

Descriptive Data

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Objectives

- Prototype a ***new data format*** for TNF / ***Release 3.0*** of Rob Barlow's flame data
 - Develop Schema
 - Write Java Program
 - Convert Flames C, D, E, and F data into new format (Release 3.0)

Need

- Semantic Web
 - Data with meaning
- Facilitate **Collaboration**
 - Raw data, analyses, and models
 - Provide useful data views
- Future Use/Expansion
 - Allow others to use/modify code

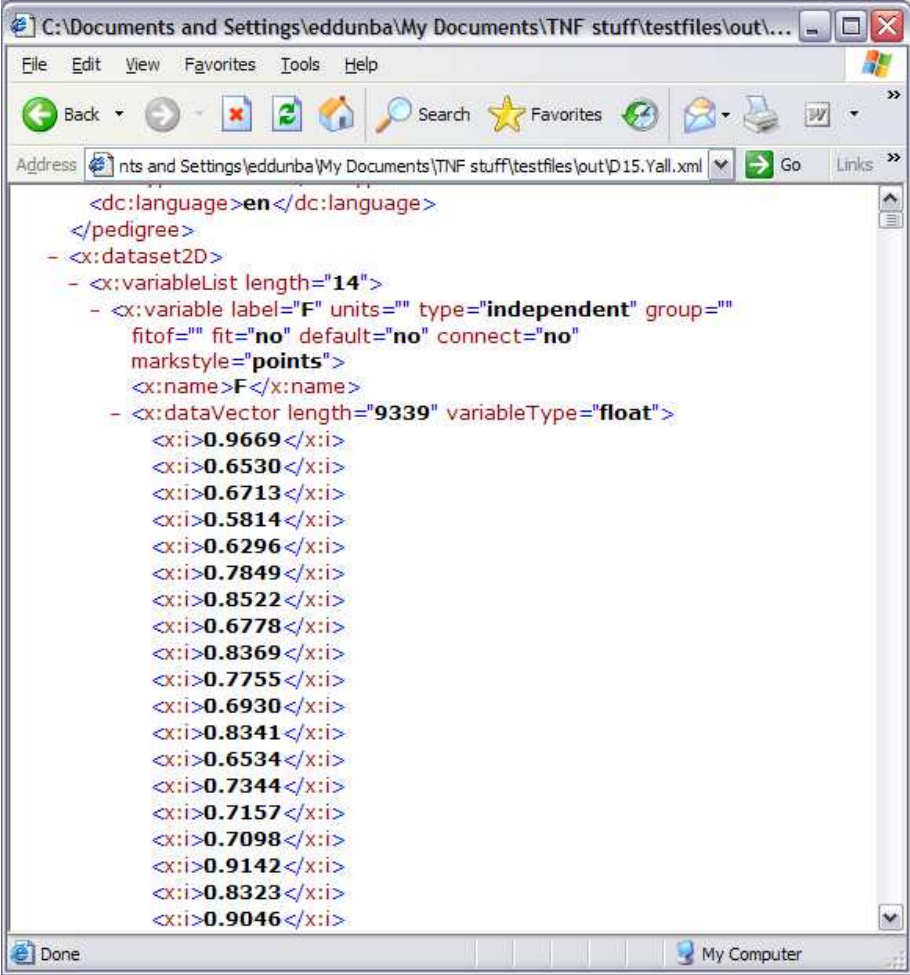


What I Did

- Developed schema for text and XML
- Wrote Java code
 - Text to XML
- Wrote XSLTs
 - Tables, graphs, text
- Converted Data



Schema



The screenshot shows a web browser window with the address bar displaying a file path: C:\Documents and Settings\eddunba\My Documents\TNF stuff\testfiles\out\D15.Yall.xml. The browser's address bar also shows the text "nts and Settings\eddunba\My Documents\TNF stuff\testfiles\out\D15.Yall.xml". The main content area displays an XML document with the following structure:

```
<dc:language>en</dc:language>
</pedigree>
- <x:dataset2D>
  - <x:variableList length="14">
    - <x:variable label="F" units="" type="independent" group=""
      fitof="" fit="no" default="no" connect="no"
      markstyle="points">
      <x:name>F</x:name>
    - <x:dataVector length="9339" variableType="float">
      <x:i>0.9669</x:i>
      <x:i>0.6530</x:i>
      <x:i>0.6713</x:i>
      <x:i>0.5814</x:i>
      <x:i>0.6296</x:i>
      <x:i>0.7849</x:i>
      <x:i>0.8522</x:i>
      <x:i>0.6778</x:i>
      <x:i>0.8369</x:i>
      <x:i>0.7755</x:i>
      <x:i>0.6930</x:i>
      <x:i>0.8341</x:i>
      <x:i>0.6534</x:i>
      <x:i>0.7344</x:i>
      <x:i>0.7157</x:i>
      <x:i>0.7098</x:i>
      <x:i>0.9142</x:i>
      <x:i>0.8323</x:i>
      <x:i>0.9046</x:i>
```

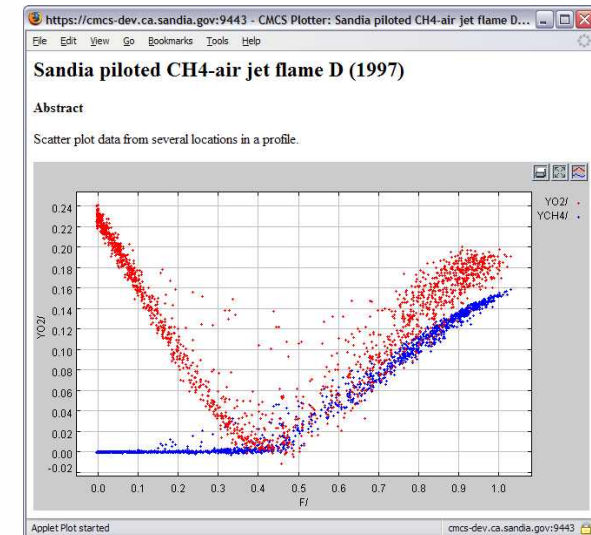
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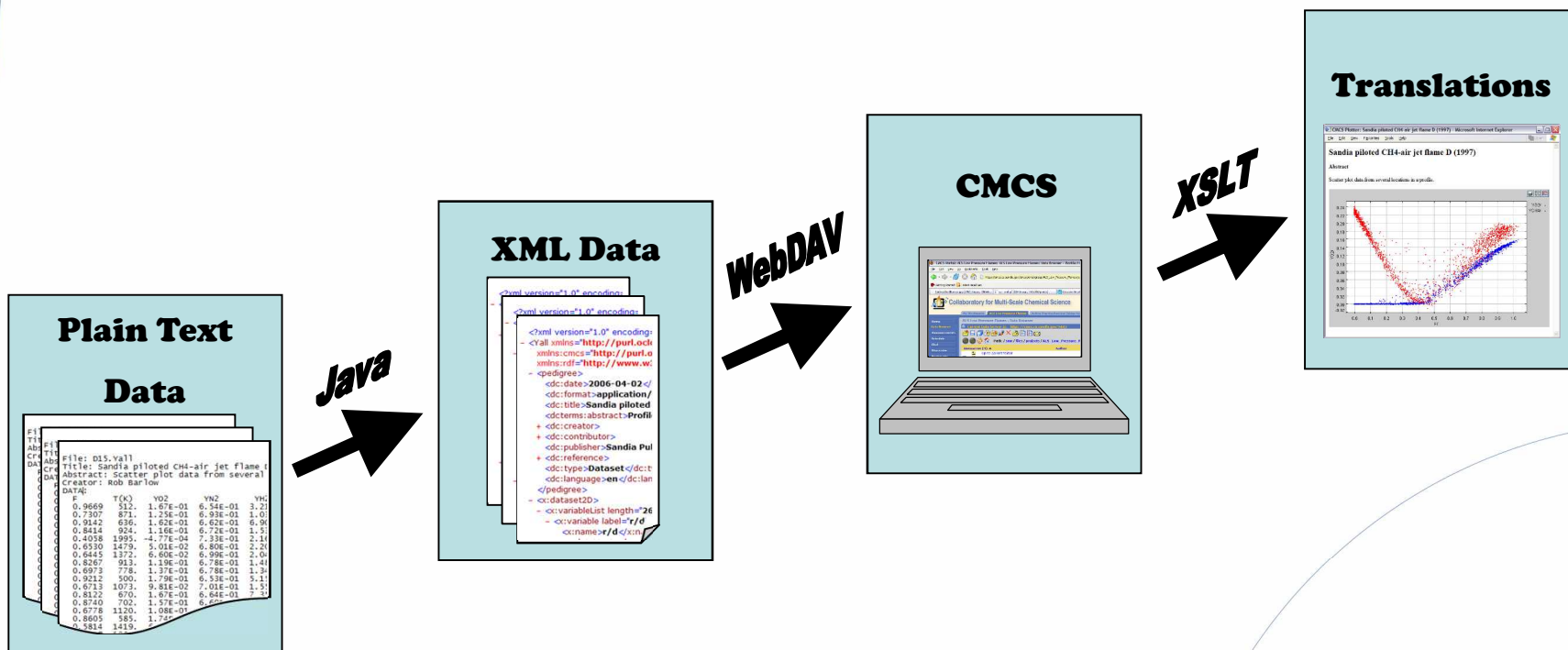


Results

- **Release 3.0** of Barlow's Data
 - Pretty Graphs
- Genericability
 - Not a word, but still important
 - Allows other TNF researchers to use system



Process



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Conclusions

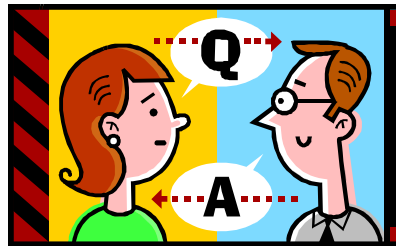
- Increased Computer Comprehension
- Increased Human Comprehension
- Current Problems
 - Not generic enough?
- Future Plans

Acknowledgements

- Mentors
 - Larry Rahn and Rob Barlow
- Collaborators
 - Michael Chen and Scott Crawford (intern)
- Past Intern
 - Eric Hall



Questions?



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