

# DAC Example

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Stat 133 with Gaston Sanchez

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# Men's Long Jump World Record

Wikipedia

[https://en.wikipedia.org/wiki/Men%27s\\_long\\_jump\\_world\\_record\\_progression](https://en.wikipedia.org/wiki/Men%27s_long_jump_world_record_progression)

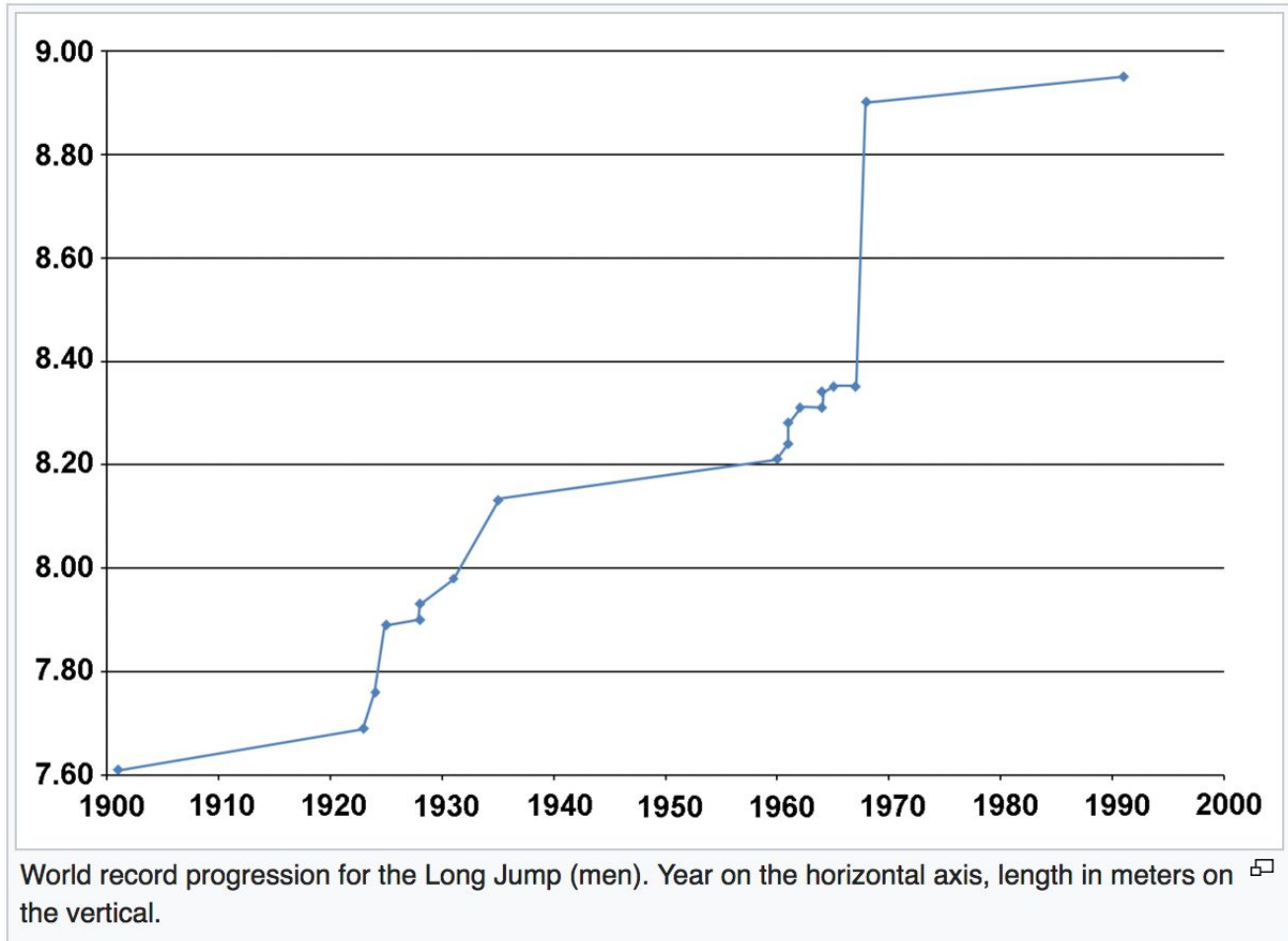


Mike Powell, 1991

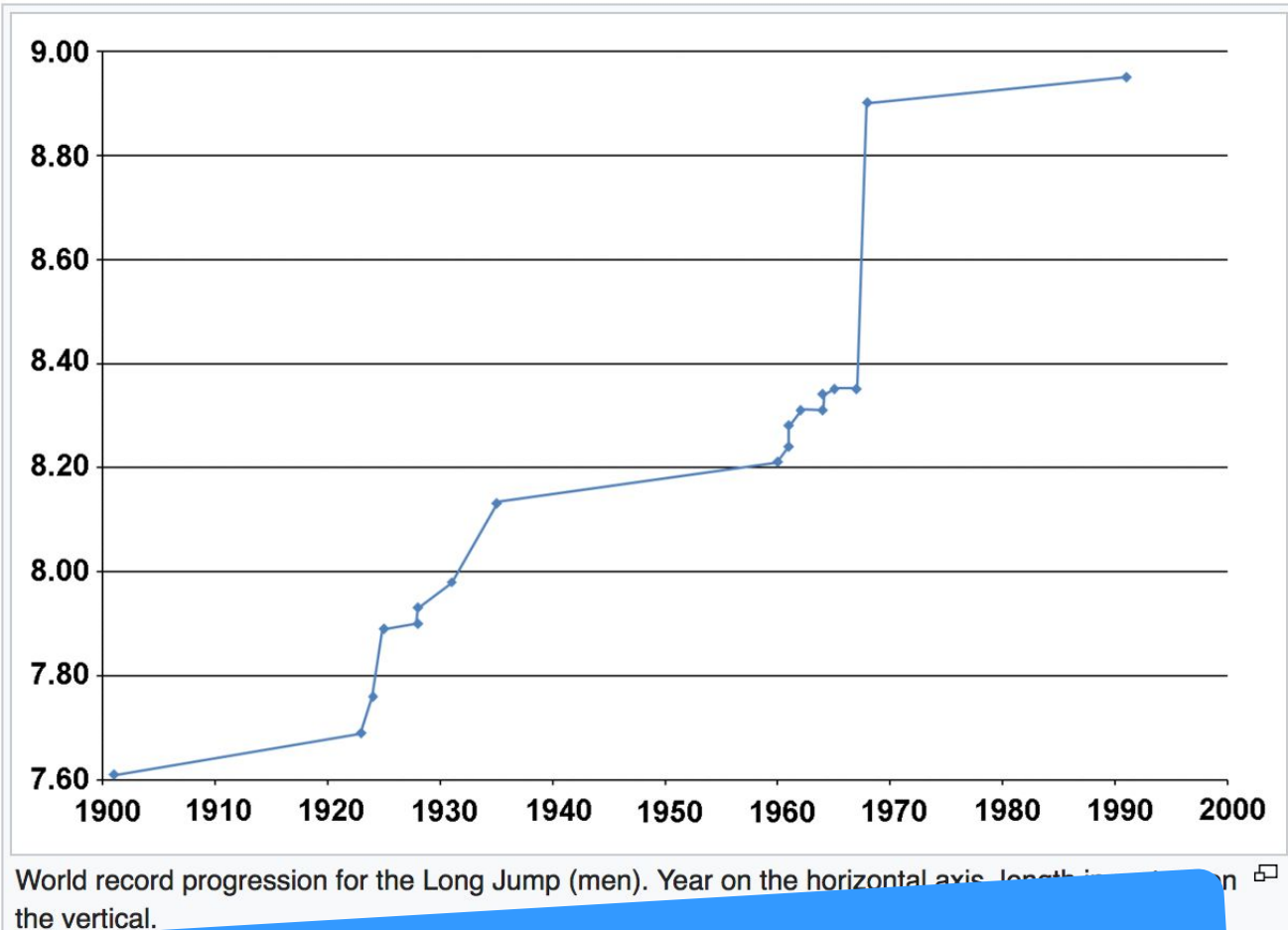
## Record progression [[edit](#)]

Mark	Wind	Athlete	Venue	Date
7.61 m (24 ft 11½ in)		 <a href="#">Peter O'Connor</a> (IRE)	<a href="#">Dublin, Ireland</a>	5 August 1901 <sup>[1]</sup>
7.69 m (25 ft 2¾ in)		 <a href="#">Edward Gourdin</a> (USA)	<a href="#">Cambridge, United States</a>	23 July 1921 <sup>[1]</sup>
7.76 m (25 ft 5½ in)		 <a href="#">Robert LeGendre</a> (USA)	<a href="#">Paris, France</a>	7 July 1924 <sup>[1]</sup>
7.89 m (25 ft 10¾ in)		 <a href="#">DeHart Hubbard</a> (USA)	<a href="#">Chicago, United States</a>	13 June 1925 <sup>[1]</sup>
7.90 m (25 ft 11 in)		 <a href="#">Edward Hamm</a> (USA)	<a href="#">Cambridge, United States</a>	7 July 1928 <sup>[1]</sup>
7.93 m (26 ft 0 in)	0.0	 <a href="#">Sylvio Cator</a> (HAI)	<a href="#">Paris, France</a>	9 September 1928 <sup>[1]</sup>
7.98 m (26 ft 2 in)	0.5	 <a href="#">Chuhei Nambu</a> (JPN)	<a href="#">Tokyo, Japan</a>	27 October 1931 <sup>[1]</sup>
8.13 m (26 ft 8 in)	1.5	 <a href="#">Jesse Owens</a> (USA)	<a href="#">Ann Arbor, United States</a>	25 May 1935 <sup>[1]</sup>
8.21 m (26 ft 11¼ in)	0.0	 <a href="#">Ralph Boston</a> (USA)	<a href="#">Walnut, United States</a>	12 August 1960 <sup>[1]</sup>
8.24 m (27 ft ½ in)	1.8	 <a href="#">Ralph Boston</a> (USA)	<a href="#">Modesto, United States</a>	27 May 1961 <sup>[1]</sup>
8.28 m (27 ft 2 in)	1.2	 <a href="#">Ralph Boston</a> (USA)	<a href="#">Moscow, Soviet Union</a>	16 July 1961 <sup>[1]</sup>
8.31 m (27 ft 3¼ in)	-0.1	 <a href="#">Igor Ter-Ovanesyan</a> (URS)	<a href="#">Yerevan, Soviet Union</a>	10 June 1962 <sup>[1]</sup>
8.31 m (27 ft 3¼ in)	0.0	 <a href="#">Ralph Boston</a> (USA)	<a href="#">Kingston, Jamaica</a>	15 August 1964 <sup>[1]</sup>
8.34 m (27 ft 4¼ in)	1.0	 <a href="#">Ralph Boston</a> (USA)	<a href="#">Los Angeles, United States</a>	12 September 1964 <sup>[1]</sup>
8.35 m (27 ft 4¾ in)	0.0	 <a href="#">Ralph Boston</a> (USA)	<a href="#">Modesto, United States</a>	29 May 1965 <sup>[1]</sup>
8.35 m (27 ft 4¾ in) <b>at Altitude</b>	0.0	 <a href="#">Igor Ter-Ovanesyan</a> (URS)	<a href="#">Mexico City, Mexico</a>	19 October 1967 <sup>[1]</sup>
8.90 m (29 ft 2½ in) <b>at Altitude</b>	2.0	 <a href="#">Bob Beamon</a> (USA)	<a href="#">Mexico City, Mexico</a>	18 October 1968 <sup>[1]</sup>
8.95 m (29 ft 4¼ in)	0.3	 <a href="#">Mike Powell</a> (USA)	<a href="#">Shinjuku, Tokyo, Japan</a>	30 August 1991 <sup>[1]</sup>

## Graphic evolution [\[ edit \]](#)



## Graphic evolution [\[edit\]](#)



**Let's try to make our own plot**

What do you need to  
replicate the graph?



# Demo

## In summary

Get the data: copy and paste wikipedia table into a spreadsheet

Data prep: goal is to get the distance and year, which involves data manipulation

Analysis: exploratory graph with a scatterplot

Report?

# DATA: BY THE NUMBERS



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www.phdcomics.com

<http://www.phdcomics.com/comics/archive.php?comid=462>



## Data Preparation

- Acquisition
- Storage
- Cleaning
- Processing
- Tidying
- Reshaping
- Wrangling



## Analyses

- Exploration
- Description
- Visualization
- Hypothesis Tests
- Inference
- Simulation
- Model Fitting



## Reports

- Document(s)
- Article(s)
- Book(s)
- Poster(s)
- Blog post(s)
- Dissertation
- News



## Communication

- Oral
- Print
- Web
- Audio
- Video
- Multimedia
- Other

# My vision of the Data Analysis Cycle

