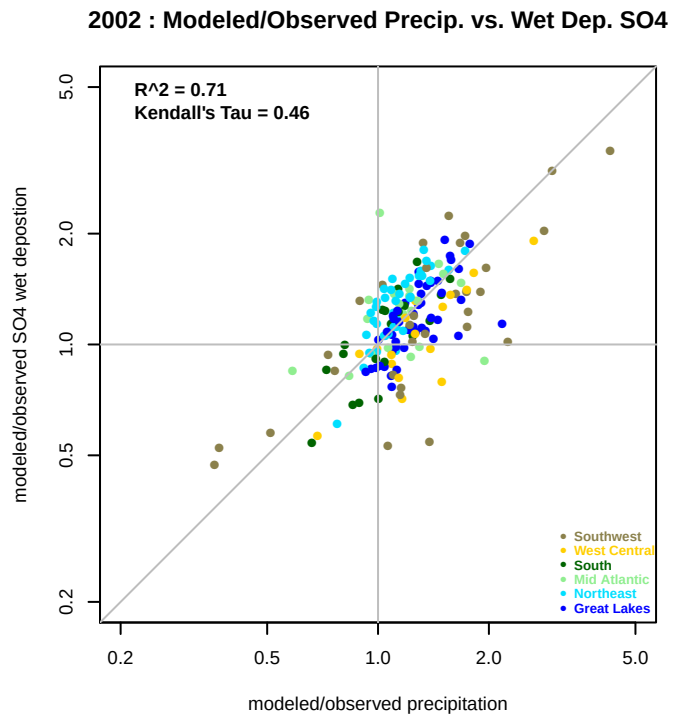
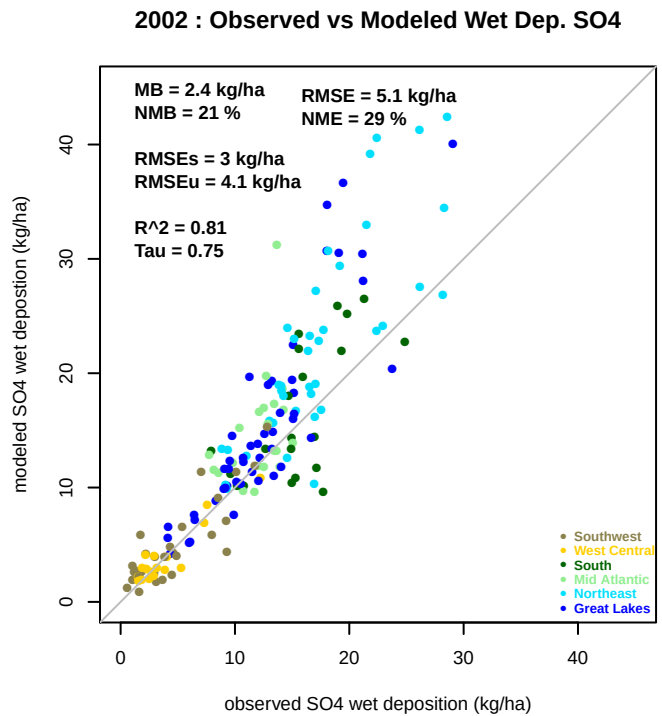
Figure. S4.

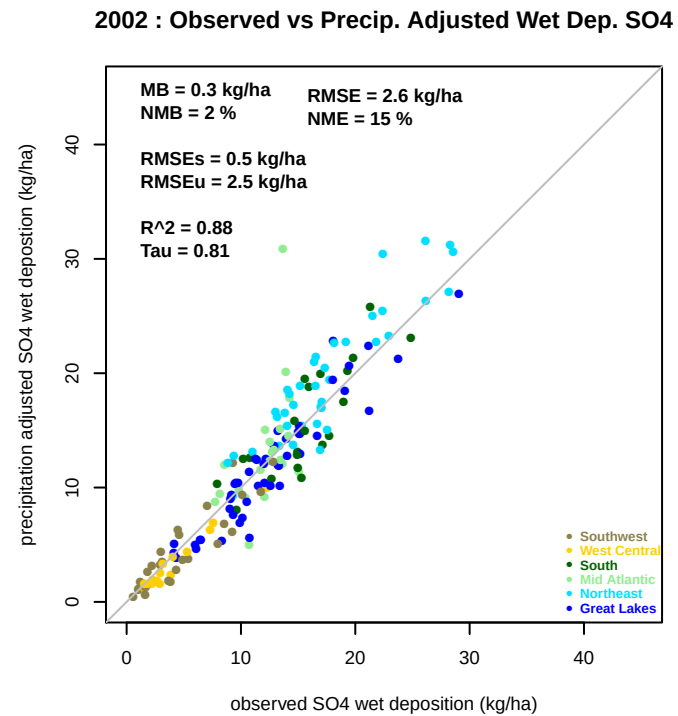
Right: Scatter plot of the ratio of observed/modeled precipitation versus the ratio of observed/modeled $SO_4^=$ wet deposition. The colors indicate the various regions defined in Fig. S3.

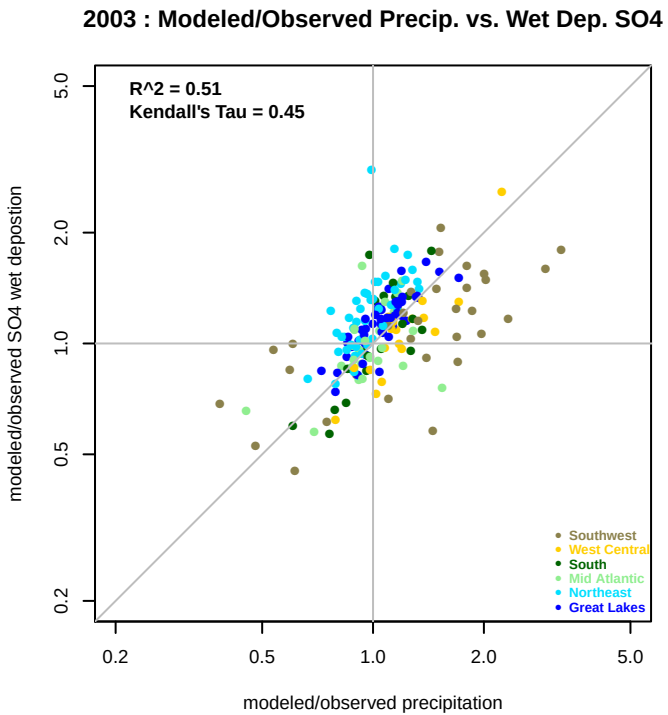
Middle: Scatter plot of NTN observed versus CMAQ 12-km estimated $SO_4^=$ wet deposition. The colors indicate the various regions defined in Fig. S3.

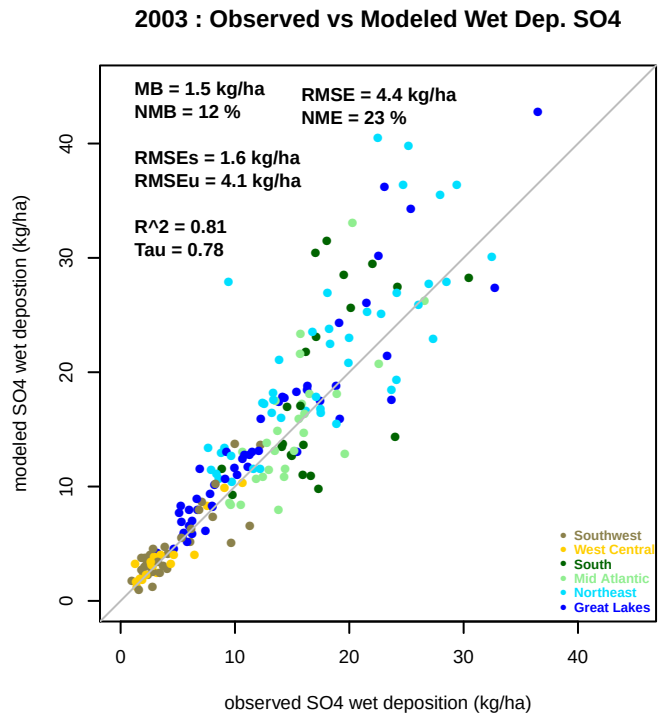
Left: Scatter plot NTN observed versus CMAQ 12-km estimated $SO_4^=$ wet deposition (kg/ha) that has been adjusted for precipitation bias. The colors indicate the various regions defined in Fig. S3.

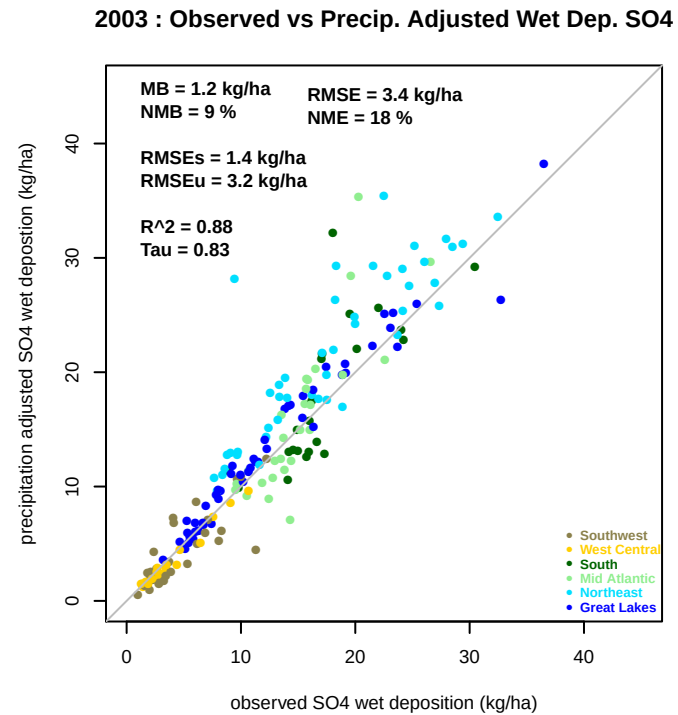

2002 : Modeled/Observed Precip. vs. Wet Dep. SO4
R^2 = 0.71
Kendall's Tau = 0.46
modeled/observed SO4 wet depostion
modeled/observed precipitation
0.2
0.5
1.0
2.0
5.0
Southwest
West Central
South
Mid Atlantic
Northeast
Great Lakes


2002 : Observed vs Modeled Wet Dep. SO4
MB = 2.4 kg/ha
NMB = 21 %
RMSE = 5.1 kg/ha
NME = 29 %
RMSEs = 3 kg/ha
RMSEu = 4.1 kg/ha
R^2 = 0.81
Tau = 0.75
modeled SO4 wet depostion (kg/ha)
observed SO4 wet deposition (kg/ha)
0
10
20
30
40
Southwest
West Central
South
Mid Atlantic
Northeast
Great Lakes

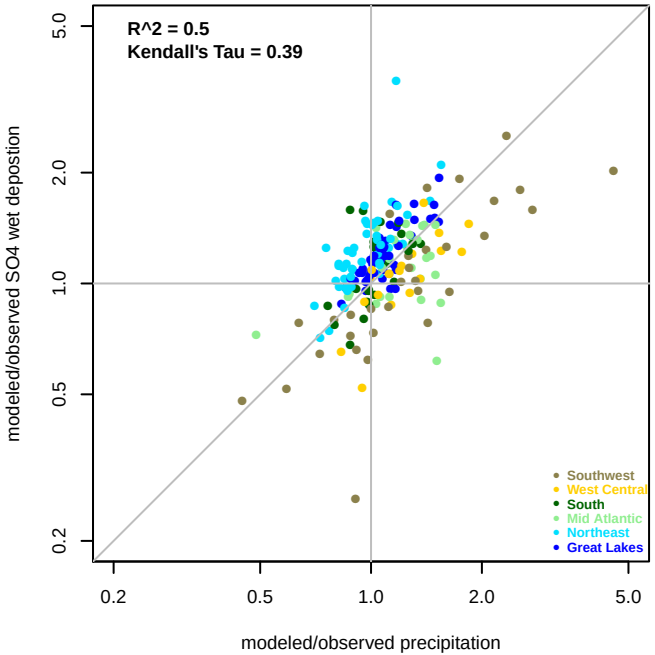

2002 : Observed vs Precip. Adjusted Wet Dep. SO4
MB = 0.3 kg/ha
NMB = 2 %
RMSE = 2.6 kg/ha
NME = 15 %
RMSEs = 0.5 kg/ha
RMSEu = 2.5 kg/ha
R^2 = 0.88
Tau = 0.81
precipitation adjusted SO4 wet depostion (kg/ha)
observed SO4 wet deposition (kg/ha)
0
10
20
30
40
Southwest
West Central
South
Mid Atlantic
Northeast
Great Lakes


2003 : Modeled/Observed Precip. vs. Wet Dep. SO4
R^2 = 0.51
Kendall's Tau = 0.45
modeled/observed SO4 wet depostion
modeled/observed precipitation
0.2
0.5
1.0
2.0
5.0
Southwest
West Central
South
Mid Atlantic
Northeast
Great Lakes

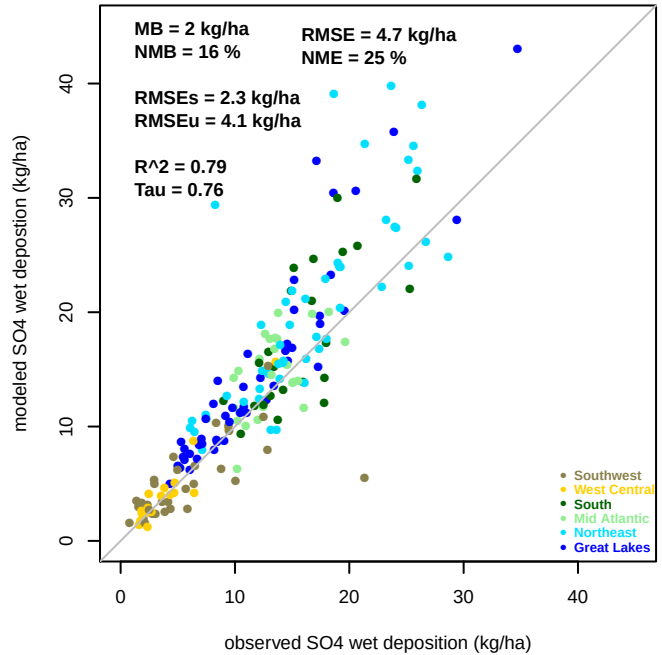

2003 : Observed vs Modeled Wet Dep. SO4
MB = 1.5 kg/ha
NMB = 12 %
RMSE = 4.4 kg/ha
NME = 23 %
RMSEs = 1.6 kg/ha
RMSEu = 4.1 kg/ha
R^2 = 0.81
Tau = 0.78
modeled SO4 wet depostion (kg/ha)
observed SO4 wet deposition (kg/ha)
0
10
20
30
40
Southwest
West Central
South
Mid Atlantic
Northeast
Great Lakes


2003 : Observed vs Precip. Adjusted Wet Dep. SO4
MB = 1.2 kg/ha
NMB = 9 %
RMSE = 3.4 kg/ha
NME = 18 %
RMSEs = 1.4 kg/ha
RMSEu = 3.2 kg/ha
R^2 = 0.88
Tau = 0.83
precipitation adjusted SO4 wet depostion (kg/ha)
observed SO4 wet deposition (kg/ha)
0
10
20
30
40
Southwest
West Central
South
Mid Atlantic
Northeast
Great Lakes

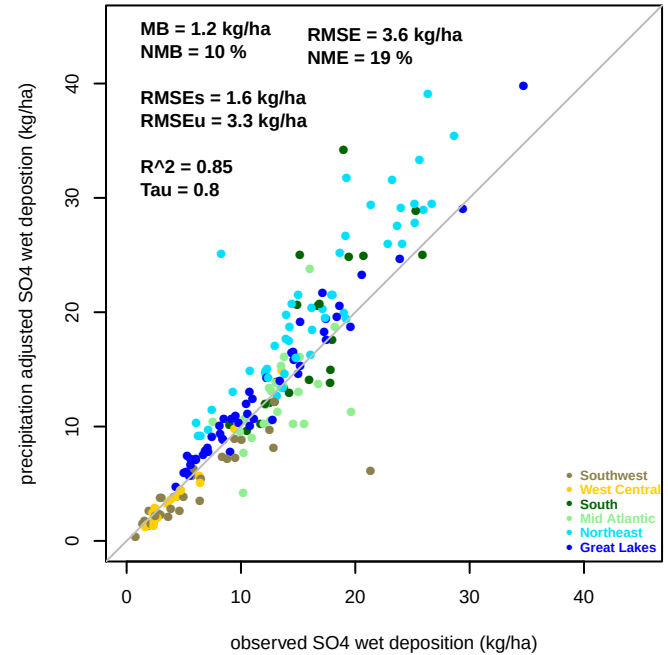
2004 : Modeled/Observed Precip. vs. Wet Dep. SO4



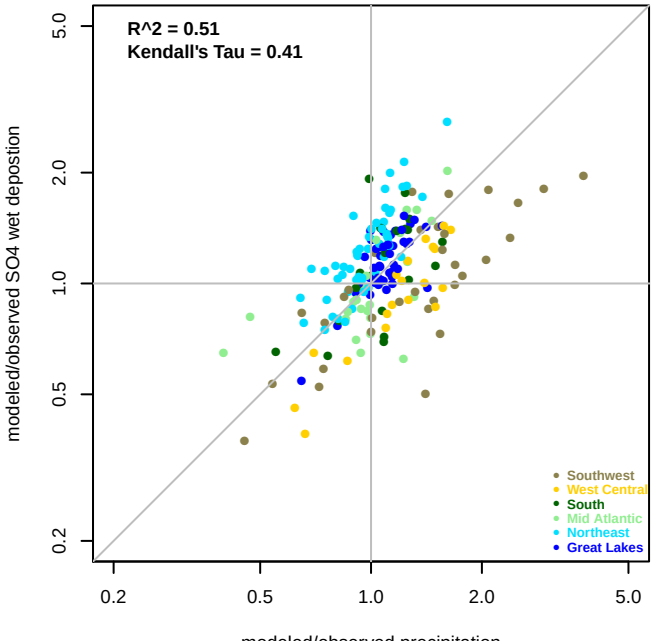
2004 : Observed vs Modeled Wet Dep. SO4



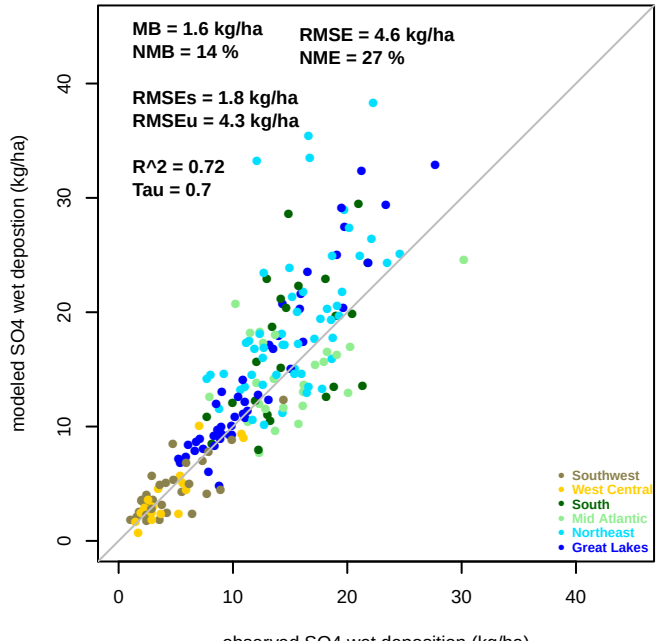
2004 : Observed vs Precip. Adjusted Wet Dep. SO4



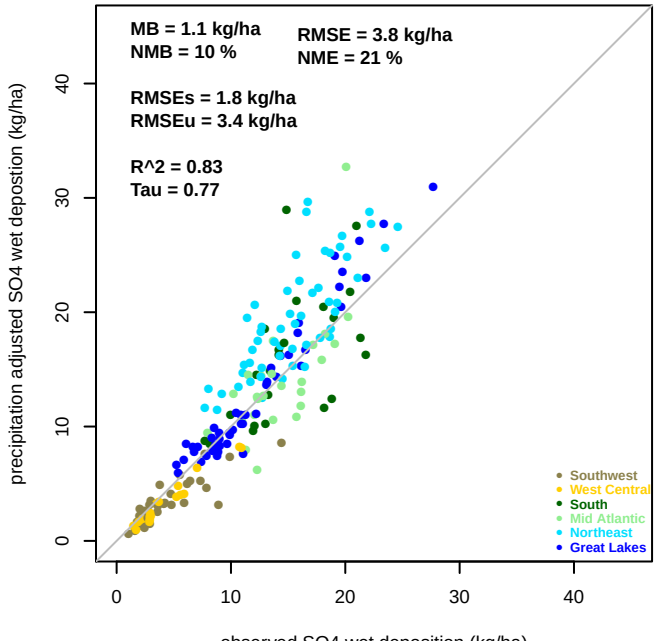
2005 : Modeled/Observed Precip. vs. Wet Dep. SO4



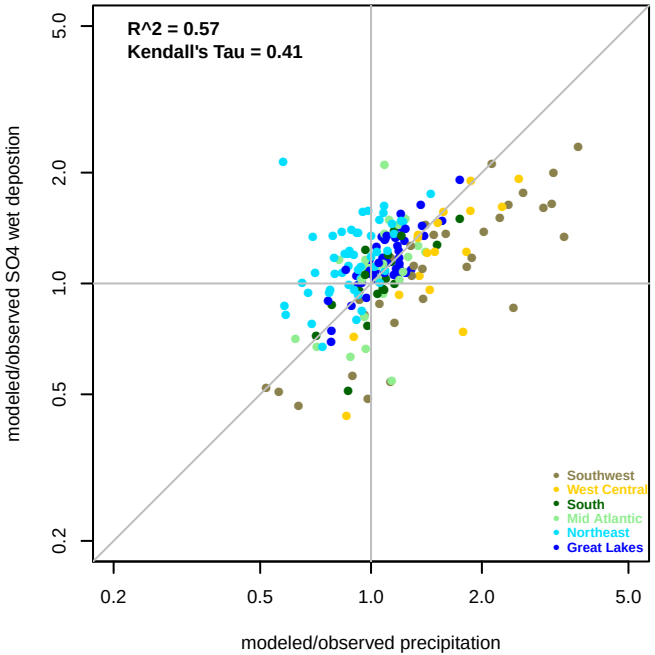
2005 : Observed vs Modeled Wet Dep. SO4



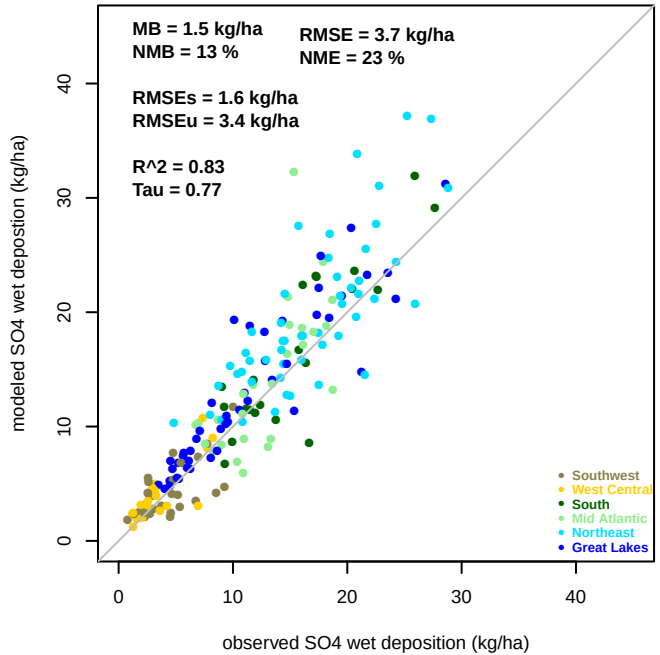
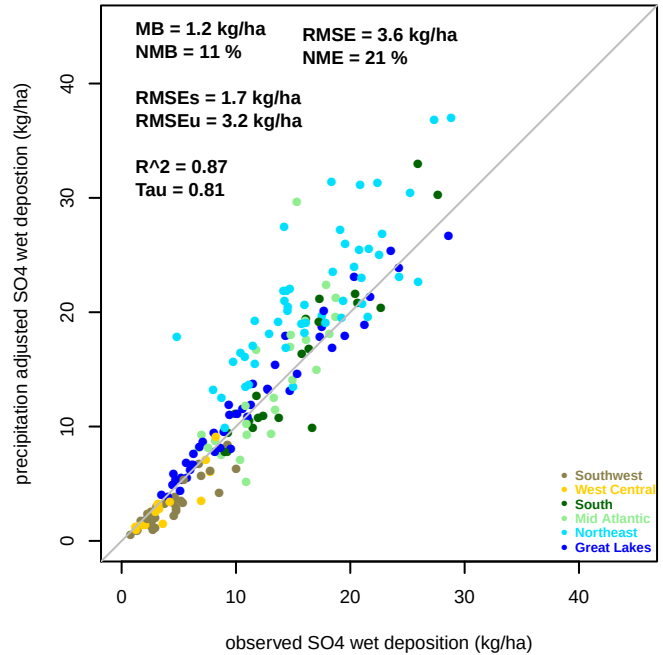
2005 : Observed vs Precip. Adjusted Wet Dep. SO4



2006 : Modeled/Observed Precip. vs. Wet Dep. SO4



2006 : Observed vs Modeled Wet Dep. SO4



2006 : Observed vs Precip. Adjusted Wet Dep. SO4