

Are You a Data Detective?

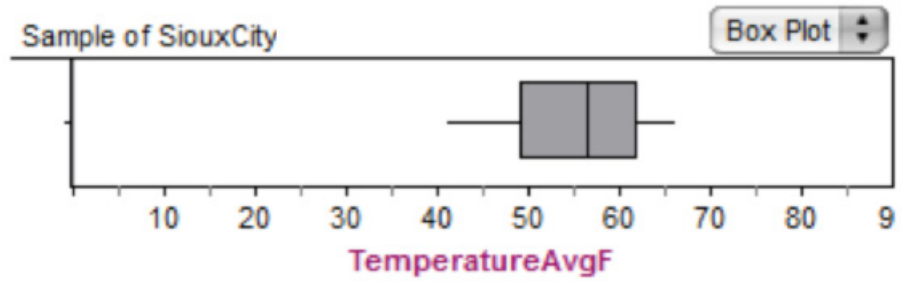
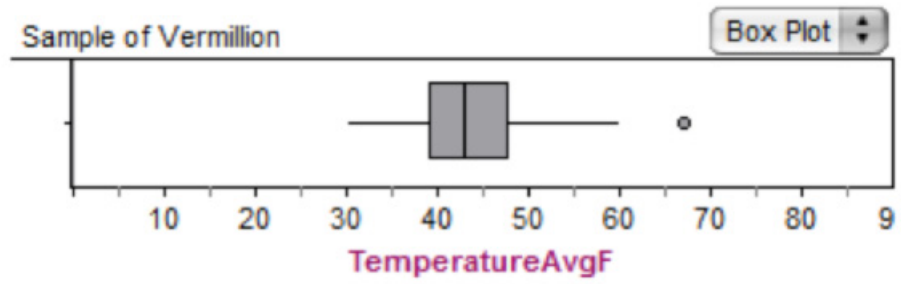


Data detectives use PPDAC

www.censusatschool.org.nz

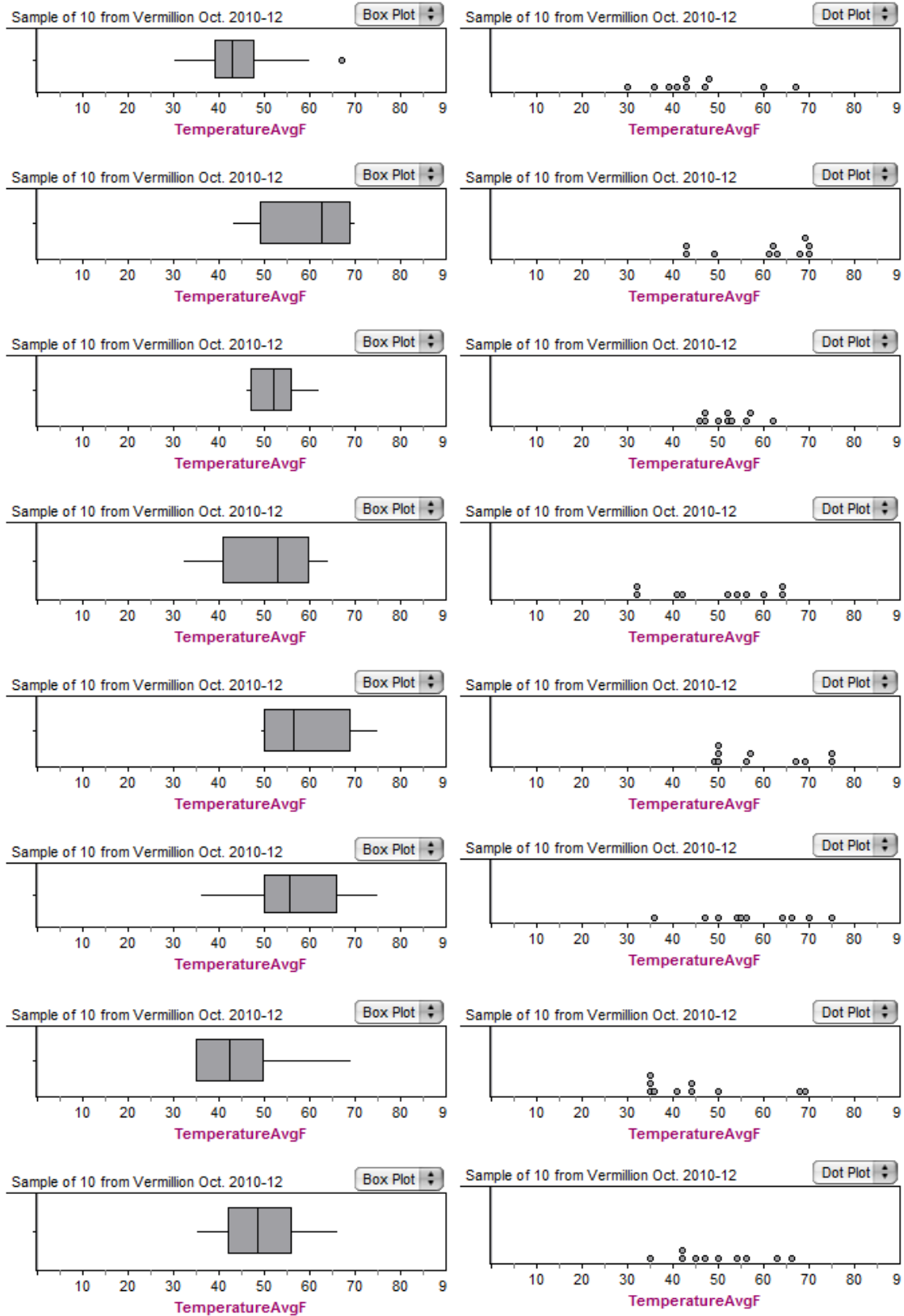
<http://www.censusatschool.org.nz/resources/poster/>



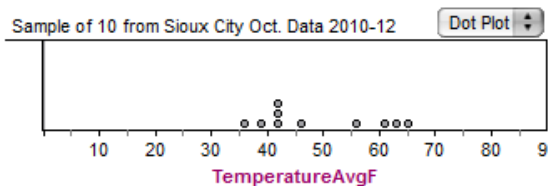
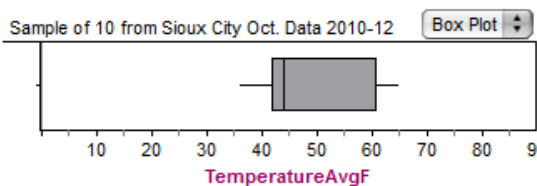
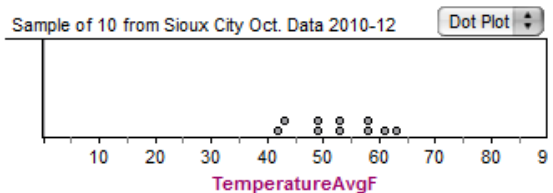
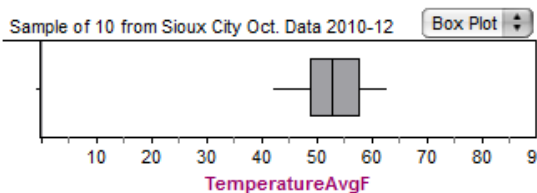
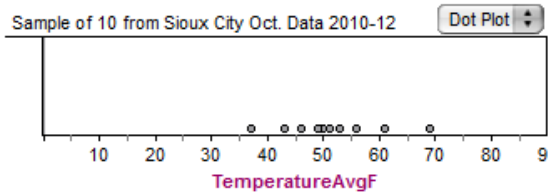
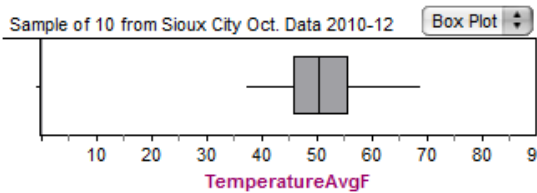
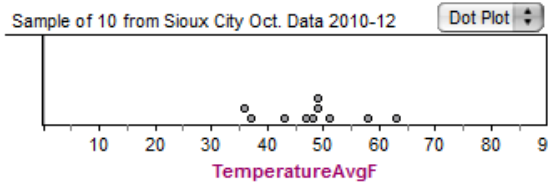
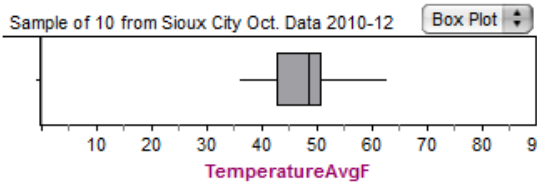
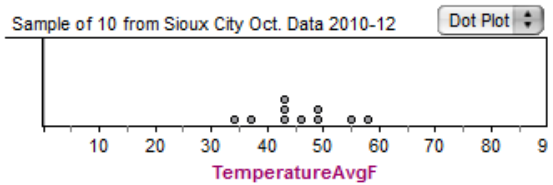
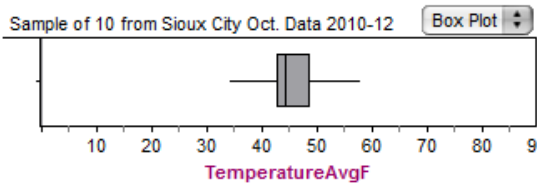
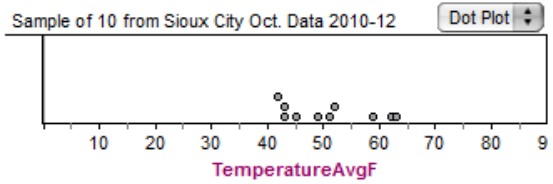
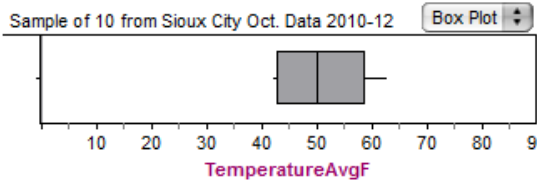
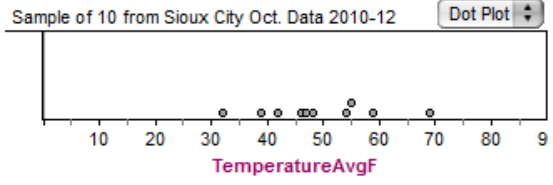
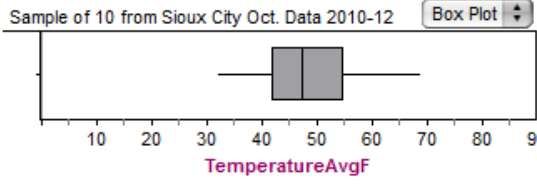
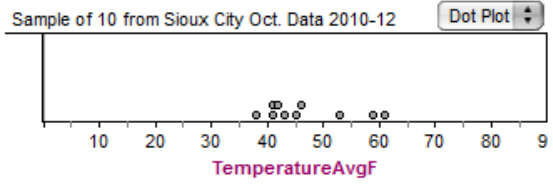
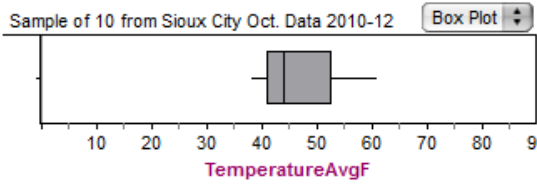


Are the temperatures in Sioux City, IA generally higher than in Vermillion, SD?

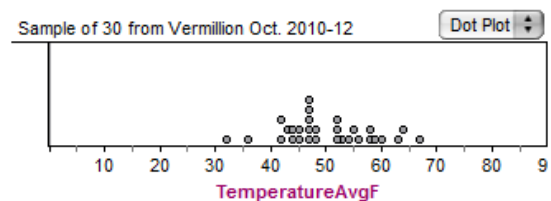
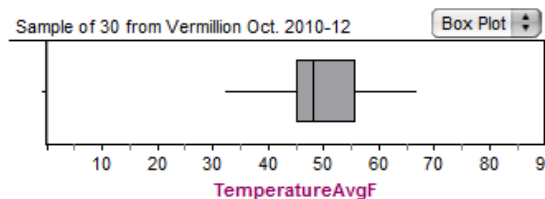
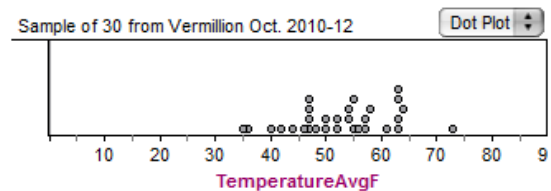
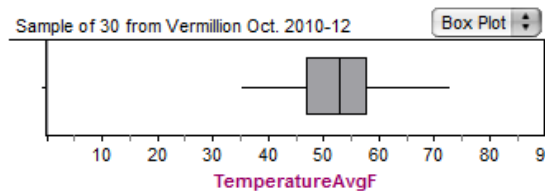
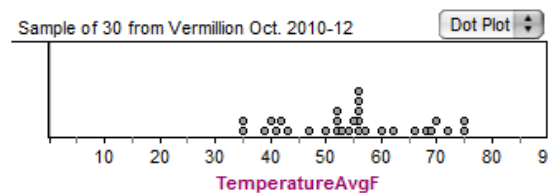
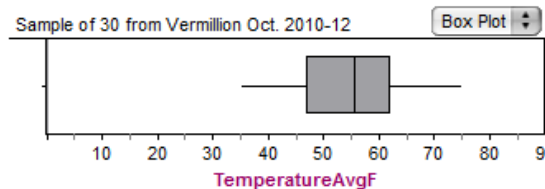
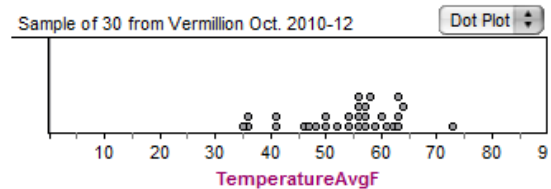
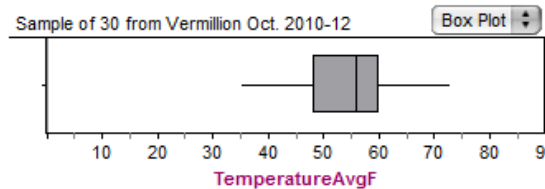
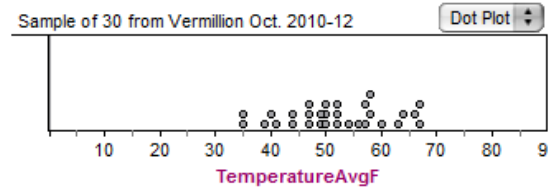
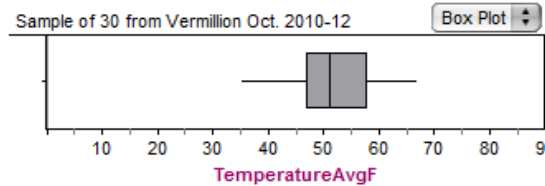
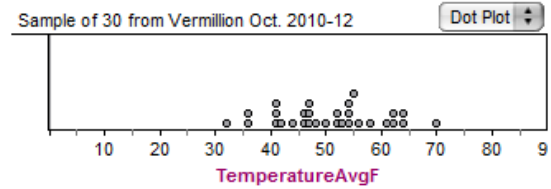
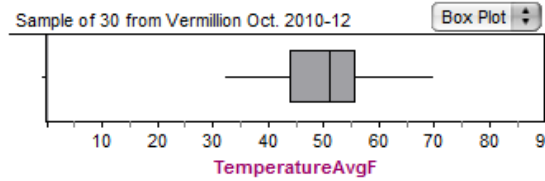
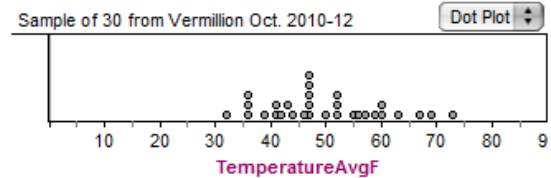
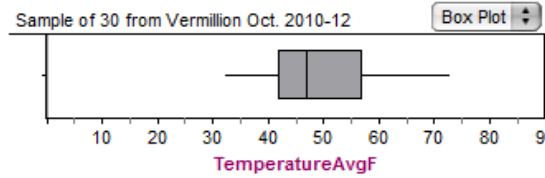
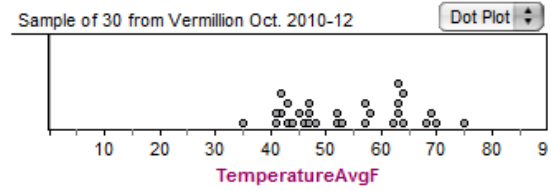
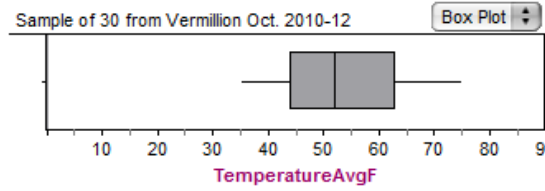
Vermillion Temperature Data from Oct. 2010, 2011, 2012 for SAMPLES of SIZE 10



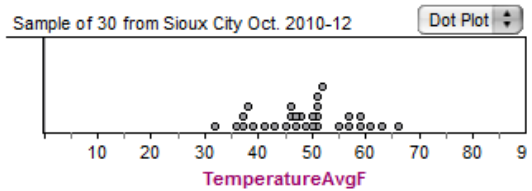
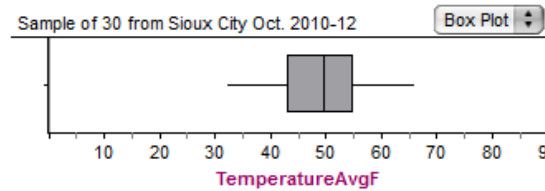
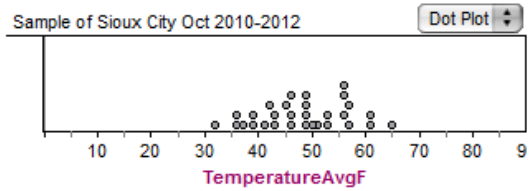
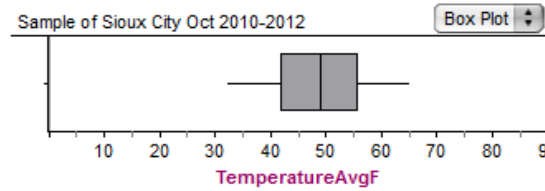
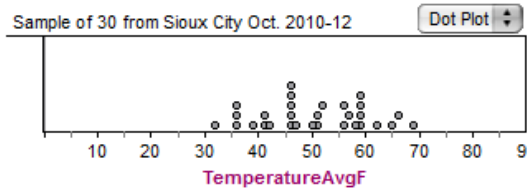
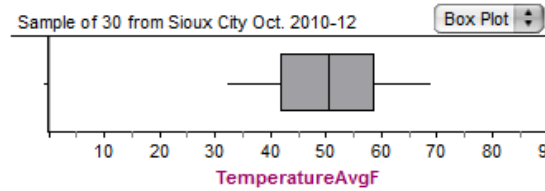
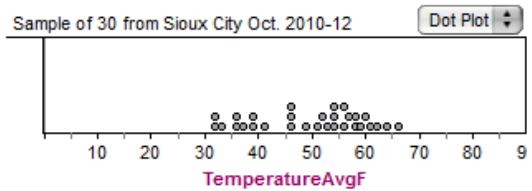
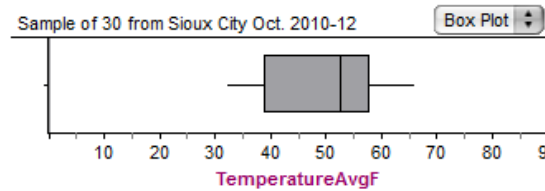
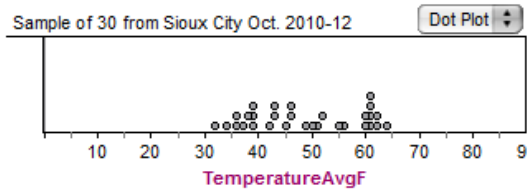
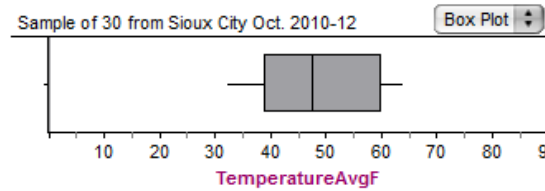
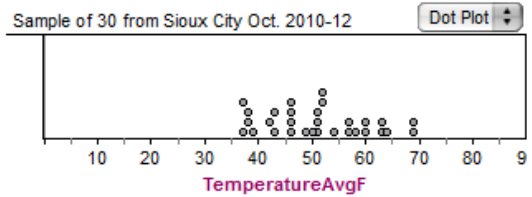
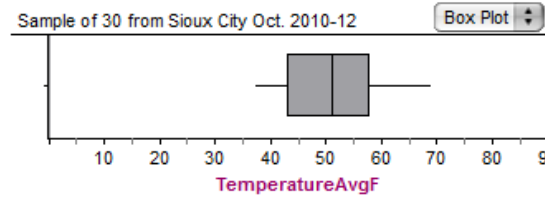
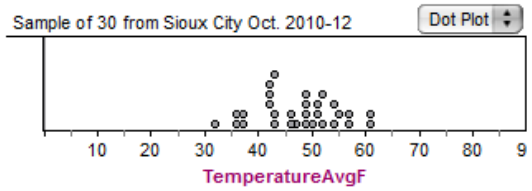
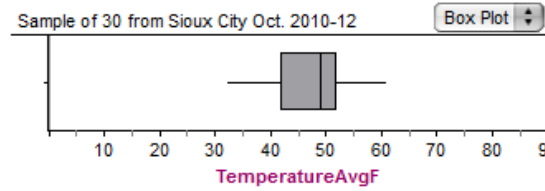
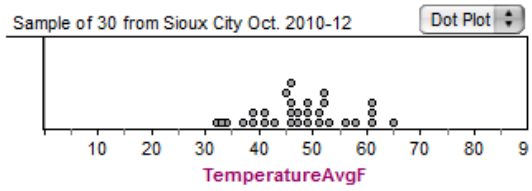
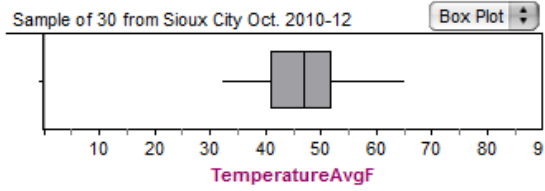
Sioux City Temperature Data from Oct. 2010, 2011, 2012 for **SAMPLES** of SIZE 10



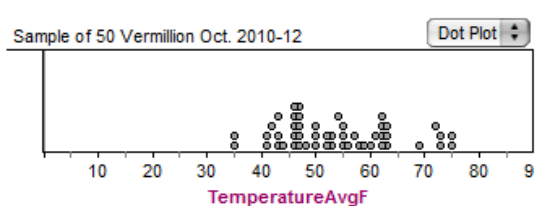
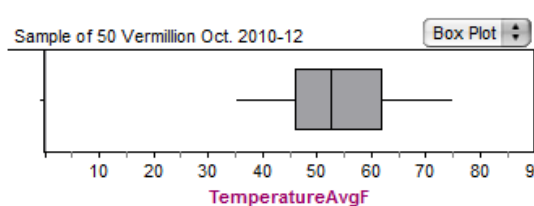
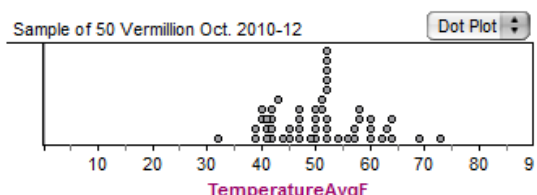
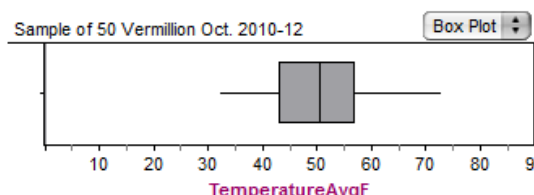
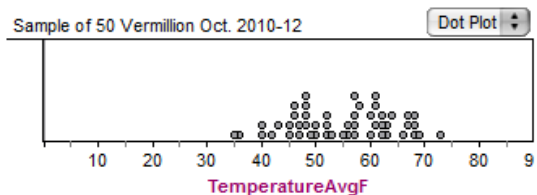
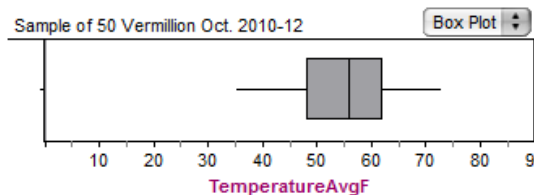
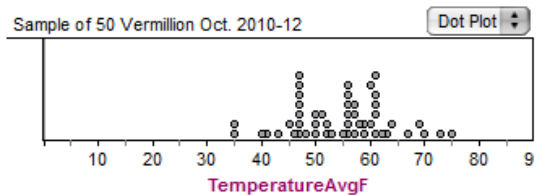
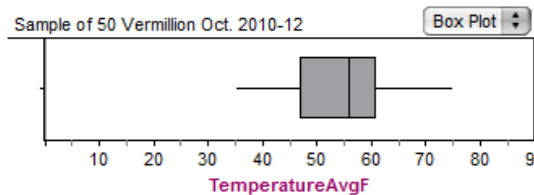
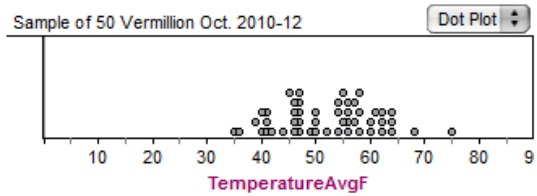
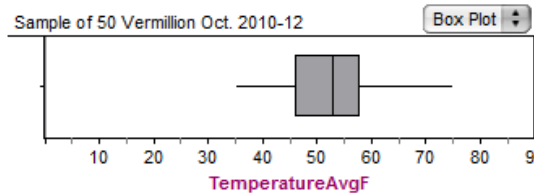
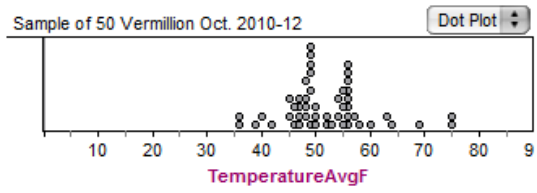
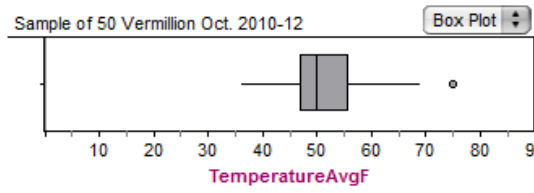
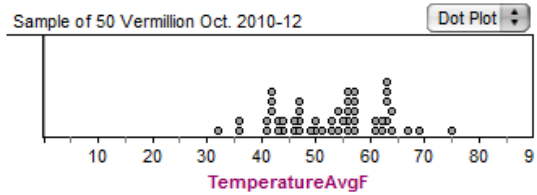
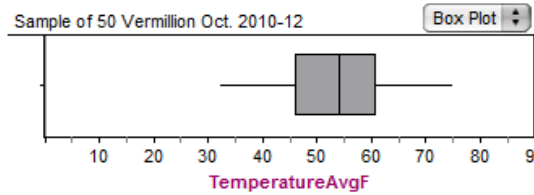
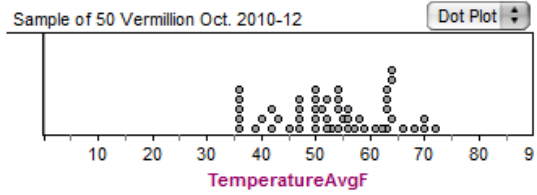
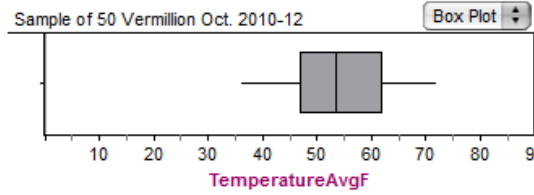
Vermillion Temperature Data from Oct. 2010, 2011, 2012 for SAMPLES of SIZE 30



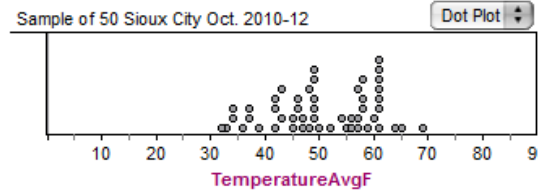
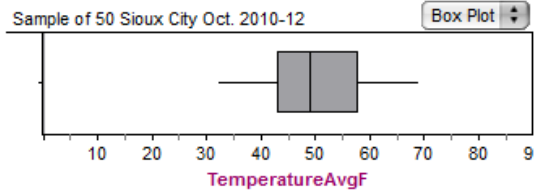
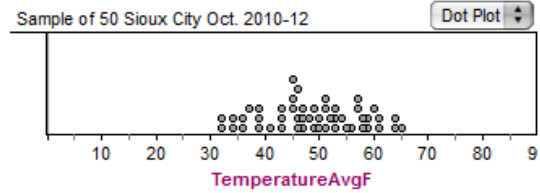
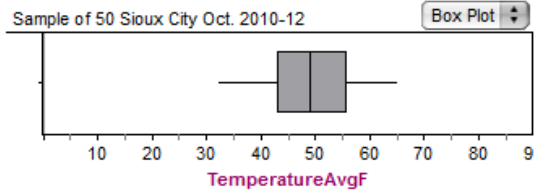
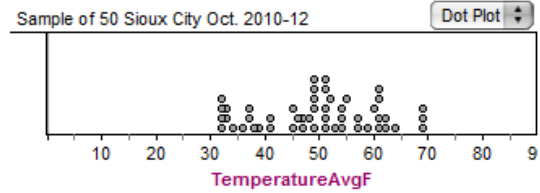
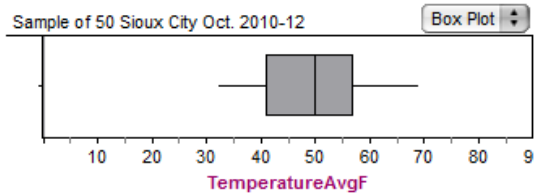
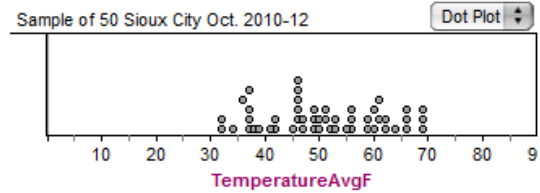
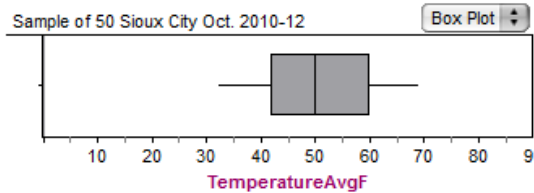
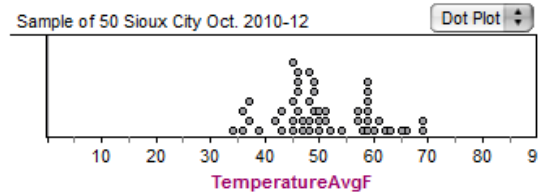
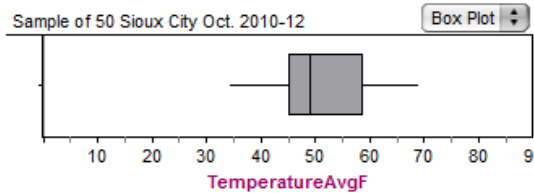
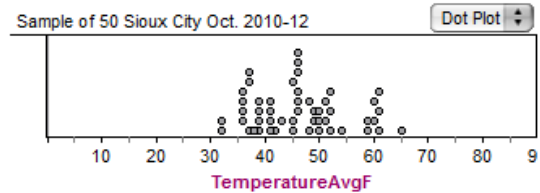
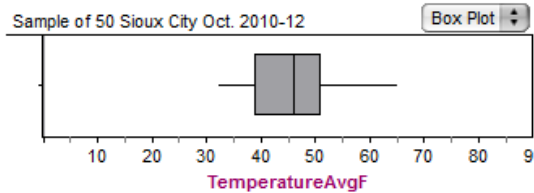
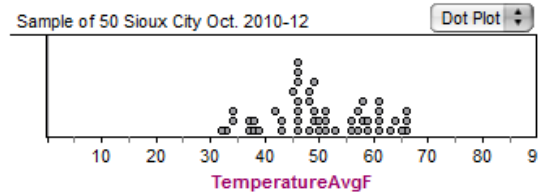
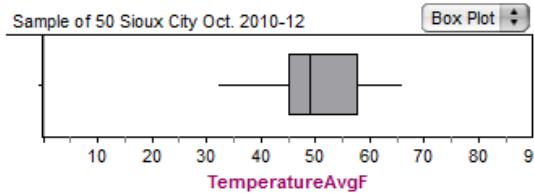
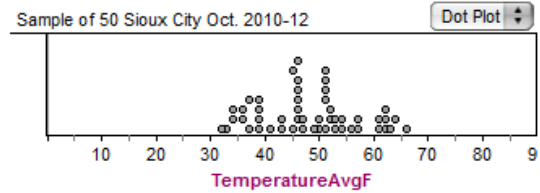
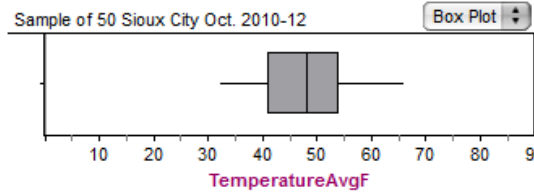
Sioux City Temperature Data from Oct. 2010, 2011, 2012 for **SAMPLES** of SIZE 30



Vermillion Temperature Data from Oct. 2010, 2011, 2012 for **SAMPLES** of **SIZE 50**

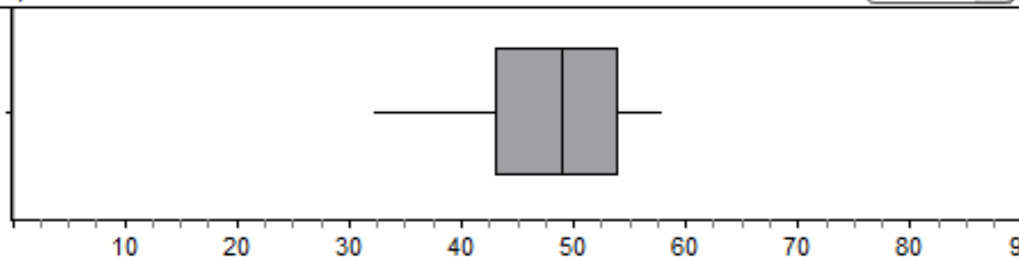


Sioux City Temperature Data from Oct. 2010, 2011, 2012 for **SAMPLES** of SIZE 50



Sample of 30 from Vermillion Oct. 2010-12

Box Plot



TemperatureAvgF

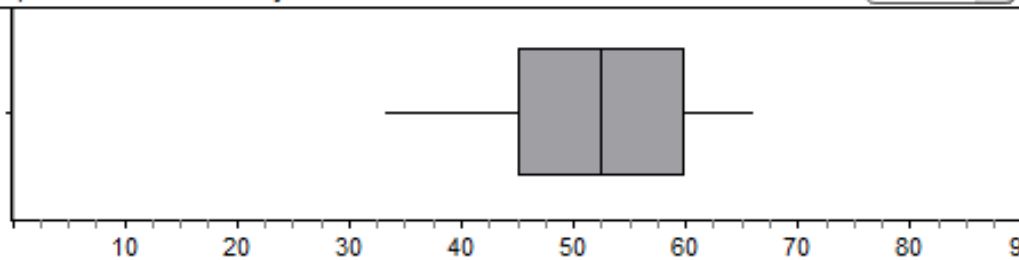
Sample of 30 from Vermillion Oct. 2010-12

TemperatureAvgF	48.6
	32
	43
	49
	54
	58

S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 from Sioux City Oct. 2010-12

Box Plot



TemperatureAvgF

Sample of 30 from Sioux City Oct. 2010-12

TemperatureAvgF	51.5
	33
	45
	52.5
	60
	66

S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Fall – Random Samples of Size 30 from 2010, 2011, 2012

Sample of 30 Vermillion Septembers 2010-12

	61.8
	50
	56
TemperatureAvgF	60.5
	66
	82

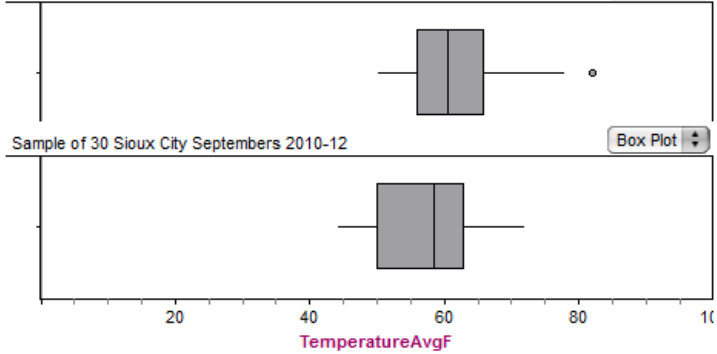
S1 = mean ()
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 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Septembers 2010-12

	56.6333
	44
	50
TemperatureAvgF	58.5
	63
	72

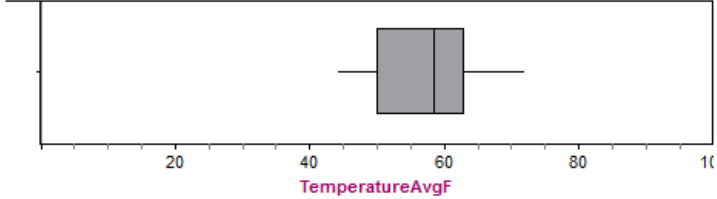
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Septembers 2010-12



How would you make the call for September?

Sample of 30 Sioux City Septembers 2010-12



Sample of 30 Vermillion Octobers 2010-12

	48.6
	32
	43
TemperatureAvgF	49
	54
	58

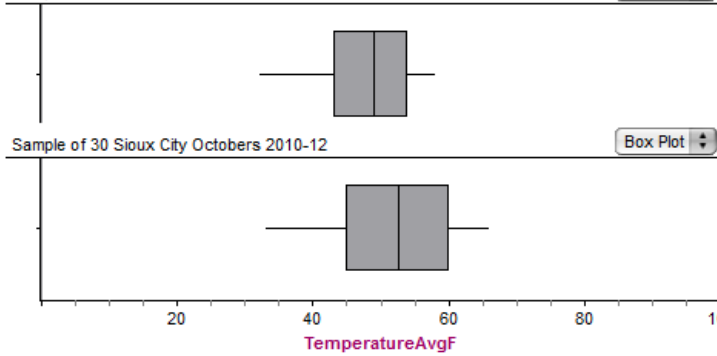
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Octobers 2010-12

	51.5
	33
	45
TemperatureAvgF	52.5
	60
	66

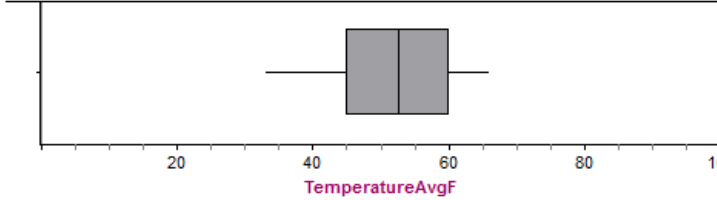
S1 = mean ()
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 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Octobers 2010-12



How would you make the call for October?

Sample of 30 Sioux City Octobers 2010-12



Sample of 30 Vermillion Novembers 2010-12

	35.1667
	14
	24
TemperatureAvgF	36.5
	43
	60

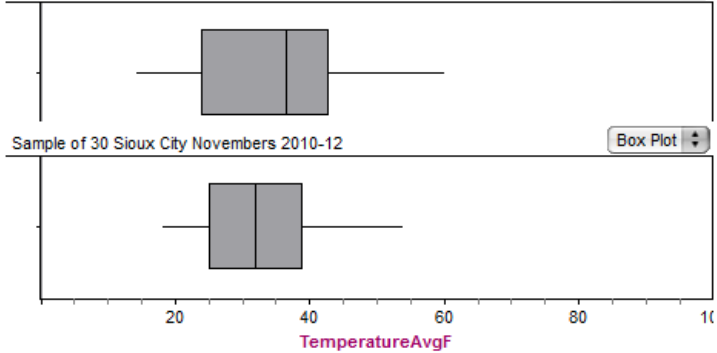
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Novembers 2010-12

	32.6667
	18
	25
TemperatureAvgF	32
	39
	54

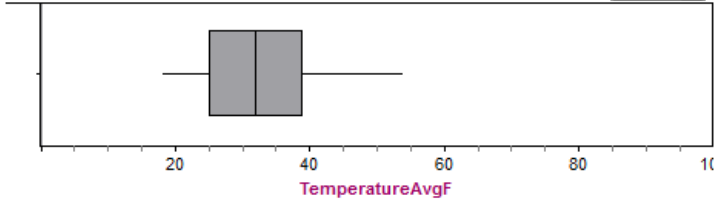
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Novembers 2010-12



How would you make the call for November?

Sample of 30 Sioux City Novembers 2010-12



Winter – Random Samples of Size 30 from 2010, 2011, 2012

Sample of 30 Vermillion Decembers 2010-12

	28.2667
	7
	21
TemperatureAvgF	29.5
	36
	45

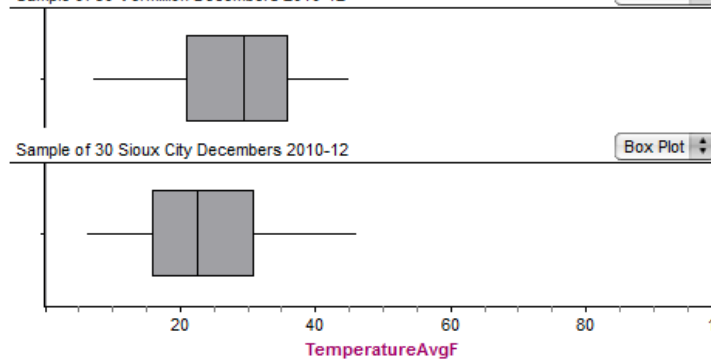
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Decembers 2010-12

	23.1667
	6
	16
TemperatureAvgF	22.5
	31
	46

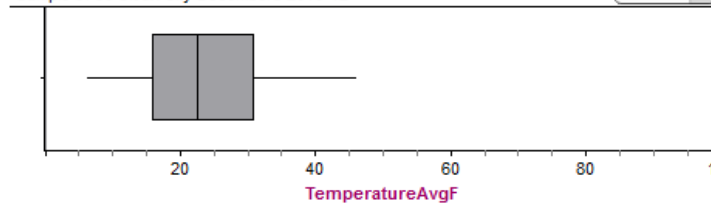
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Decembers 2010-12



How would you make the call for December?

Sample of 30 Sioux City Decembers 2010-12



Sample of 30 Vermillion Januarys 2010-12

	22.3667
	-1
	15
TemperatureAvgF	23
	32
	41

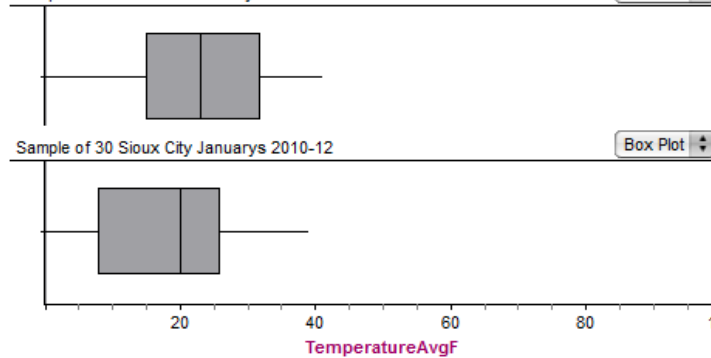
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Januarys 2010-12

	17.7667
	-2
	8
TemperatureAvgF	20
	26
	39

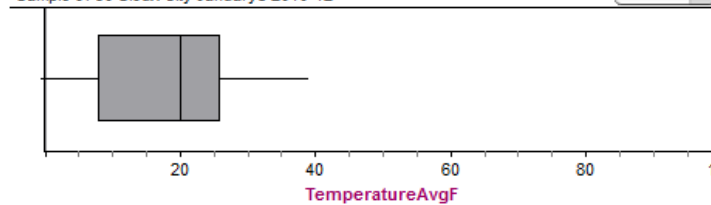
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Januarys 2010-12



How would you make the call for January?

Sample of 30 Sioux City Januarys 2010-12



Sample of 30 Vermillion Februarys 2010-12

	21.8333
	-3
	14
TemperatureAvgF	24
	33
	44

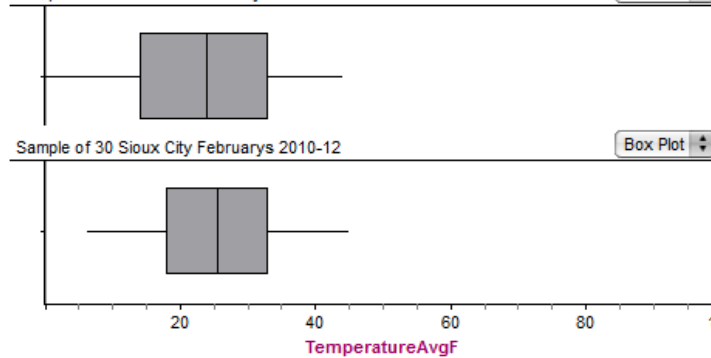
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Februarys 2010-12

	23.8
	-6
	18
TemperatureAvgF	25.5
	33
	45

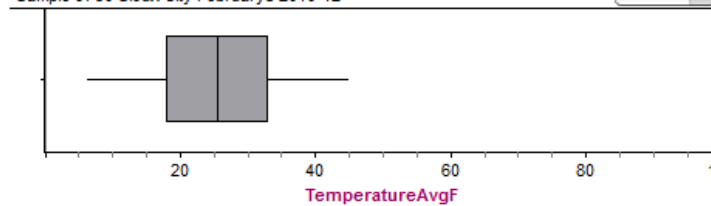
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Februarys 2010-12



How would you make the call for February?

Sample of 30 Sioux City Februarys 2010-12



Spring – Random Samples of Size 30 from 2010, 2011, 2012

Sample of 30 Vermillion Marchs 2010-12

TemperatureAvgF	45.6
	24
	32
	42.5
	60
	73

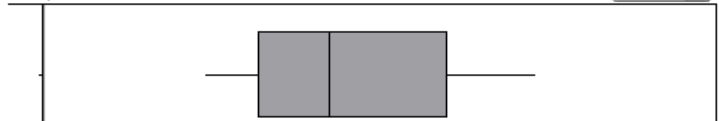
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Marchs 2010-12

TemperatureAvgF	38.5333
	24
	30
	35.5
	43
	65

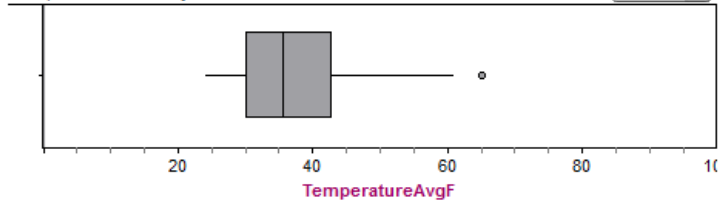
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Marchs 2010-12



How would you make the call for March?

Sample of 30 Sioux City Marchs 2010-12



Sample of 30 Vermillion Aprils 2010-12

TemperatureAvgF	51.9667
	40
	46
	52
	56
	73

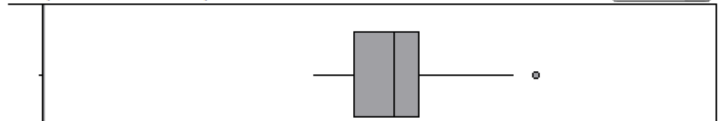
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Aprils 2010-12

TemperatureAvgF	52.8
	35
	46
	51.5
	61
	68

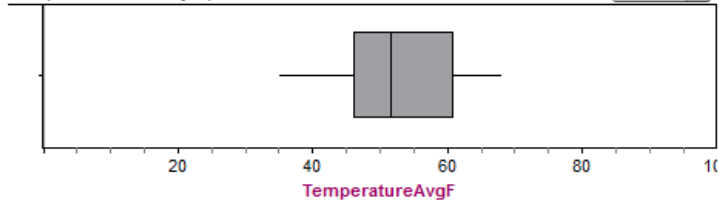
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Aprils 2010-12



How would you make the call for April?

Sample of 30 Sioux City Aprils 2010-12



Sample of 30 Vermillion Mays 2010-12

TemperatureAvgF	63.5333
	46
	54
	64
	72
	84

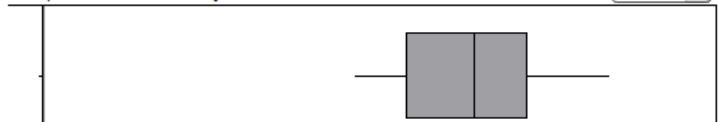
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Mays 2010-12

TemperatureAvgF	63.0333
	49
	60
	63.5
	67
	81

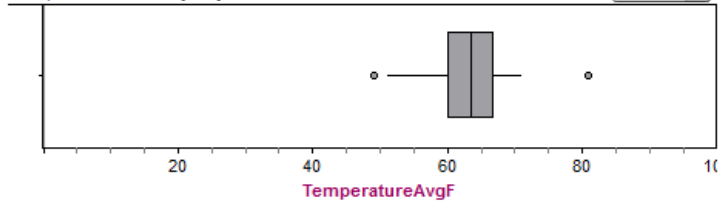
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Mays 2010-12



How would you make the call for May?

Sample of 30 Sioux City Mays 2010-12



Summer – Random Samples of Size 30 from 2010, 2011, 2012

Sample of 30 Vermillion Junes 2010-12

	71.6333
	54
	68
TemperatureAvgF	71.5
	76
	86

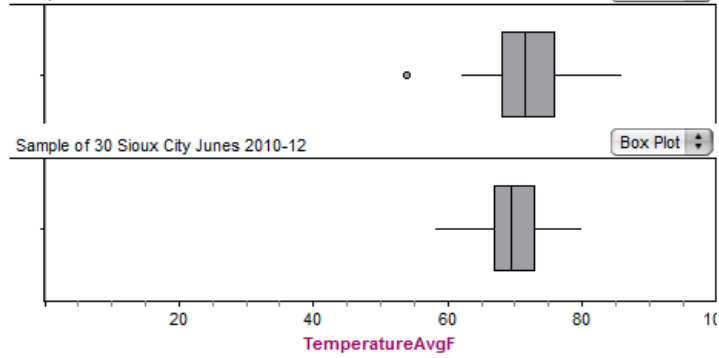
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Junes 2010-12

	69.6
	58
	67
TemperatureAvgF	69.5
	73
	80

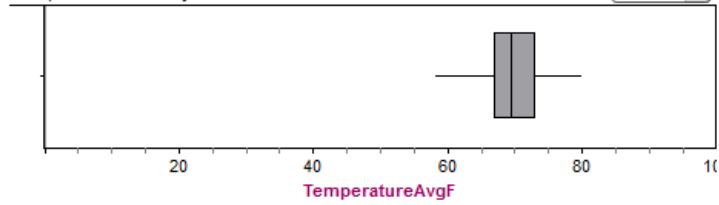
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Junes 2010-12



How would you make the call for June?

Sample of 30 Sioux City Junes 2010-12



Sample of 30 Vermillion Julys 2010-12

	79.7667
	72
	77
TemperatureAvgF	79
	83
	88

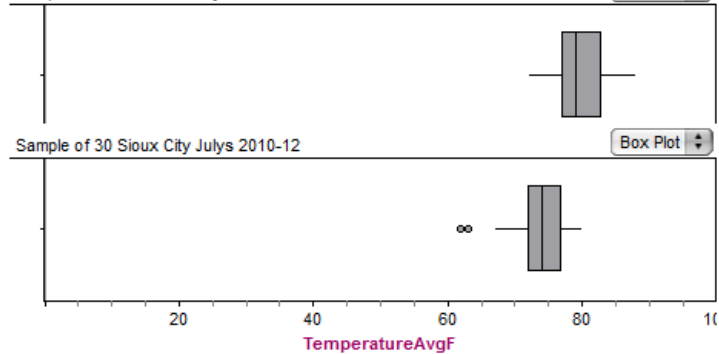
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Julys 2010-12

	73.3667
	62
	72
TemperatureAvgF	74
	77
	80

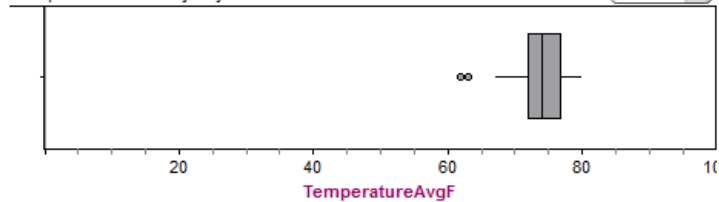
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Julys 2010-12



How would you make the call for July?

Sample of 30 Sioux City Julys 2010-12



Sample of 30 Vermillion Augusts 2010-12

	73.7333
	63
	70
TemperatureAvgF	73.5
	77
	88

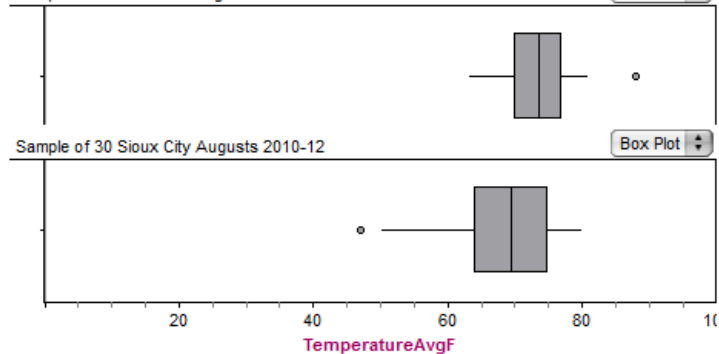
S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Sioux City Augusts 2010-12

	69.1333
	47
	64
TemperatureAvgF	69.5
	75
	80

S1 = mean ()
 S2 = min ()
 S3 = Q1 ()
 S4 = median ()
 S5 = Q3 ()
 S6 = max ()

Sample of 30 Vermillion Augusts 2010-12



How would you make the call for August?

Sample of 30 Sioux City Augusts 2010-12

