

# Sharing is Caring: Challenges and Opportunities in Producing Open Data

## Data as Intellectual Property

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# Agenda

- **U.S. Federal Government Interest in Open Science Data**
- **What is data?**
- **How can data be protected?**
  - Contracts
  - Copyright
  - Trade Secret
  - Patents?
- **What if data is openly shared?**



# U.S. Federal Gov't Interest in Open Science Data

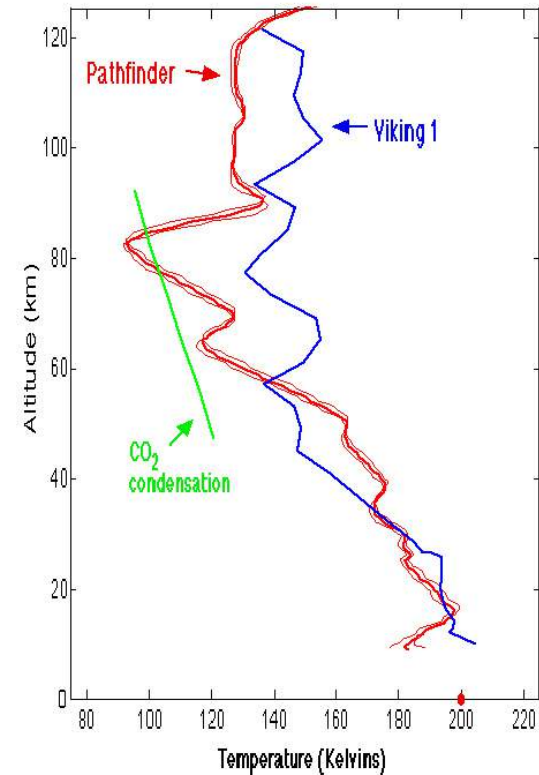
- Obama Administration believes that openness in government strengthens democracy and “promotes a more efficient, effective, and accountable government.”
- The Office of Science and Technology Policy (OSTP) requires Federal agencies to take “specific steps to achieve key milestones in transparency, participation, and collaboration.”
- As such, The Obama Administration described how they are committed to unleash vaulted government data to not only “fuel the innovation that grows the economy” but to also further government efficiency and accountability.
- In May 2013, President Obama signed an executive order that required making open and machine-readable data the new default for government information. To build on this, the Obama Administration and OSTP have set up several Open Data Initiatives to scale up open data efforts across other sectors such as Health, Education, Energy, etc.



# What is data?

- Arguably data can be (almost) anything
  - But not all data is inherently protectable Intellectual Property (“IP”)
  - Factual data is not IP
    - Recorded Temperature Data
    - Compiled names and phone numbers
    - Plain ideas
  - Requires contract law for protection

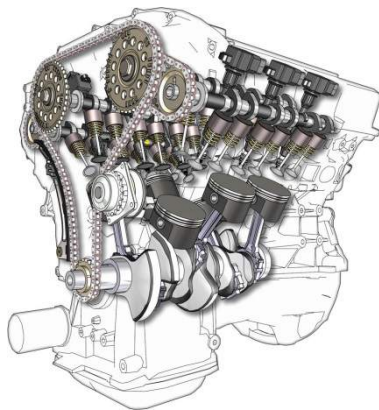
Temperature Profile from Pathfinder Atmospheric Structure Instrument





# If Data more than Just Factual Info

- Some data may have a pecuniary value, creative component, or may lead to inventions
  - Patients with a WBC count of X and condition Y responded to Drug Z.
    - May be of value in Pharmaceutical or Medical Insurance industries



- Engine torque vs. performance data
- May be of value in the Automotive industry



# Possible Ways to Protect Data



- **Copyright**
  - U.S. Copyright Act, 17 U.S.C. §§ 101-810
  - Gives limited monopoly to copy, modify, distribute, perform publicly, and display publicly original works of authorship that are fixed in a tangible medium and have a minimal degree of creativity.
- **Trade Secret**
  - Uniform Trade Secrets Act
  - Protects information (including a formula, pattern, compilation, program, device, method, technique, or process) that derives economic value from not being known to others who can obtain economic value from it and reasonable efforts are made to keep it secret.
- **Patents**
  - 35 U.S.C. §§ 1 et seq.
  - Right to exclude others from making, using, selling an invention for a limited time. Covers compositions of matter, processes, articles of manufacture



# Copyright ©

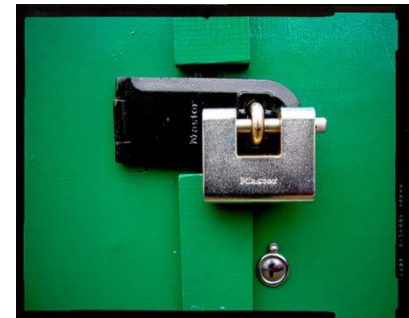
- If data is arranged in a way that is original and minimally creative the way it is arranged, organized, or displayed can be protected by copyright law.
- Data vs. Databases
  - Data – determine whether copyrightable based on what it is
  - Databases – may have a built in layer of copyright protection. Decisions were made as to what data to include, how the data is organized, how data elements relate to one another, etc.





# Trade Secret

- Rare to use this type of protection in a public land grant university
- Commonly issues arise when an employee leaves a company and then uses the former employer's information in a new position.
  - Supplier data
  - Customer lists







# Patents

- Generally data is not patentable
- However, data has the potential to open the door to a patentable invention. Need to ask:
  - Is there a method, or process for identifying or making something that can be gleaned from the data?
  - Has the gleaning been done prior to publishing?
  - What if the data is published and someone else gets a patent on an invention that sprang from my data?



# Contracts

- If there is a marked advantage to using your data consider:
  - Non-Disclosure Agreement
  - Data Agreement to limit use and protect confidentiality
- Open Sharing Licenses
  - “Take it or leave it” terms



# Open Sharing License Agreements

- READ AND UNDERSTAND THE TERMS
- 6 Types of Licenses
  1. Attribution CC BY
    - Lets others distribute, remix, tweak, and build upon your work, even for commercial purposes, as long as you are credited for the original creation
    - Most accommodating
  2. Attribution-ShareAlike CC BY-SA
    - Lets others remix, tweak, and build upon your work, even for commercial purposes, as long as you are credited for the original creation AND license their new creations under identical terms.
    - All new works based on yours will carry the same license, and any derivatives will also allow commercial use.



# Open Sharing License Agreements

## 3. Attribution-NoDerivs CC BY-ND

- Allows for redistribution, commercial and non-commercial as long as it is passed along unchanged and in whole, with credit to you

## 4. Attribution-NonCommercial CC BY-NC

- Lets other remix, tweak, and build upon your work non-commercially
- New works must acknowledge you, but they do not have to license their derivative works on the same terms

## 5. Attribution-NonCommercial-ShareAlike CC BY-NC-SA

- Lets other remix, tweak, and build upon your work non-commercially
- New works must acknowledge you, but they have to license their new creations under identical terms



# Open Sharing License Agreements

## 6. Attribution-NonCommercial-NoDerivs CC BY-NC-ND

- Only allows other to download your works and share them with others as long as you are credited
- They cannot be changed in any way and cannot be used commercially.
- Most restrictive.



Thank you!

## Contact Information

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