

STA 674

Regression Analysis And Design Of Experiments

Measuring Association between Two Variables – Lecture 1

STA 674, RADOE:

Measuring Association between Two Variables

- Where does it fit in?
- What is it?
- Where next?

STA 674: Measuring Association between Two Variables

Where does it fit in?

Regression and correlation provide the basis for studying relationships between two or more variables and for answering questions about associations which arise in all areas of quantitative research.

STA 674: Measuring Association between Two Variables

What is it?

- Regression
- Correlation

STA 674: Measuring Association between Two Variables

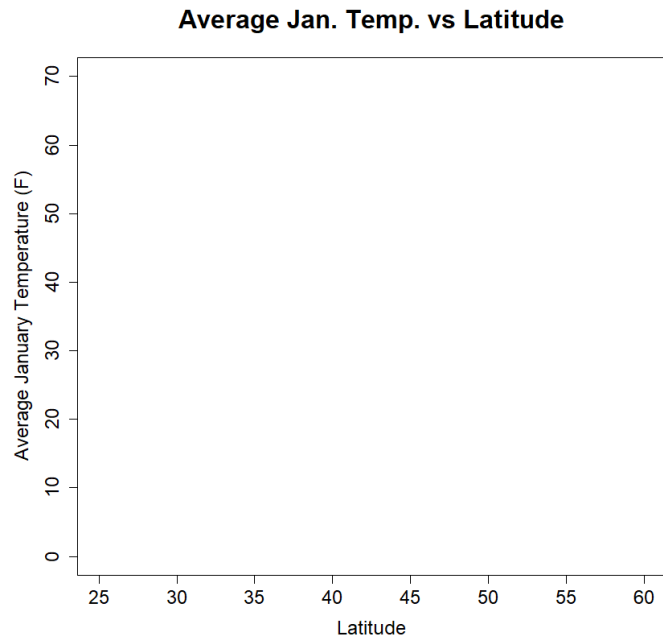
What is it?

City		Latitude	Average Jan Temp
Louisville,	KY	39	27
Key West,	FL	25	65
New Orleans,	LA	30.8	45
Atlanta,	GA	33.9	37
Charlotte,	NC	35.9	34
Harrisburg,	PA	40.9	24
Omaha,	NE	41.9	13
Detroit,	MI	43.1	21
Burlington,	VT	45	7
Spokane,	WA	48.1	19

STA 674: Measuring Association between Two Variables

What is it?

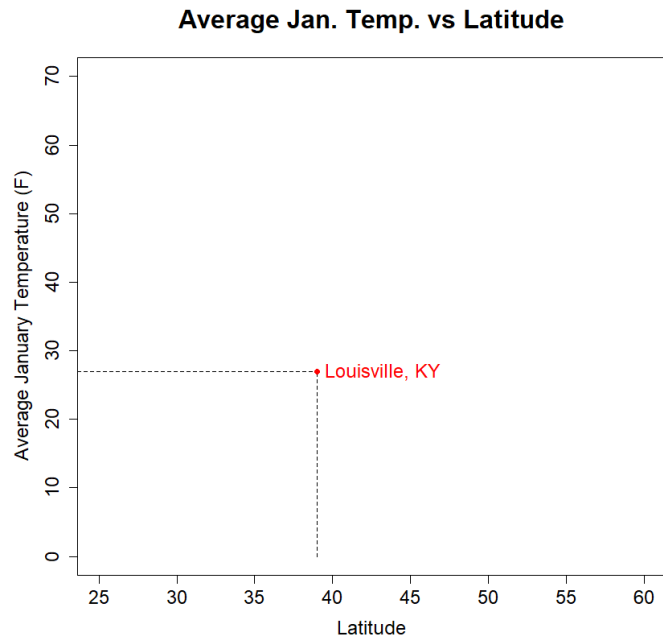
City		Latitude	Average Jan Temp
Louisville,	KY	39	27
Key West,	FL	25	65
New Orleans,	LA	30.8	45
Atlanta,	GA	33.9	37
Charlotte,	NC	35.9	34
Harrisburg,	PA	40.9	24
Omaha,	NE	41.9	13
Detroit,	MI	43.1	21
Burlington,	VT	45	7
Spokane,	WA	48.1	19



STA 674: Measuring Association between Two Variables

What is it?

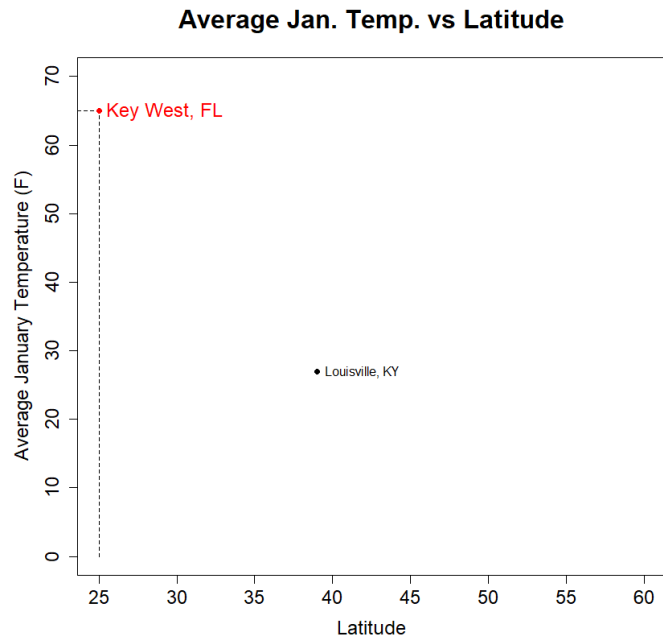
City		Latitude	Average Jan Temp
Louisville,	KY	39	27
Key West,	FL	25	65
New Orleans,	LA	30.8	45
Atlanta,	GA	33.9	37
Charlotte,	NC	35.9	34
Harrisburg,	PA	40.9	24
Omaha,	NE	41.9	13
Detroit,	MI	43.1	21
Burlington,	VT	45	7
Spokane,	WA	48.1	19



STA 674: Measuring Association between Two Variables

What is it?

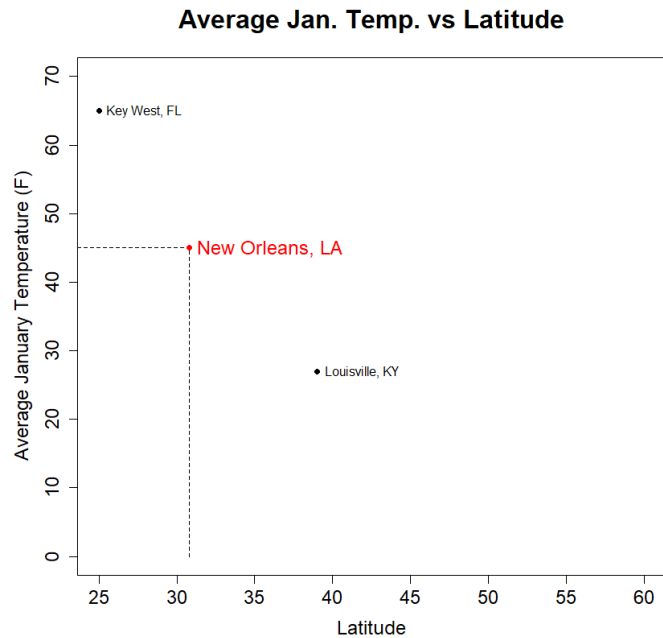
City		Latitude	Average Jan Temp
Louisville,	KY	39	27
Key West,	FL	25	65
New Orleans,	LA	30.8	45
Atlanta,	GA	33.9	37
Charlotte,	NC	35.9	34
Harrisburg,	PA	40.9	24
Omaha,	NE	41.9	13
Detroit,	MI	43.1	21
Burlington,	VT	45	7
Spokane,	WA	48.1	19



STA 674: Measuring Association between Two Variables

What is it?

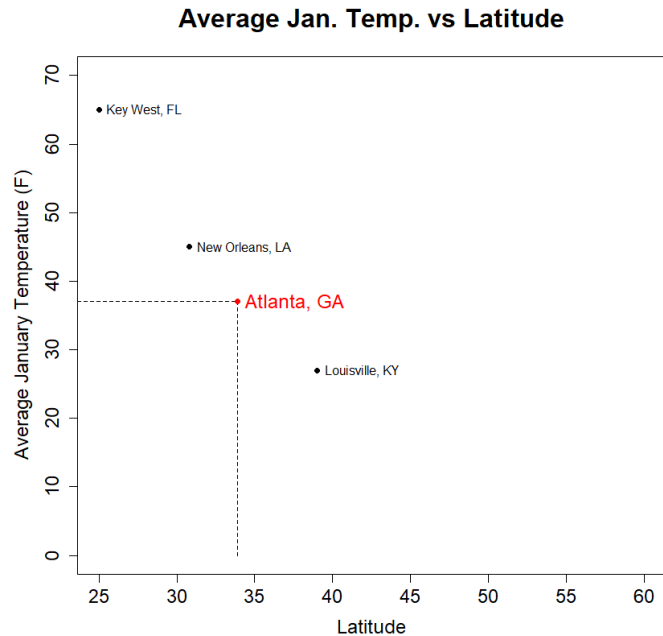
City		Latitude	Average Jan Temp
Louisville,	KY	39	27
Key West,	FL	25	65
New Orleans,	LA	30.8	45
Atlanta,	GA	33.9	37
Charlotte,	NC	35.9	34
Harrisburg,	PA	40.9	24
Omaha,	NE	41.9	13
Detroit,	MI	43.1	21
Burlington,	VT	45	7
Spokane,	WA	48.1	19



STA 674: Measuring Association between Two Variables

What is it?

City		Latitude	Average Jan Temp
Louisville,	KY	39	27
Key West,	FL	25	65
New Orleans,	LA	30.8	45
Atlanta,	GA	33.9	37
Charlotte,	NC	35.9	34
Harrisburg,	PA	40.9	24
Omaha,	NE	41.9	13
Detroit,	MI	43.1	21
Burlington,	VT	45	7
Spokane,	WA	48.1	19



STA 674: Measuring Association between Two Variables

What is it?

City		Latitude	Average Jan Temp
Louisville,	KY	39	27
Key West,	FL	25	65
New Orleans,	LA	30.8	45
Atlanta,	GA	33.9	37
Charlotte,	NC	35.9	34
Harrisburg,	PA	40.9	24
Omaha,	NE	41.9	13
Detroit,	MI	43.1	21
Burlington,	VT	45	7
Spokane,	WA	48.1	19

