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**Re-locating the FEAT Data
Repository to the University of
Denver Library**

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Re-locating the FEAT Data Repository to the University of Denver Library

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The University of Denver has informally operated an internet data repository since the late nineties. The site (www.feat.biochem.du.edu) has hosted all of the emission databases collected from the various projects and research that Don Stedman's group has conducted since 1987. In addition to the databases the site has also contains all of the reports and journal publications that the group published as a direct result of the emission measurements collected. The site is generally divided according to the types of vehicle that were measured, heavy-duty, light-duty and non-road vehicles. In addition the web site contains sections for links to other relevant work, a publications listing, non-journal reports, data and publications from the Smart Sign project, a listing of present and past sponsors of the research and a simple tutorial explaining how FEAT works.

With the passing of time the collection has grown and other researchers have used the data sets in their own research. FEAT emissions data has been featured in a number of important publications that have emphasized the importance of maintaining the repository. The current web site is run off a server that is in Gary's office and maintained by him. With retirement happening in the next year we are moving the repository to a University of Denver Library server where it will be hosted and maintained for the foreseeable future.

The University of Denver Library maintains a number of different resources that support the research activities at the University. One is called the Digital Commons which was envisioned for just this type of project and is going to be the new home for the FEAT Data Repository which can be found at the following location <https://digitalcommons.du.edu/feat/>. Figure 1 shows the screen that greets users when you follow the link to the site. The current library contact and maintainer for the site is Ms. Jenelys Cox (jennifer.cox@du.edu).

As the site's purpose is to store and allow retrieval of the various emission databases that the University of Denver has collected the layout of the site is very simple. There are four collections; 1) Publications, 2) Heavy-duty Vehicles, 3) Light-duty Vehicles and 4) Non-Road Vehicles. Figure 2 shows the bottom half of the top level screen for the repository that lists all of the links to the major sections or more directly to specific data sets within each of the categories. The journal articles, reports and presentations are listed by publication year. The heavy-duty data sets are arranged according to the method used to collect them either the FEAT optical remote sensing system or the OHMS integrated plume capture method. For the light-duty vehicles the measurements are arranged using the location of the measurements. Within the United States the sites are aggregated by State with each State having an individual link to go directly to that collection.

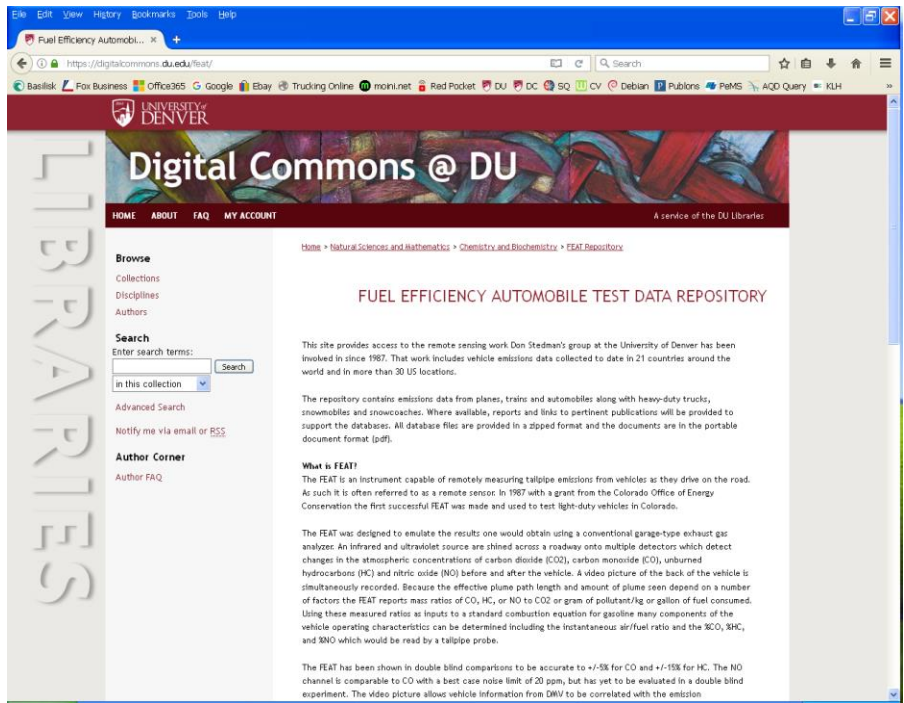


Figure 1. A screen capture of the top level page for the repository.

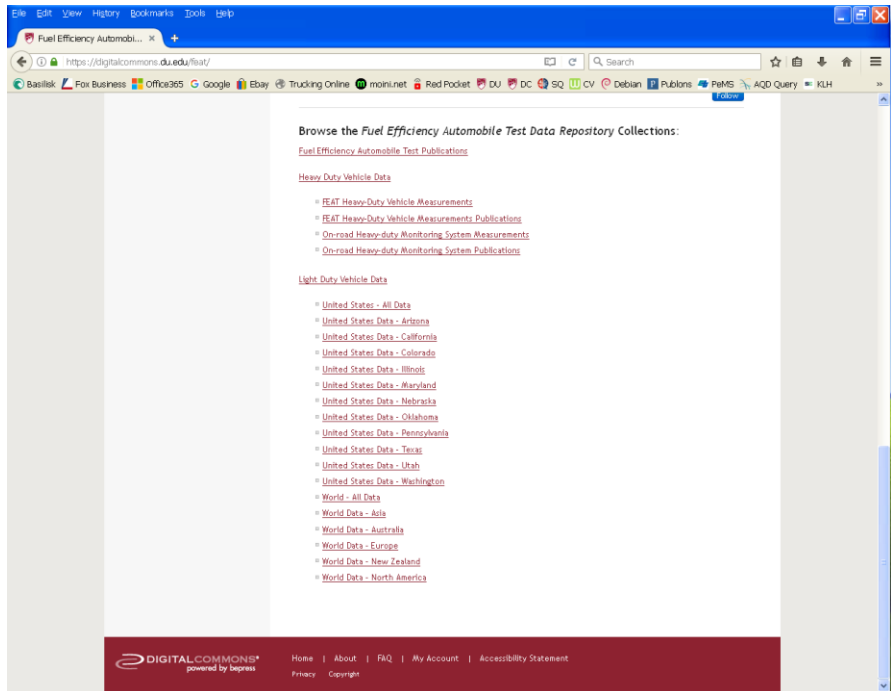


Figure 2. A screen capture of the bottom portion of the top level page for the repository. This shows two of the three sections listed, Heavy-duty and Light-duty vehicles.

Outside of the United States the data is arranged by the continent that it was collected on. Non-road vehicle emission measurements are listed together.

Each data collection includes a map with the best location information that was available for identifying the sites used to collect the emission measurements. Where available we also have included a photograph of the location and the remote sensing setup. Figure 3 shows a sample of this layout for the Illinois sites with the map showing the locations on the left and each data collection site listed on the right. For Illinois we have data from three locations in and around the Chicago area, 1) Arlington Heights / Algonquin Rd (the main E-23 site), 2) Central & I-290 and 3) Naperville IL. Following the link for a particular site reveals the available data sets. If there are more than one data set a link is included to allow the user to download all of that sites data sets in a single file or individually. Figure 4 shows a sample of this layout for the Arlington Heights / Algonquin Rd. site.

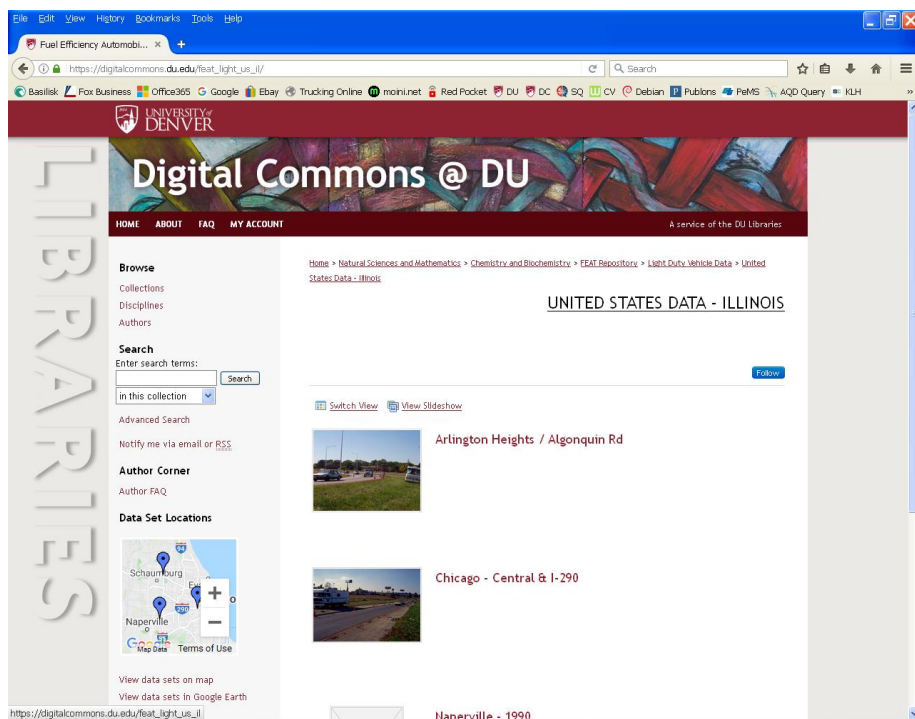


Figure 3. A screen capture showing the Illinois data sets arranged by measurement location.

We have now stopped adding any new data to the original FEAT web site and are adding new files to the Library web site. The current FEAT web site now has a redirection message on the front page (See Figure 5) and we expect to terminate its use by the end of 2021. The Library site is live now and can be accessed by anyone. When we turn off the FEAT web site we believe the University will provide an automatic redirect to the new site.

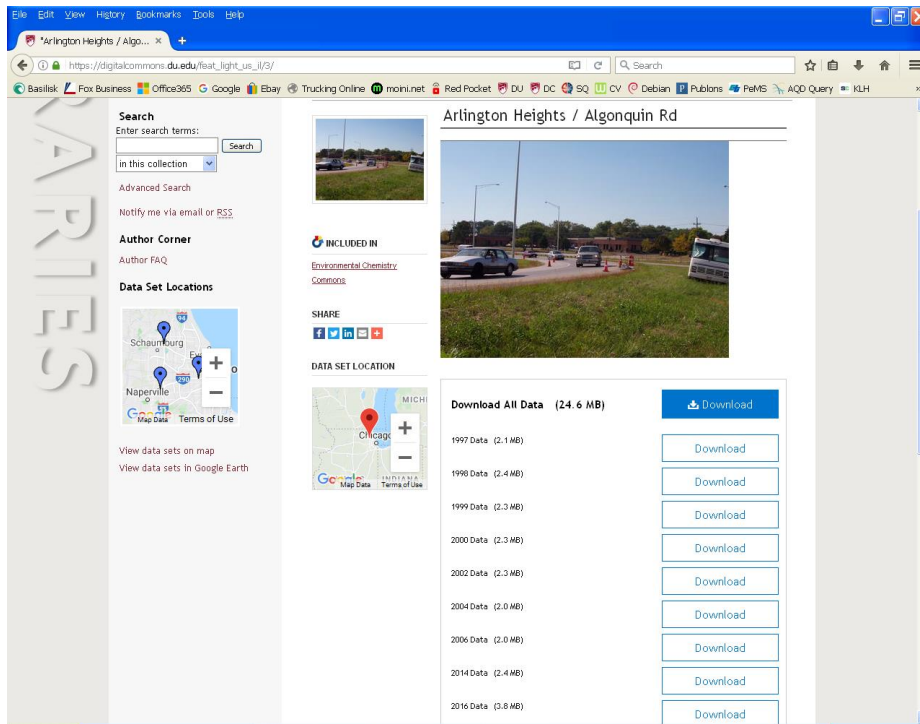


Figure 4. A screen capture showing the listing of all the databases that are available for the Arlington Heights / Algonquin Rd. site in Chicago. At the top of the list is a link that allows all of the files to be downloaded in a single file.



Figure 5. The current front page of the FEAT website with the redirection information.