NEVADA CLIMATE CHANGE PORTAL

Climograph Investigation

Grade: 6th – 8th

Objective:
The purpose of this investigation is to be able to read and interpret a climograph.

Materials:
Climographs of each transect measurement station.

Important Terms:
Climograph

Diving question:
What essential information does a climograph display and how can this information be used to better understand climate?

Background Information
Data from the transect measurement stations has been collected since the spring of 2011. Climographs are usually made using data that has been collected over a long time period (usually 30 or more years). This discrepancy results in the climographs based on transect data exhibiting more variability than would be expected, especially in the precipitation curves. These graphs were made in 2012. As more years of data are gathered the extent to which these graphs represent climate will improve.

Investigation:

1) Examine the seven climographs. What information on the graph indicates that all of the stations are in the northern hemisphere? Explain.

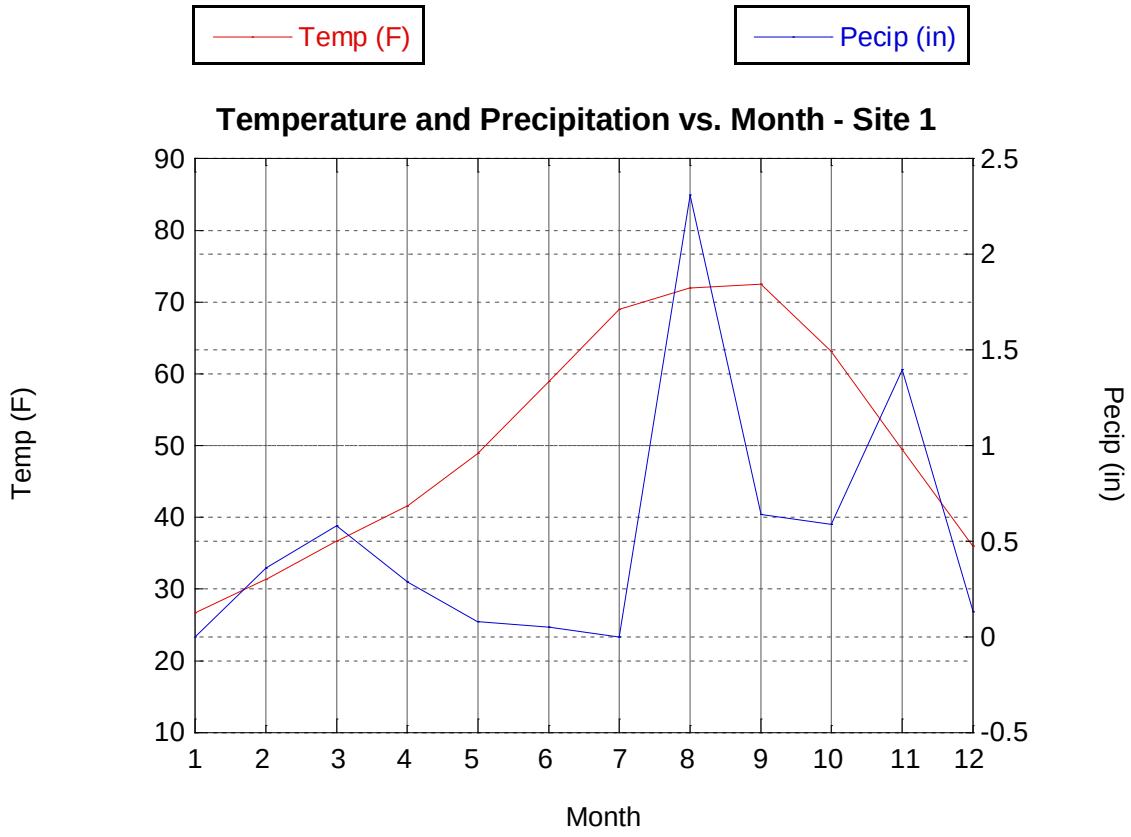
2) How are all the temperature curves similar? Why do you think that this similarity exists?

3) According to the temperature curves, which sites are at the highest elevations and which sites are at the lowest elevations? How could you tell?

4) How are all the precipitation curves similar? Which sites have the most similar precipitation curves?

5) What factors influence the amount of precipitation that falls in any given location?

6) Use your answer to question 5 to pick out the lowest elevation sites and the highest elevation sites. Do your choices correspond to your answers to question 3? Explain.


Temp (F)
Pecip (in)
Temperature and Precipitation vs. Month - Site 1
Temp (F)
Pecip (in)
Month
90
80
70
60
50
40
30
20
10
2.5
2
1.5
1
0.5
0
-0.5
1
2
3
4
5
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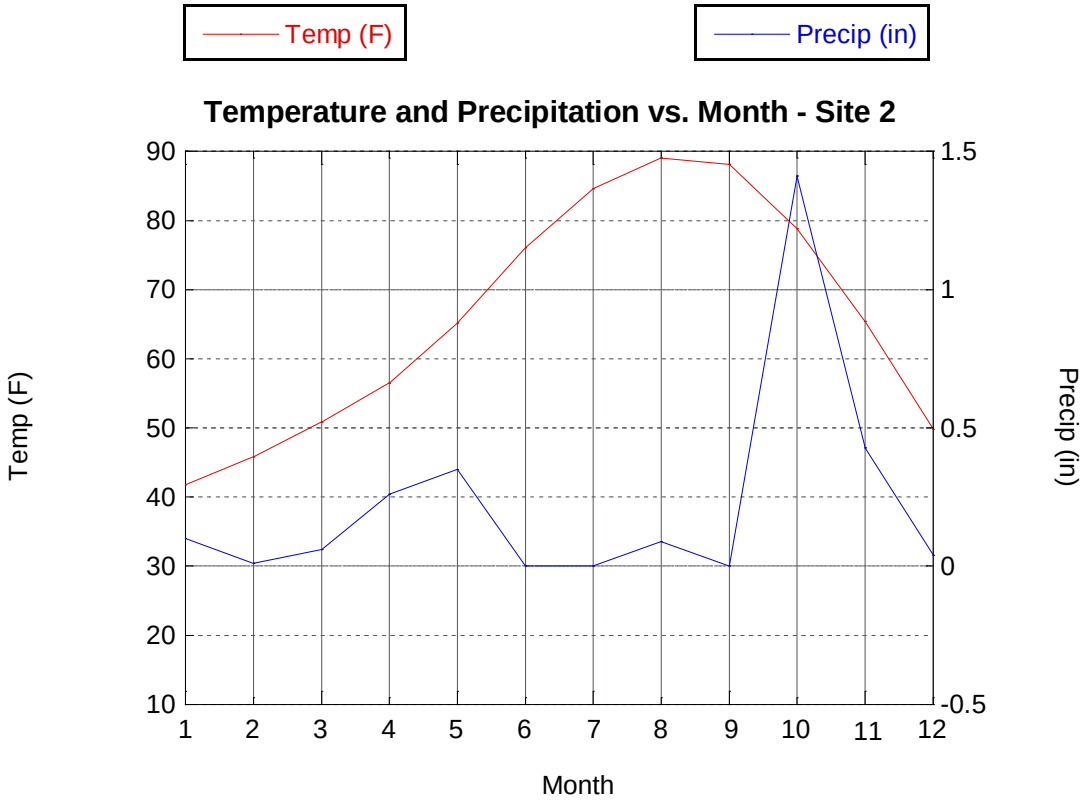
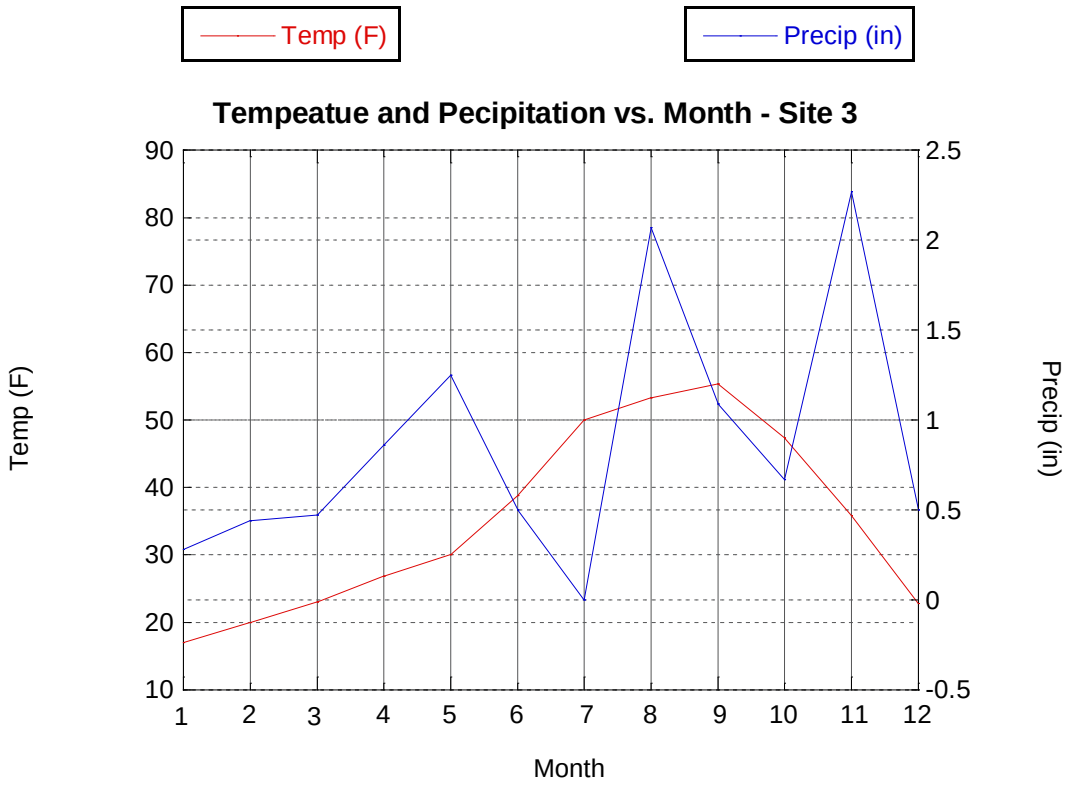
7
8
9
10
11
12


Temp (F)
Precip (in)
Temperature and Precipitation vs. Month - Site 2
Temp (F)
Precip (in)
Month
90
80
70
60
50
40
30
20
10
1.5
1
0.5
0
-0.5
1
2
3
4
5
6
7
8
9
10
11
12


Temp (F)
Precip (in)
Tempeatue and Pecipitation vs. Month - Site 3
Temp (F)
Precip (in)
Month
90
80
70
60
50
40
30
20
10
2.5
2
1.5
1
0.5
0
-0.5
1
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3
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11
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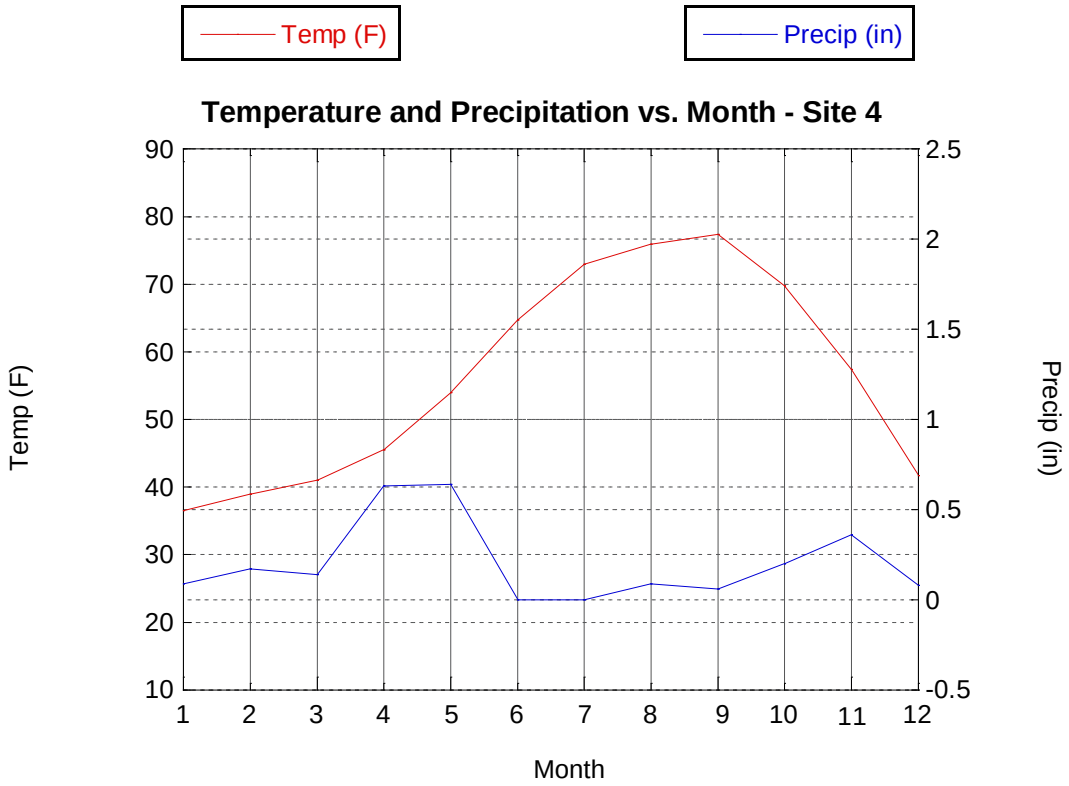
Temp (F)
Precip (in)
Temperature and Precipitation vs. Month - Site 4
Temp (F)
Precip (in)
Month
90
80
70
60
50
40
30
20
10
2.5
2
1.5
1
0.5
0
-0.5
1
2
3
4
5
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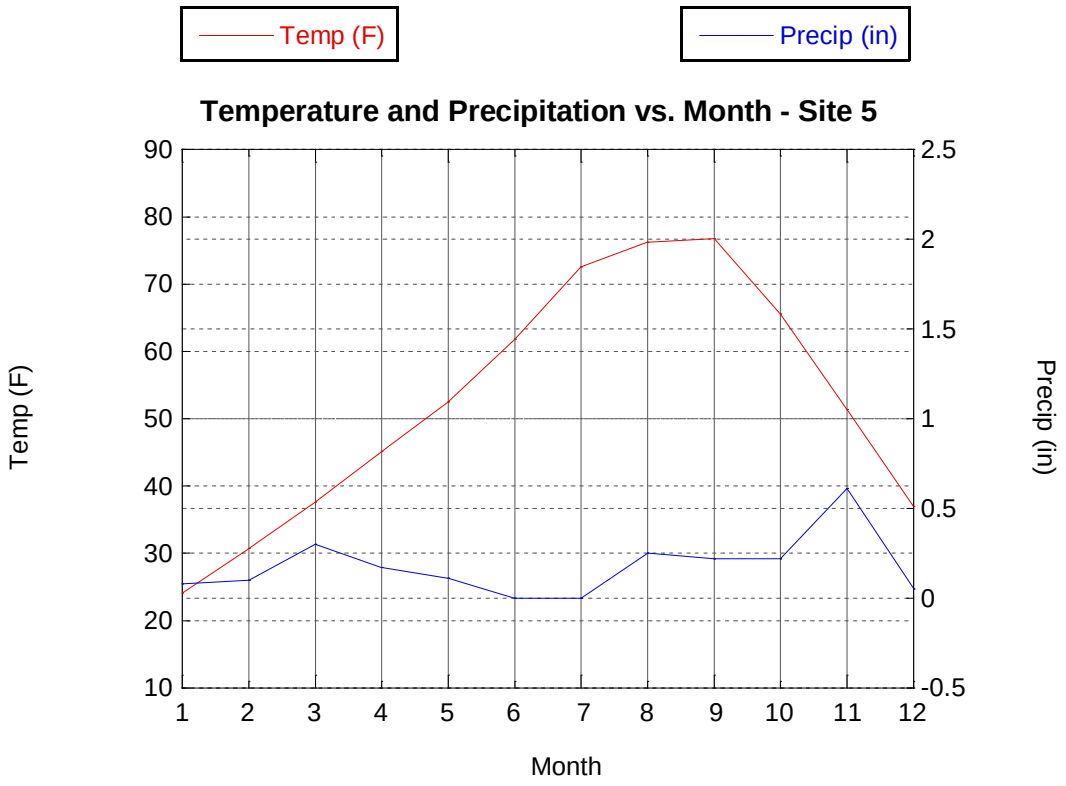
11
12


Temp (F)
Precip (in)
Temperature and Precipitation vs. Month - Site 5
Temp (F)
Precip (in)
Month
90
80
70
60
50
40
30
20
10
2.5
2
1.5
1
0.5
0
-0.5
1
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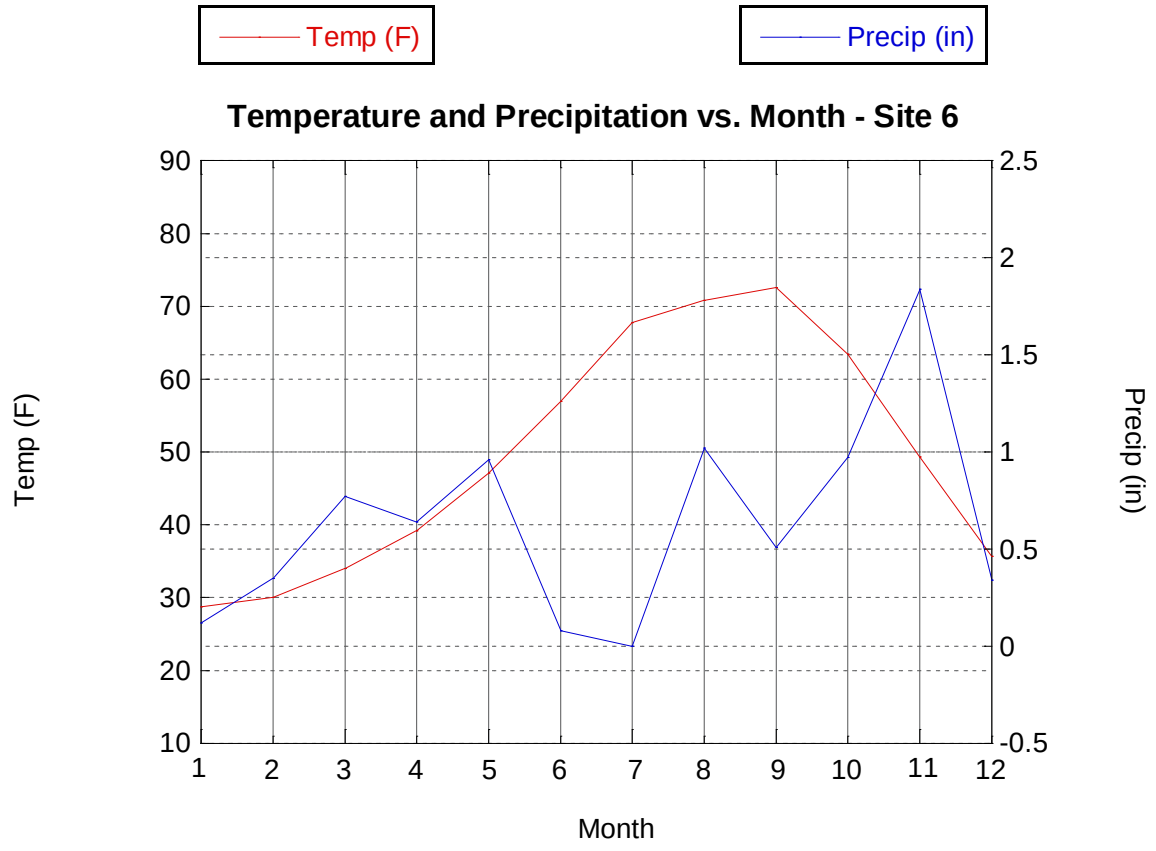
Temp (F)
Precip (in)
Temperature and Precipitation vs. Month - Site 6
Temp (F)
Precip (in)
Month
90
80
70
60
50
40
30
20
10
2.5
2
1.5
1
0.5
0
-0.5
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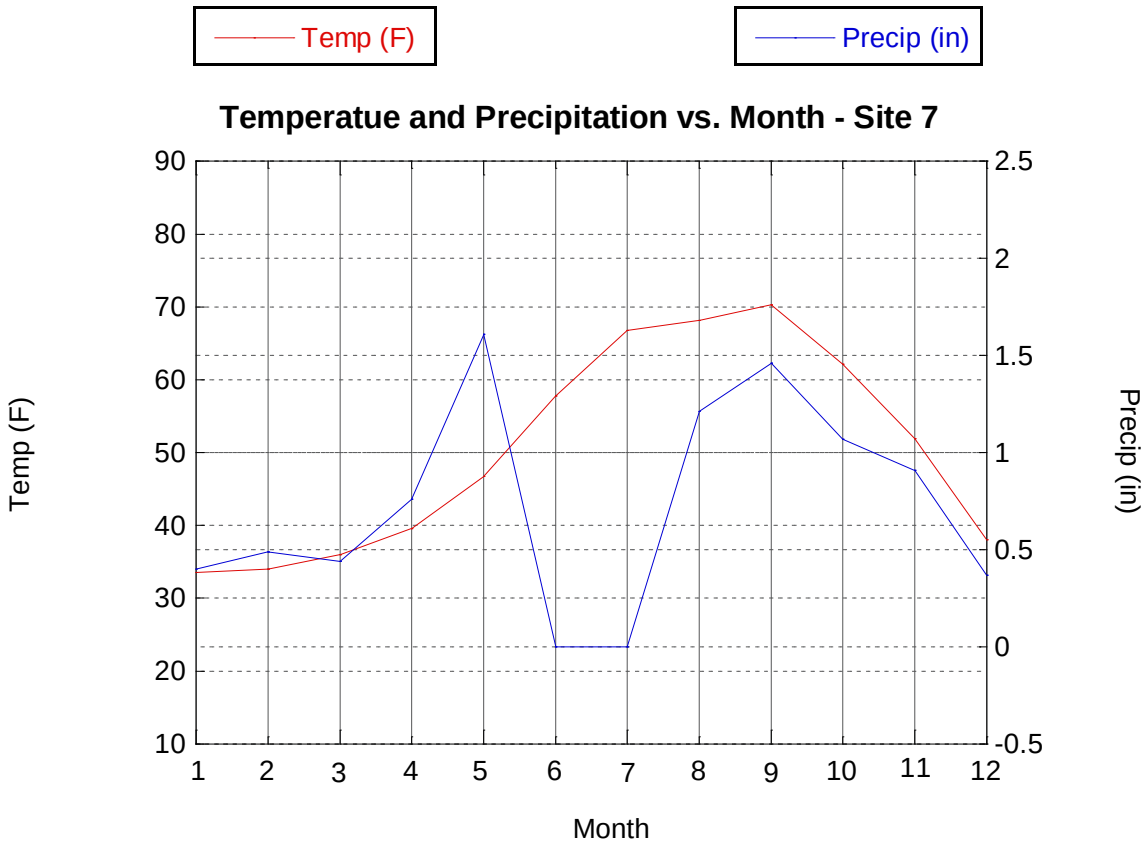
Temp (F)
Precip (in)
Temperatue and Precipitation vs. Month - Site 7
Temp (F)
Precip (in)
Month
90
80
70
60
50
40
30
20
10
2.5
2
1.5
1
0.5
0
-0.5
1
2
3
4
5
6
7
8
9
10
11
12