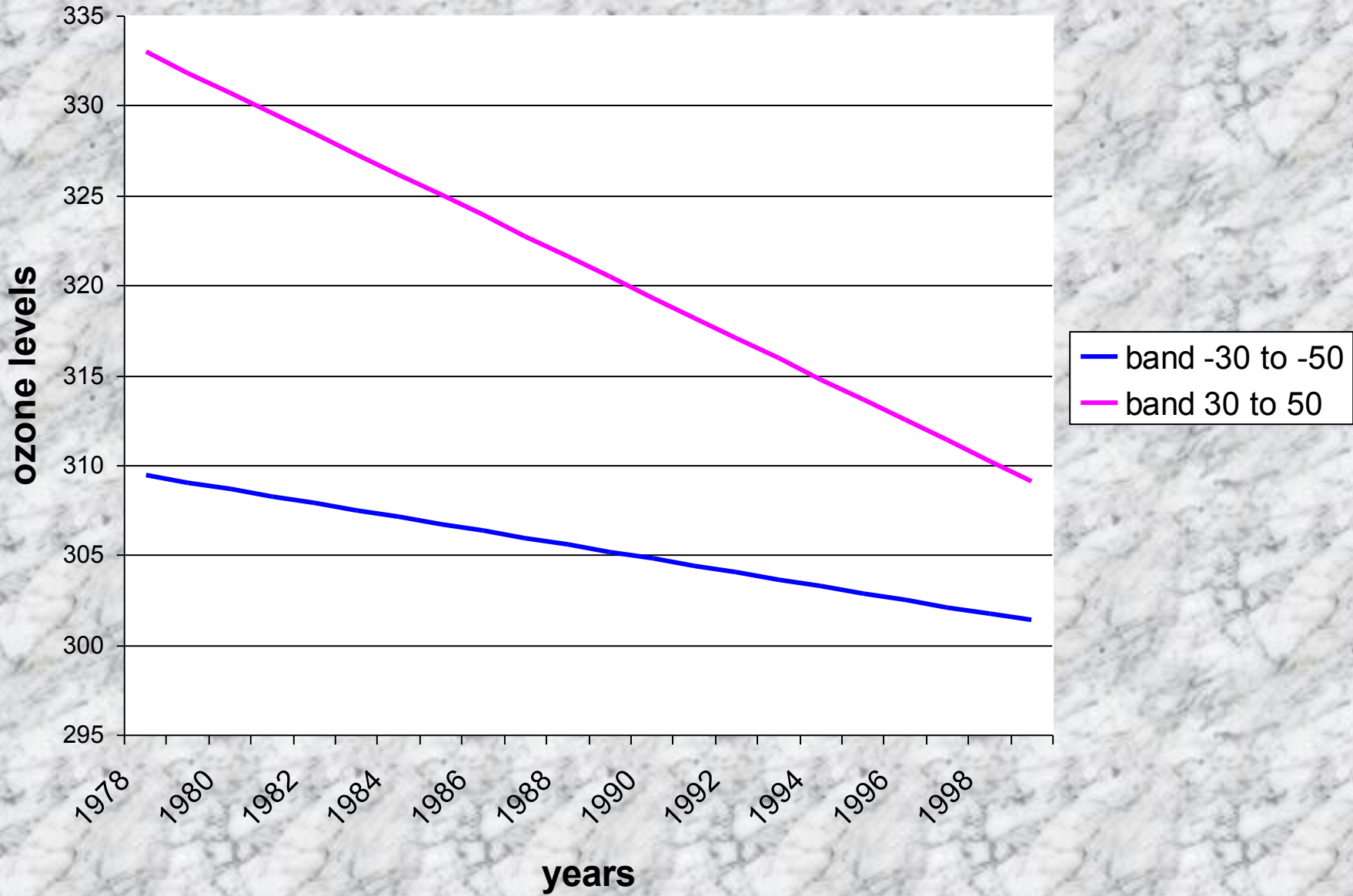
10 to 30 $y = -0.2795x + 826.75$ $R^2 = 0.1246$

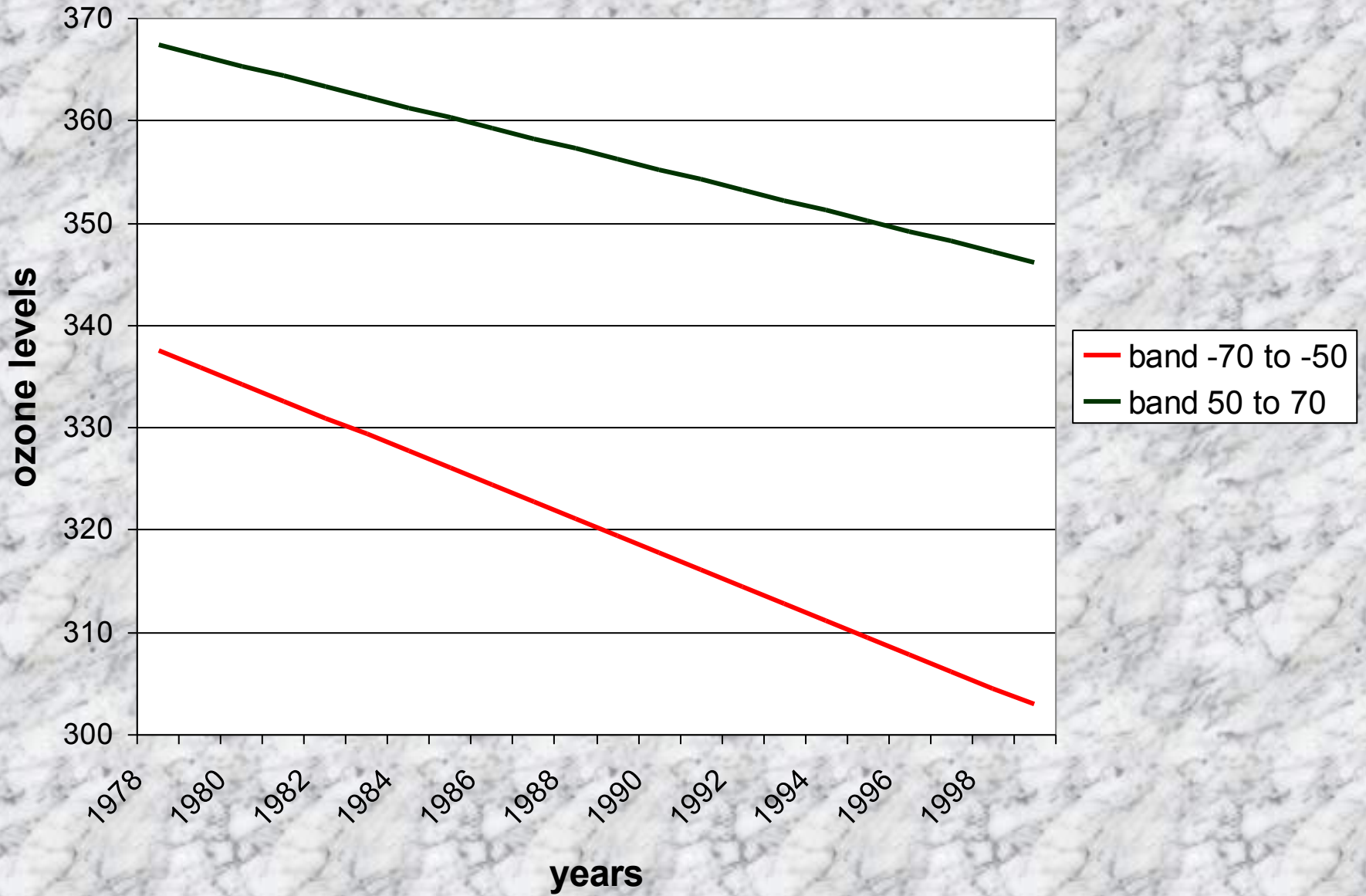
50 to 70 $y = -1.0078x + 2360.8$ $R^2 = .2187$



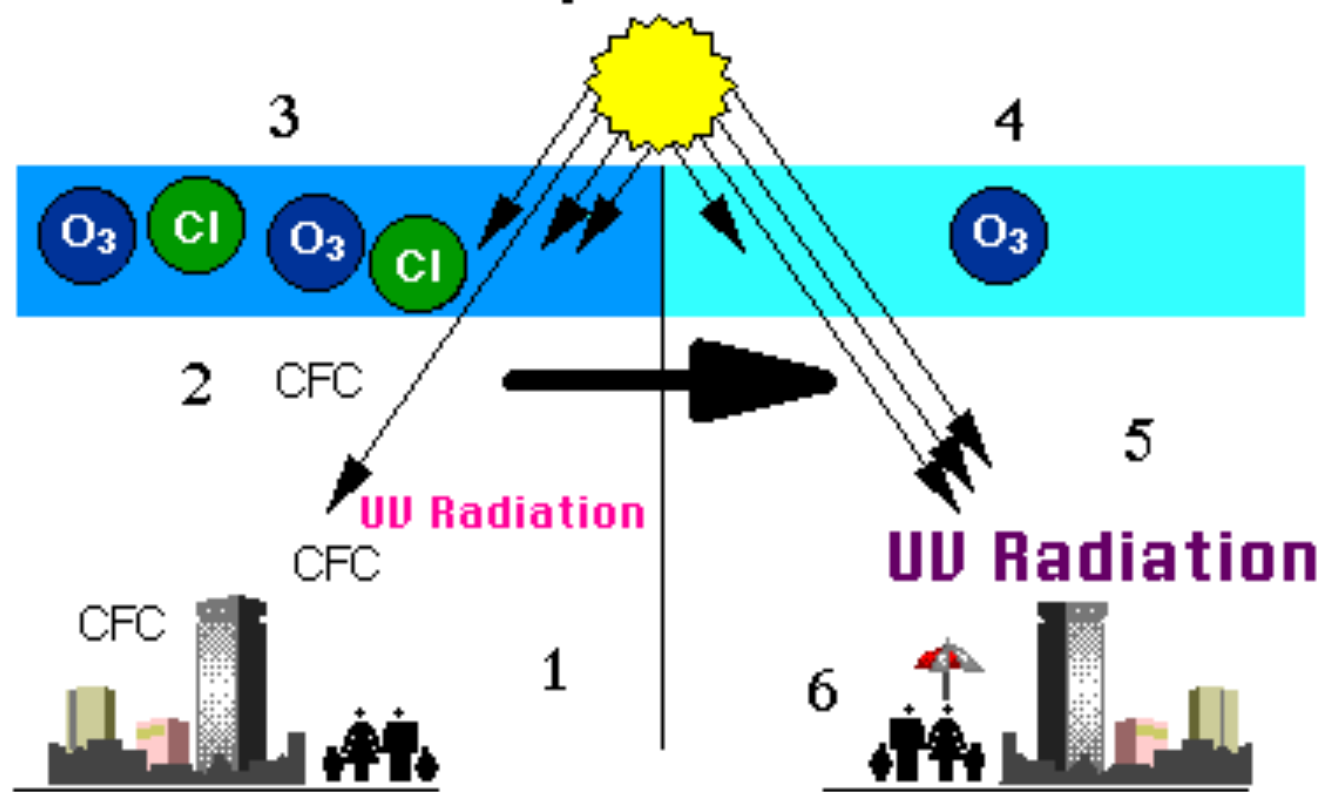






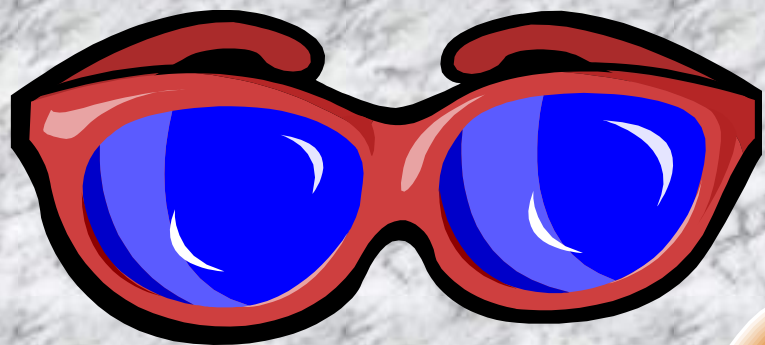


Ozone Depletion Process



- 1 - CFCs released
- 2 - CFCs rise into ozone layer
- 3 - UV releases Cl from CFCs

- 4 - Cl destroys ozone
- 5 - Depleted ozone -> more UV
- 6 - More UV -> more skin cancer



- **How safe are the CFC substitutes?**
- **Will ozone losses grow worse in the Arctic as chlorine abundance's increase?**
- **How will the ozone hole and global ozone losses affect worldwide weather and climate?**
- **How will ozone destruction affect populated countries?**

References:

Ozone layer educator's guide from the EPA

NASA Facts newsletter

**The Total Ozone Mapping Spectrometer
(TOMS) website**

THE END