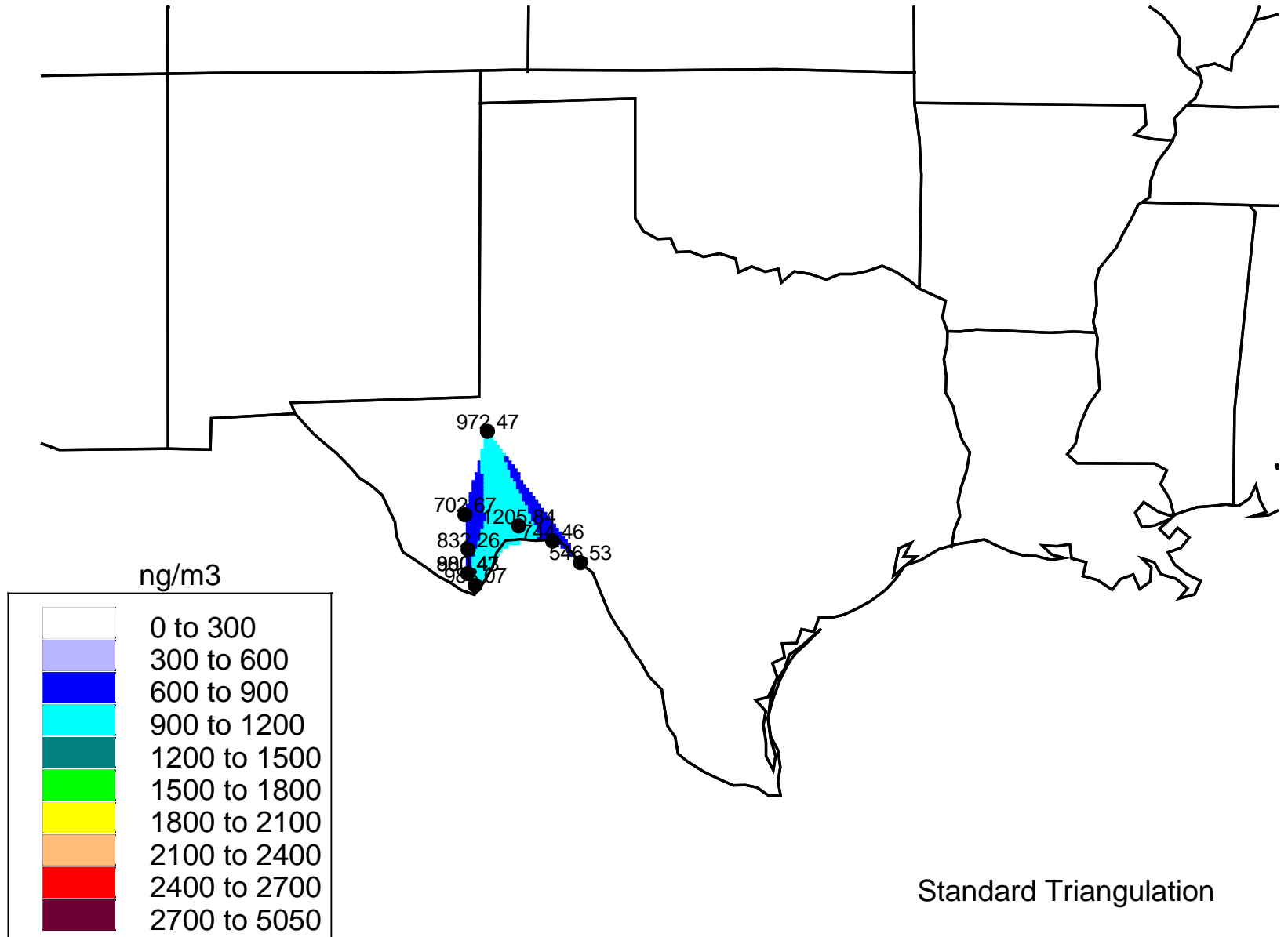


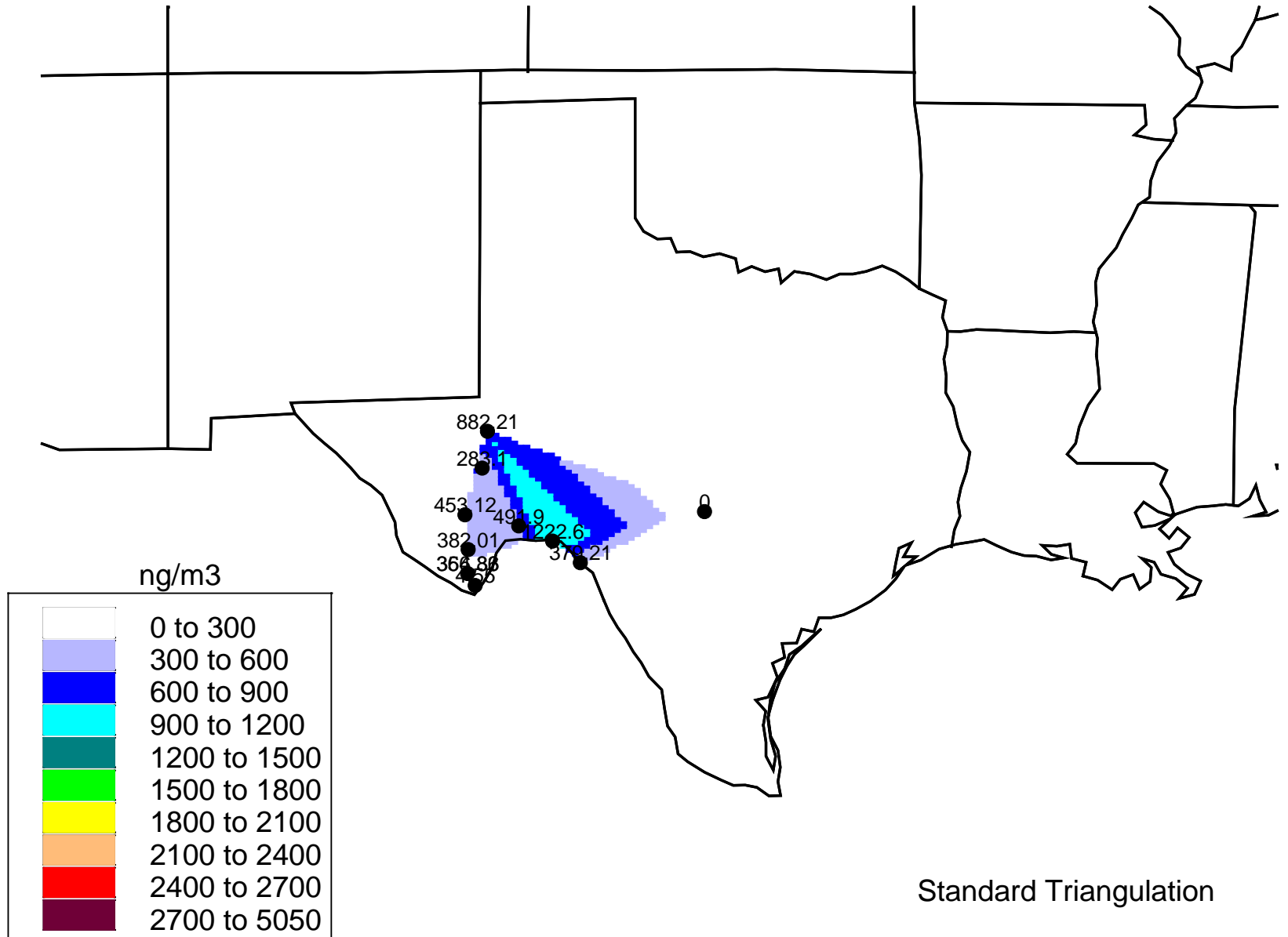
Appendix 8b

Daily maps of fine particulate sulfur concentrations. For IMPROVE sampling days, there are two maps per day, one with BRAVO data only and another which includes IMPROVE data also.

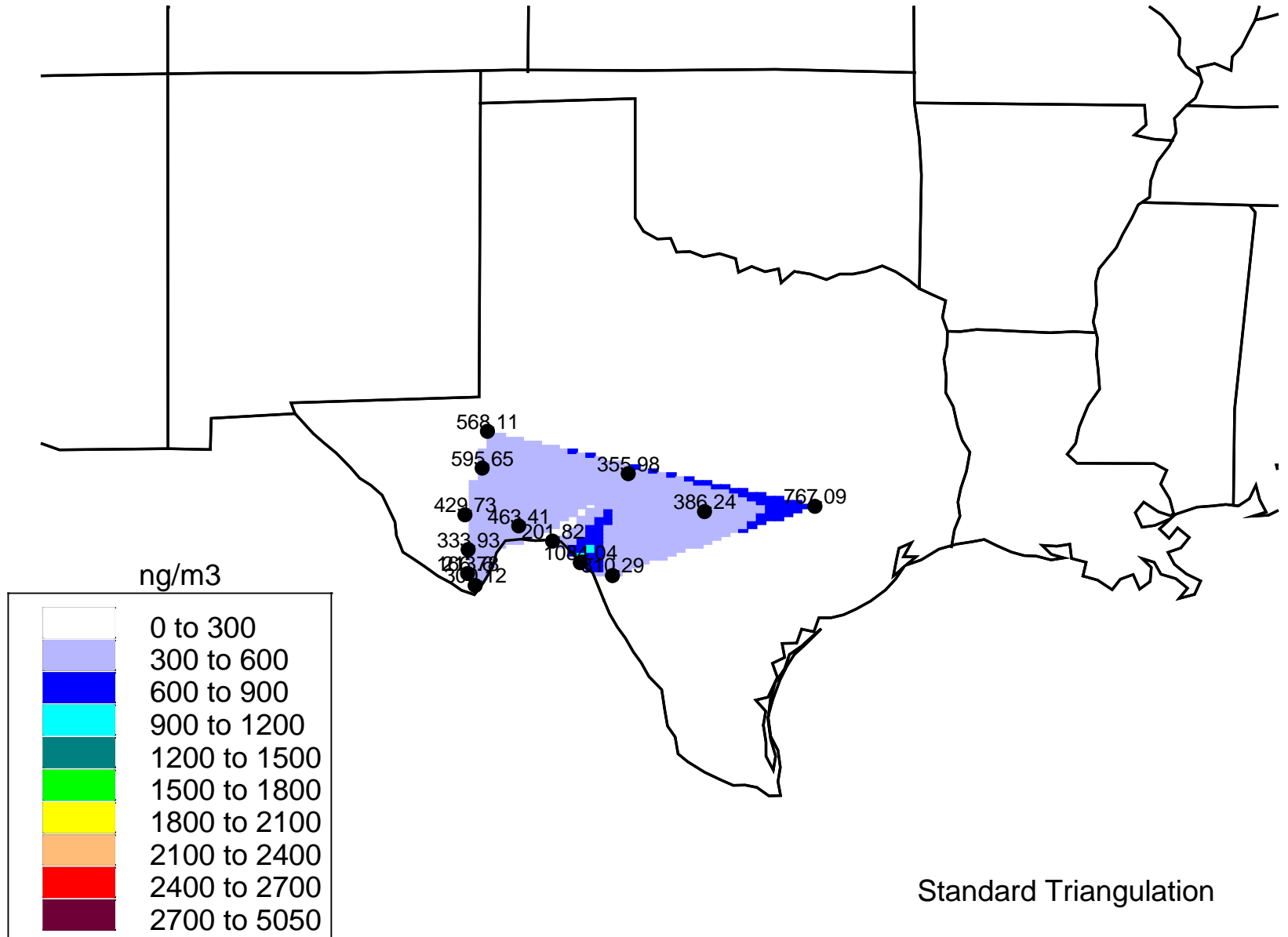
PIXE S on 7/1/1999 (jday 182)



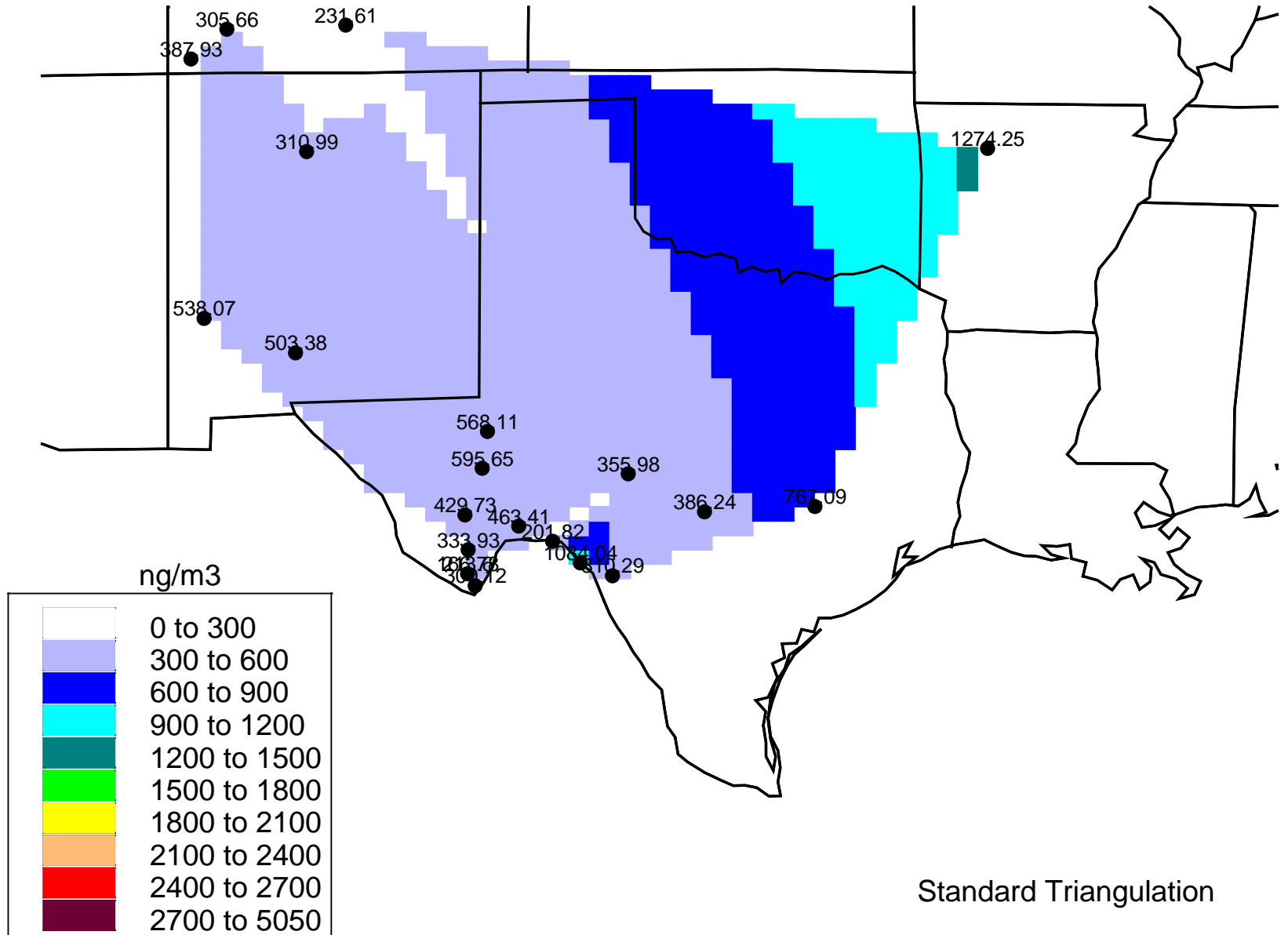
PIXE S on 7/2/1999 (jday 183)



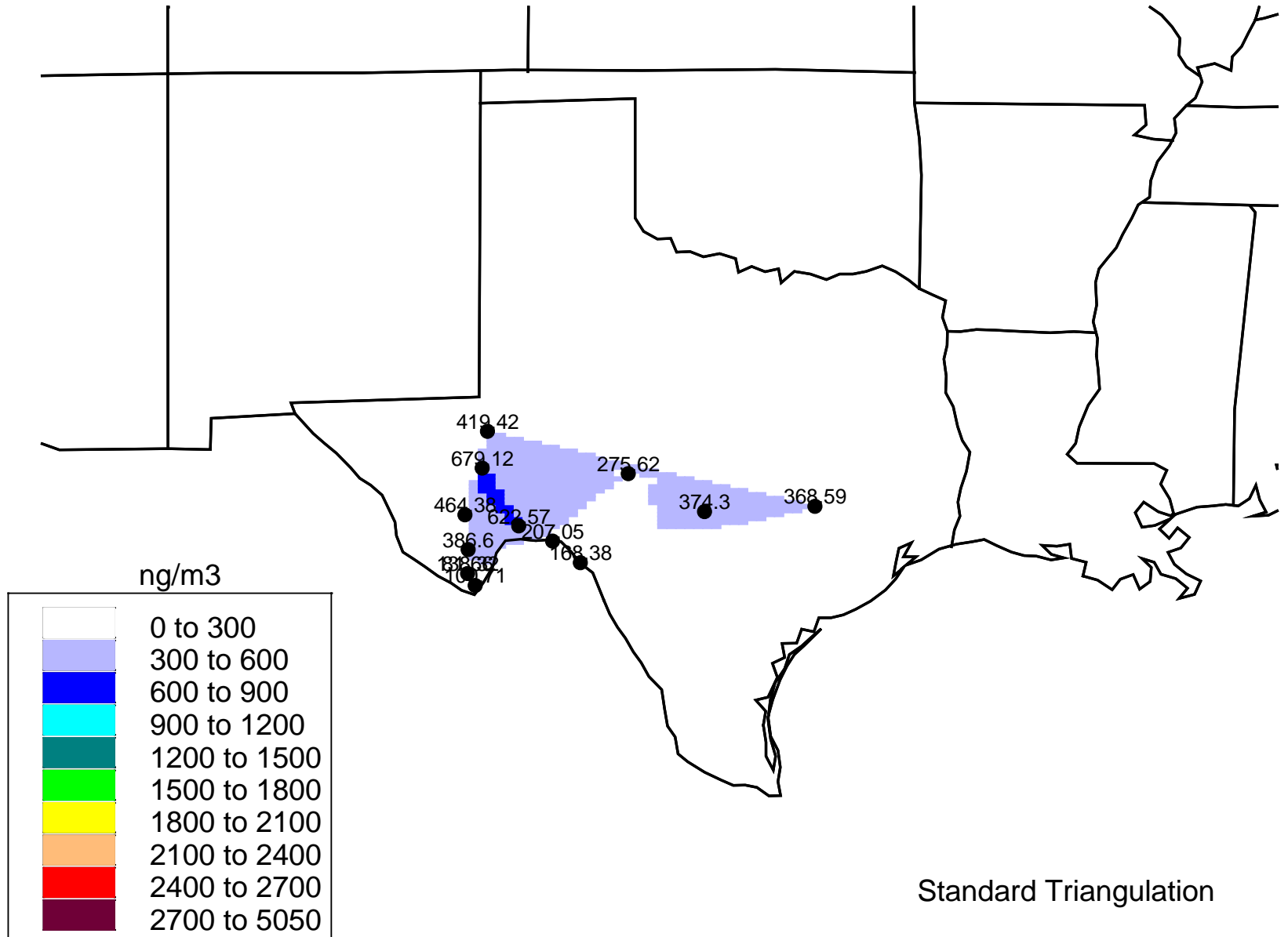
PIXE S on 7/3/1999 (jday 184)



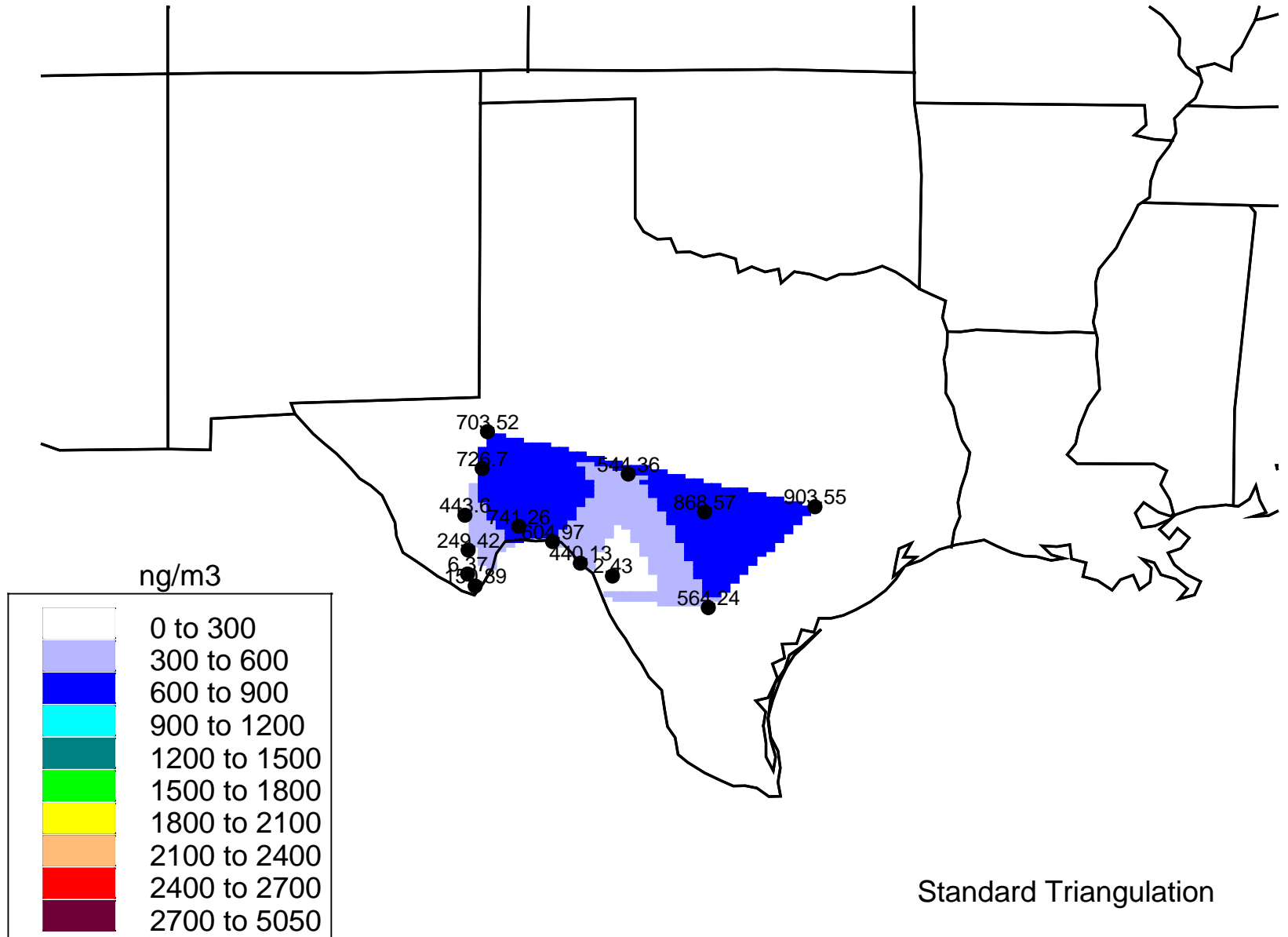
PIXE S on 7/3/1999 (jday 184)



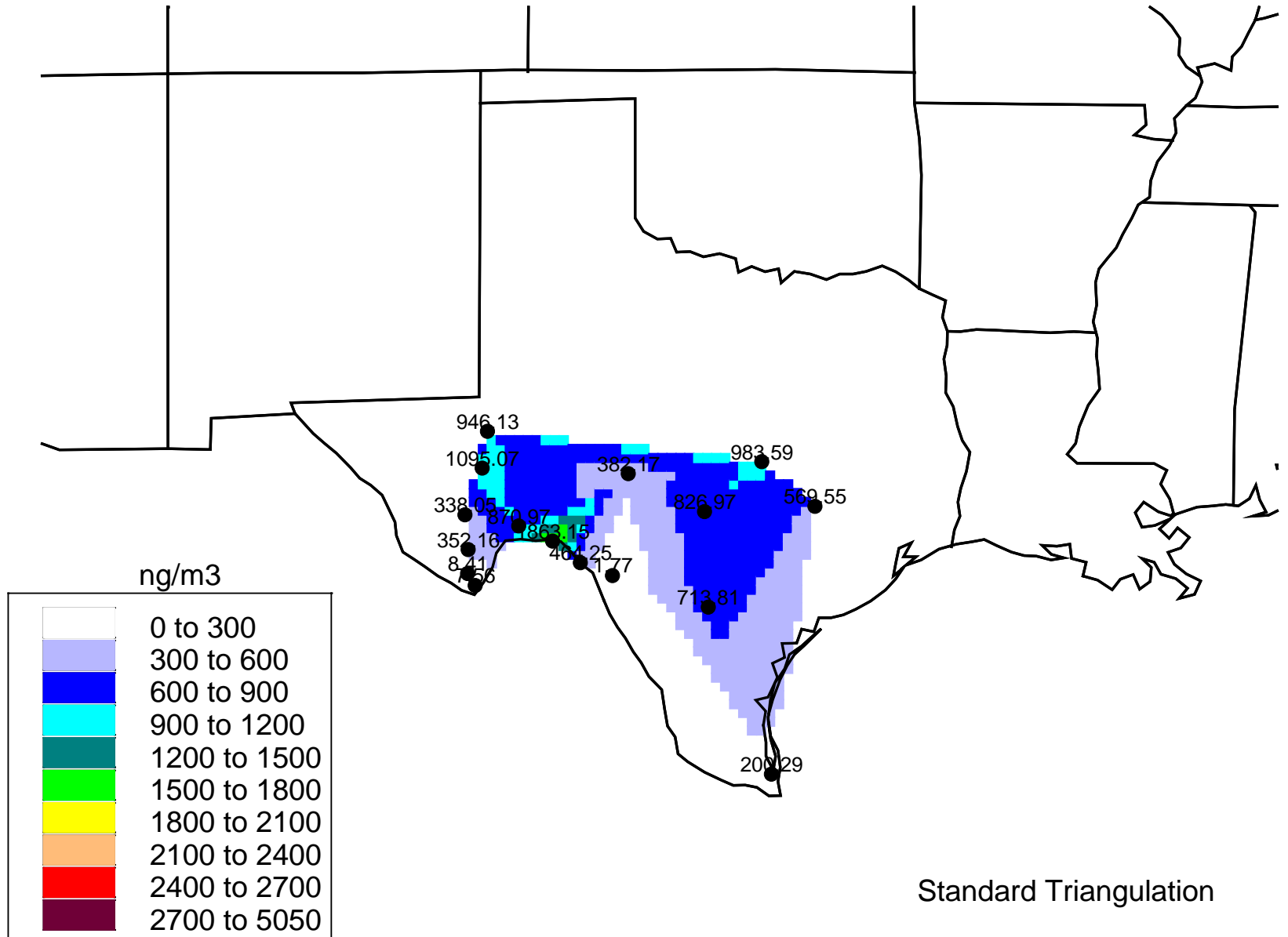
PIXE S on 7/4/1999 (jday 185)



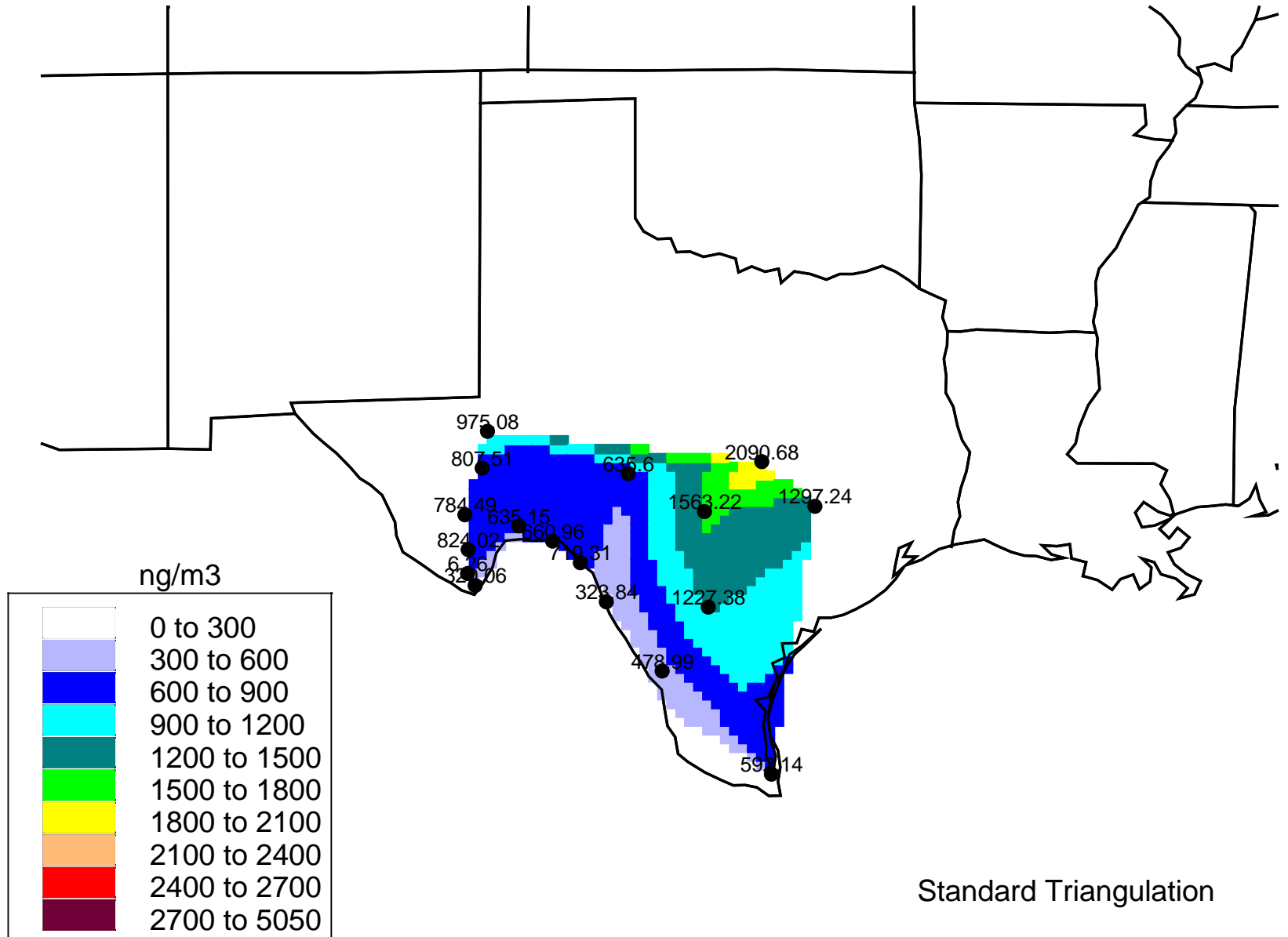
PIXE S on 7/5/1999 (jday 186)



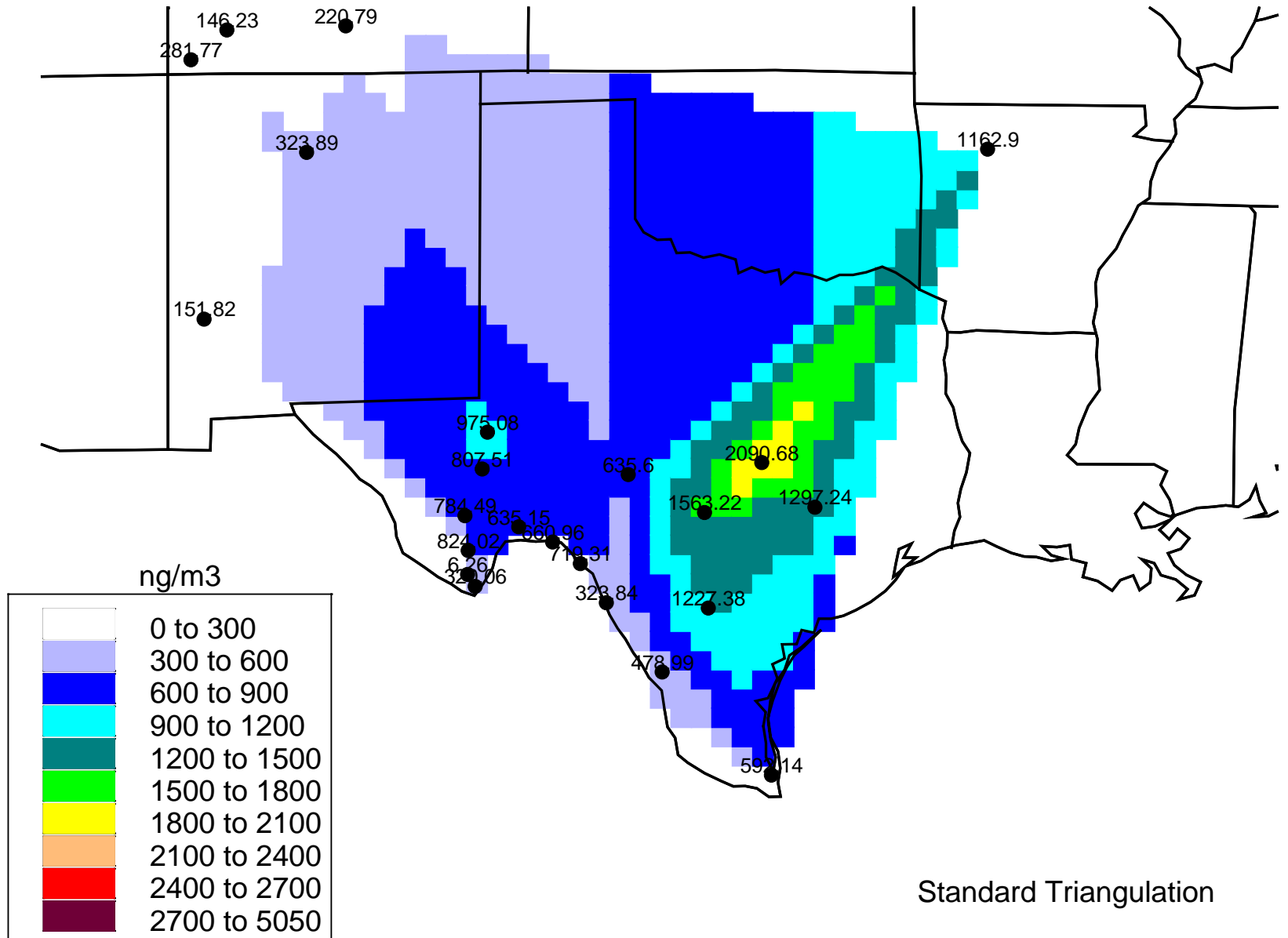
PIXE S on 7/6/1999 (jday 187)



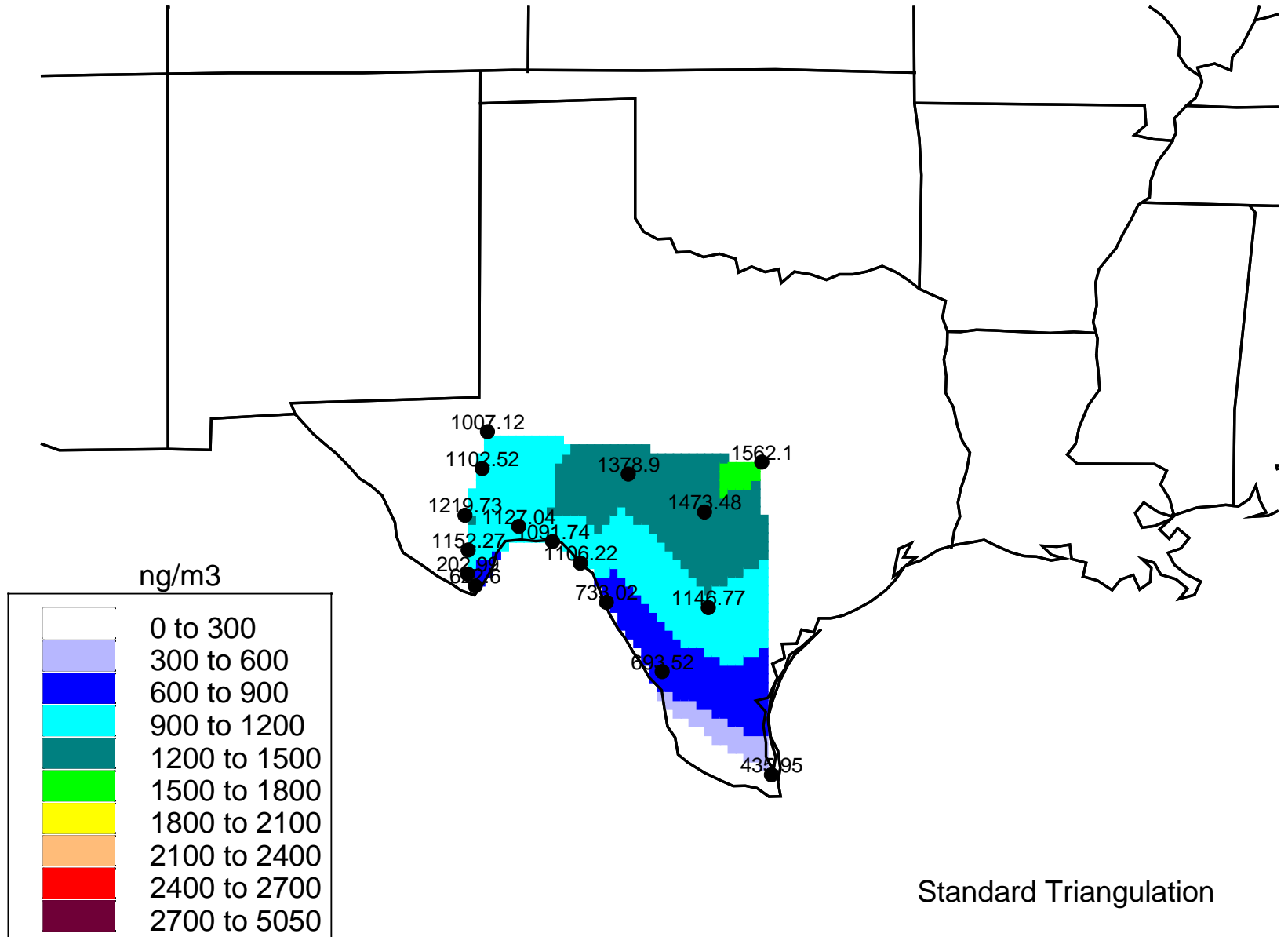
PIXE S on 7/7/1999 (jday 188)



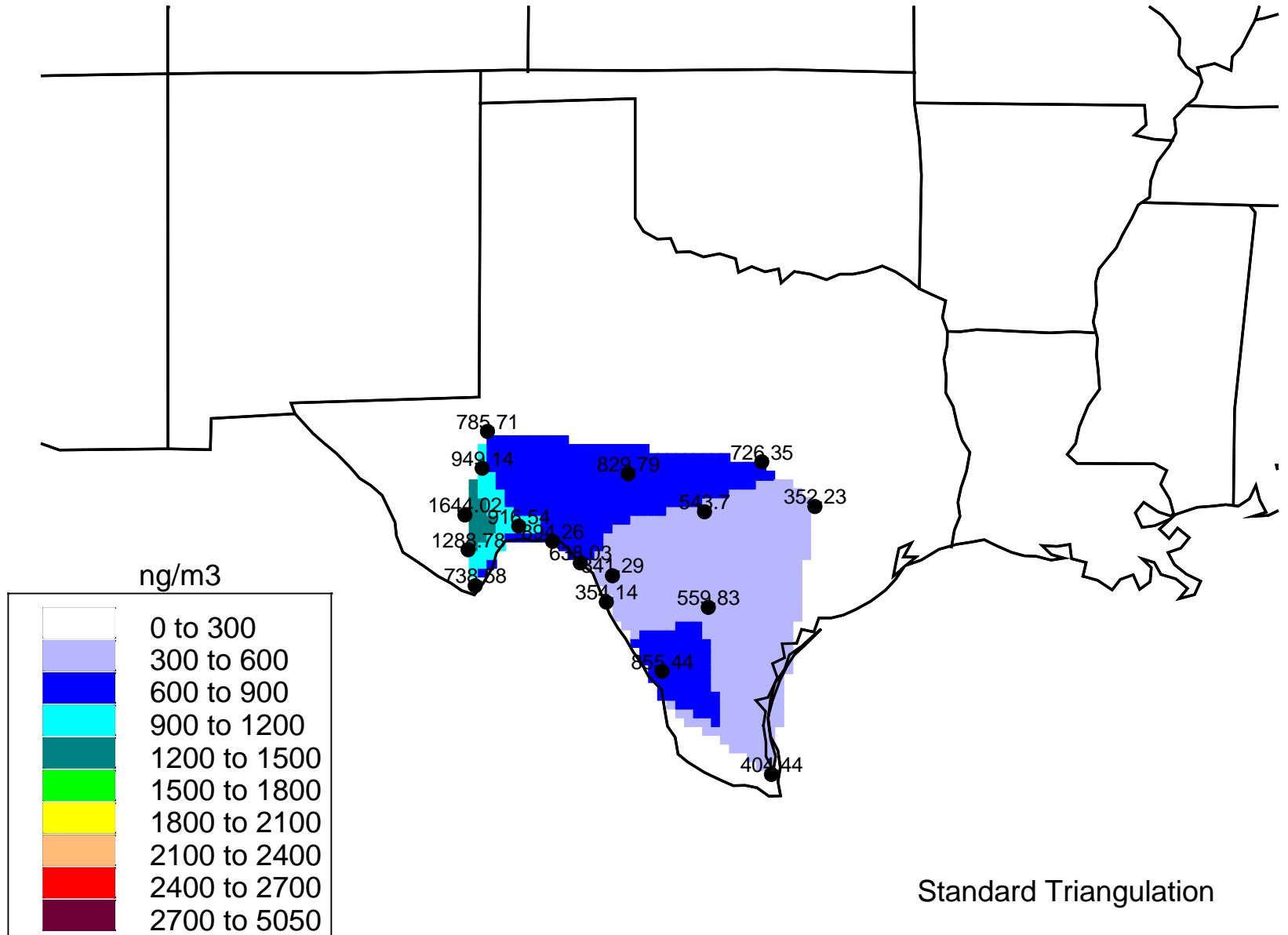
PIXE S on 7/7/1999 (jday 188)



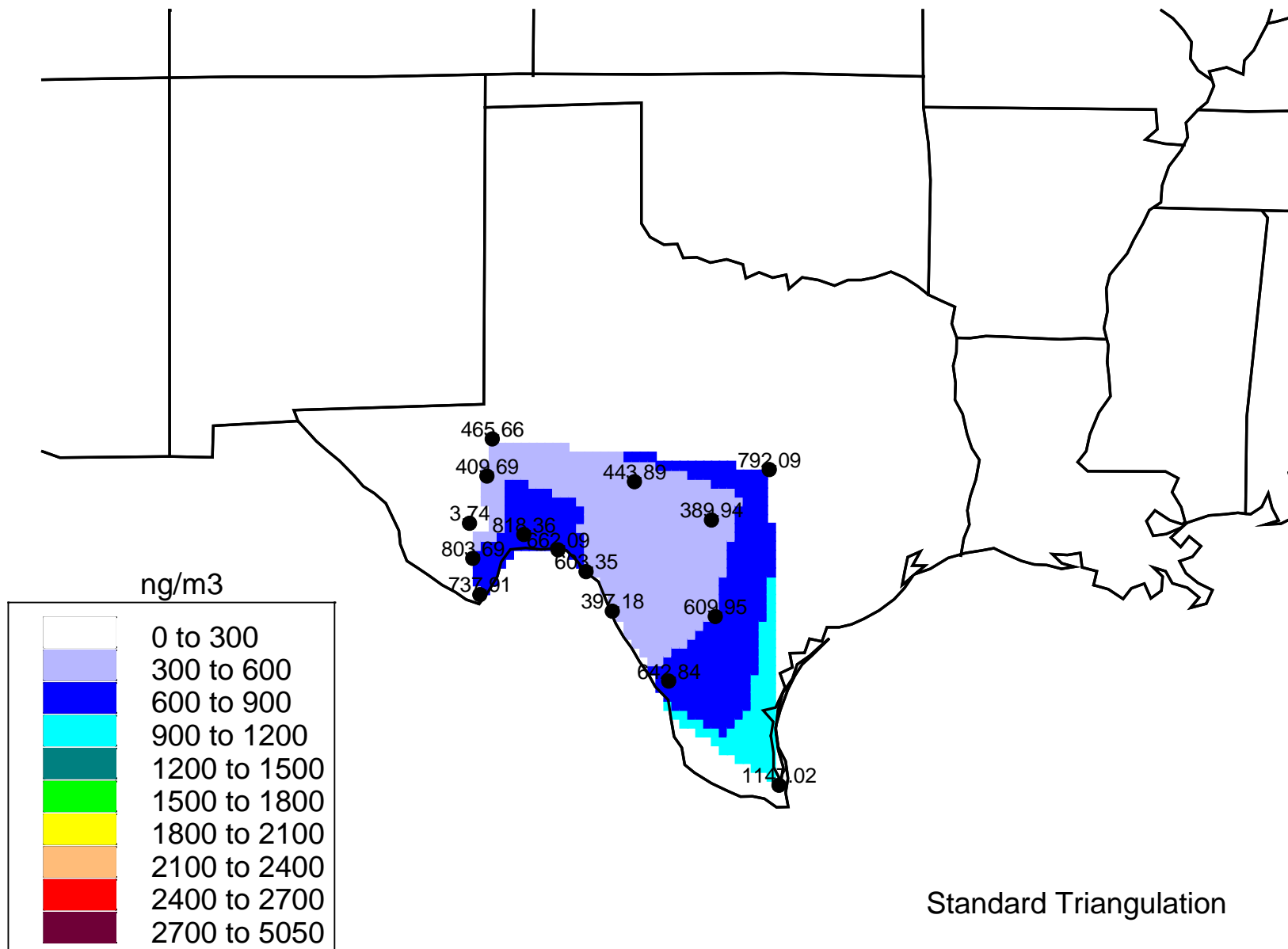
PIXE S on 7/8/1999 (jday 189)



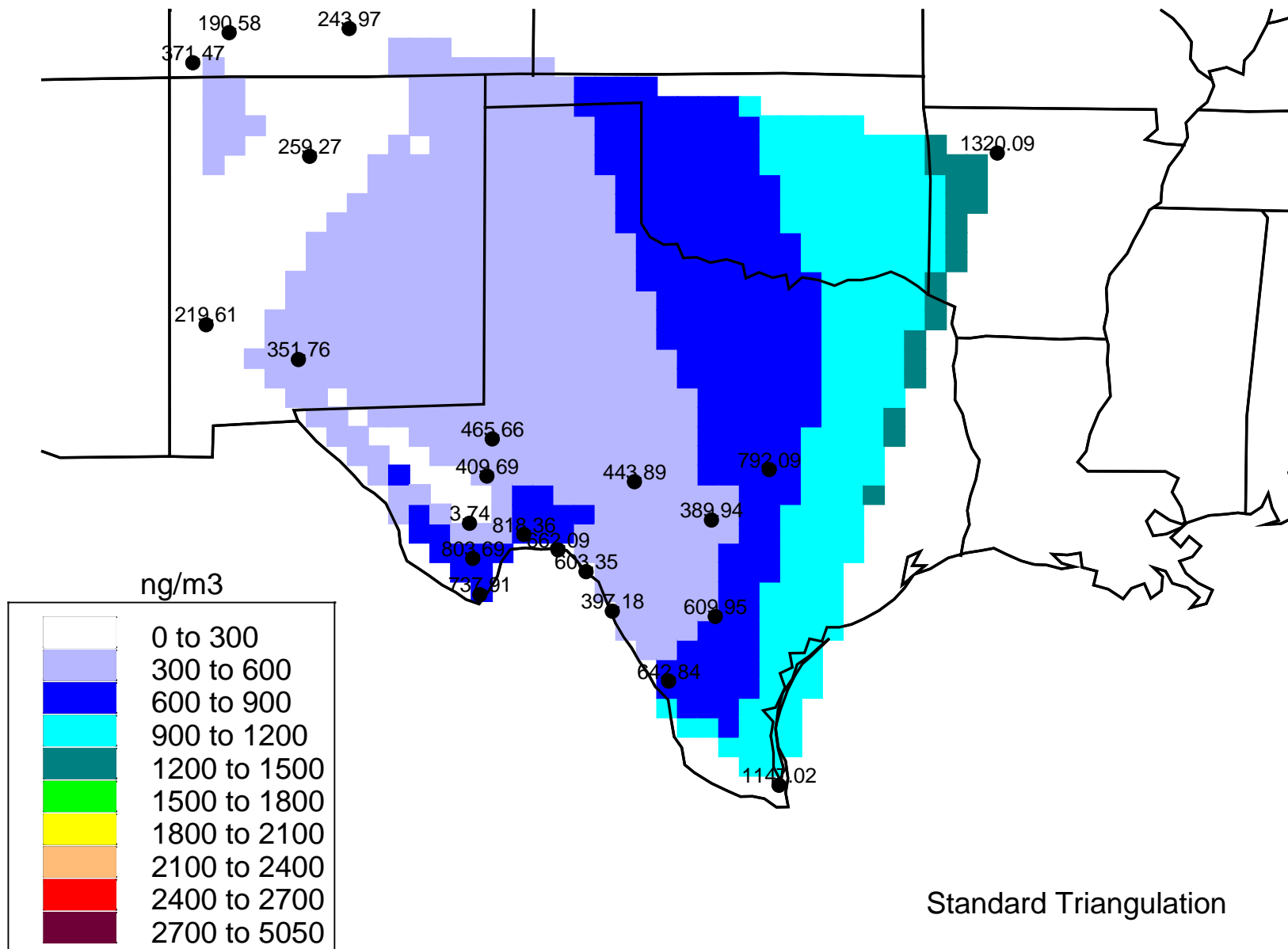
PIXE S on 7/9/1999 (jday 190)



PIXE S on 7/10/1999 (jday 191)



PIXE S on 7/10/1999 (jday 191)



190.58

243.97

371.47

259.27

1320.09

219.61

351.76

465.66

409.69

443.89

792.09

3.74

818.36

389.94

803.69

562.09

603.35

737.91

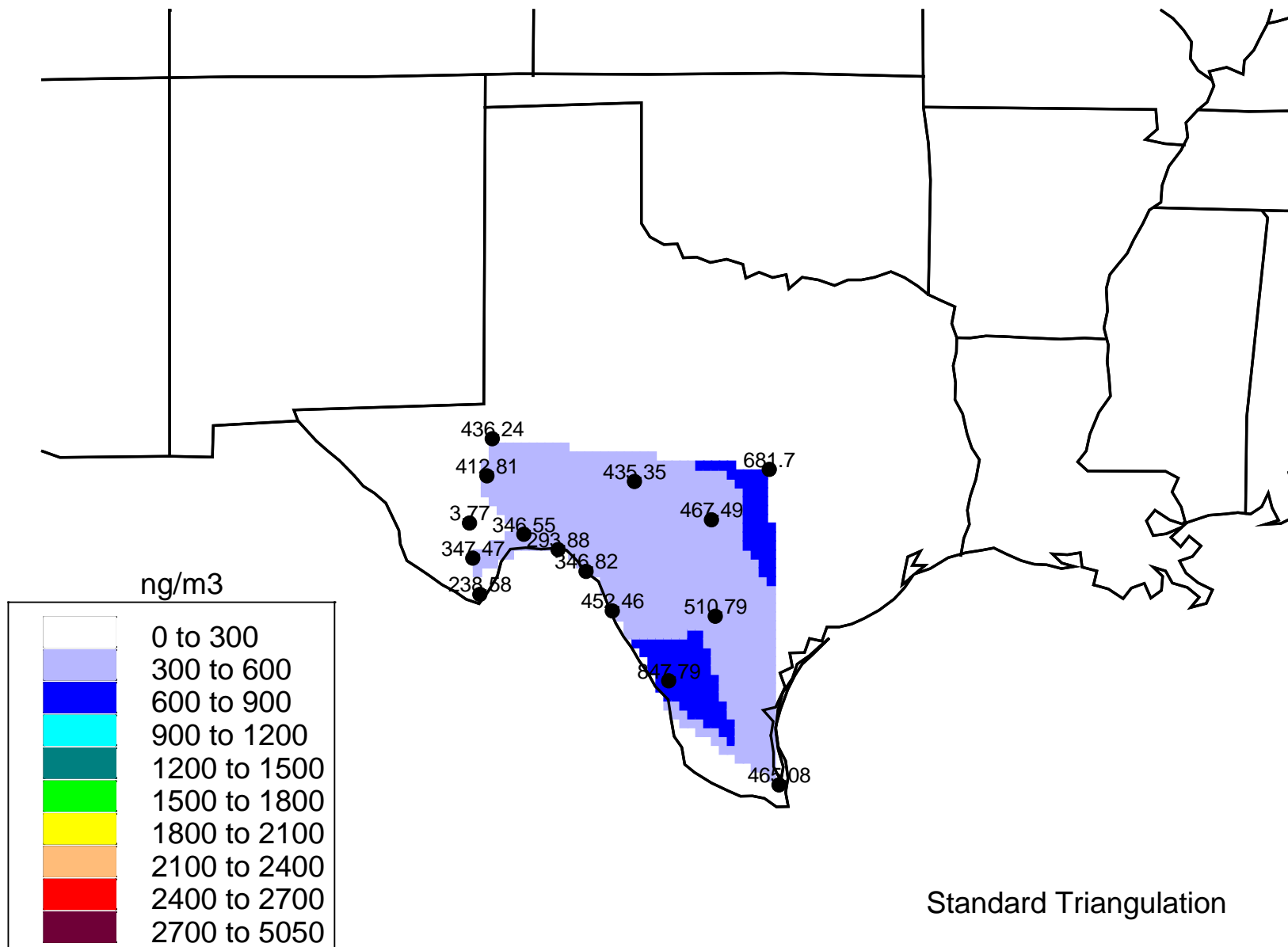
397.18

609.95

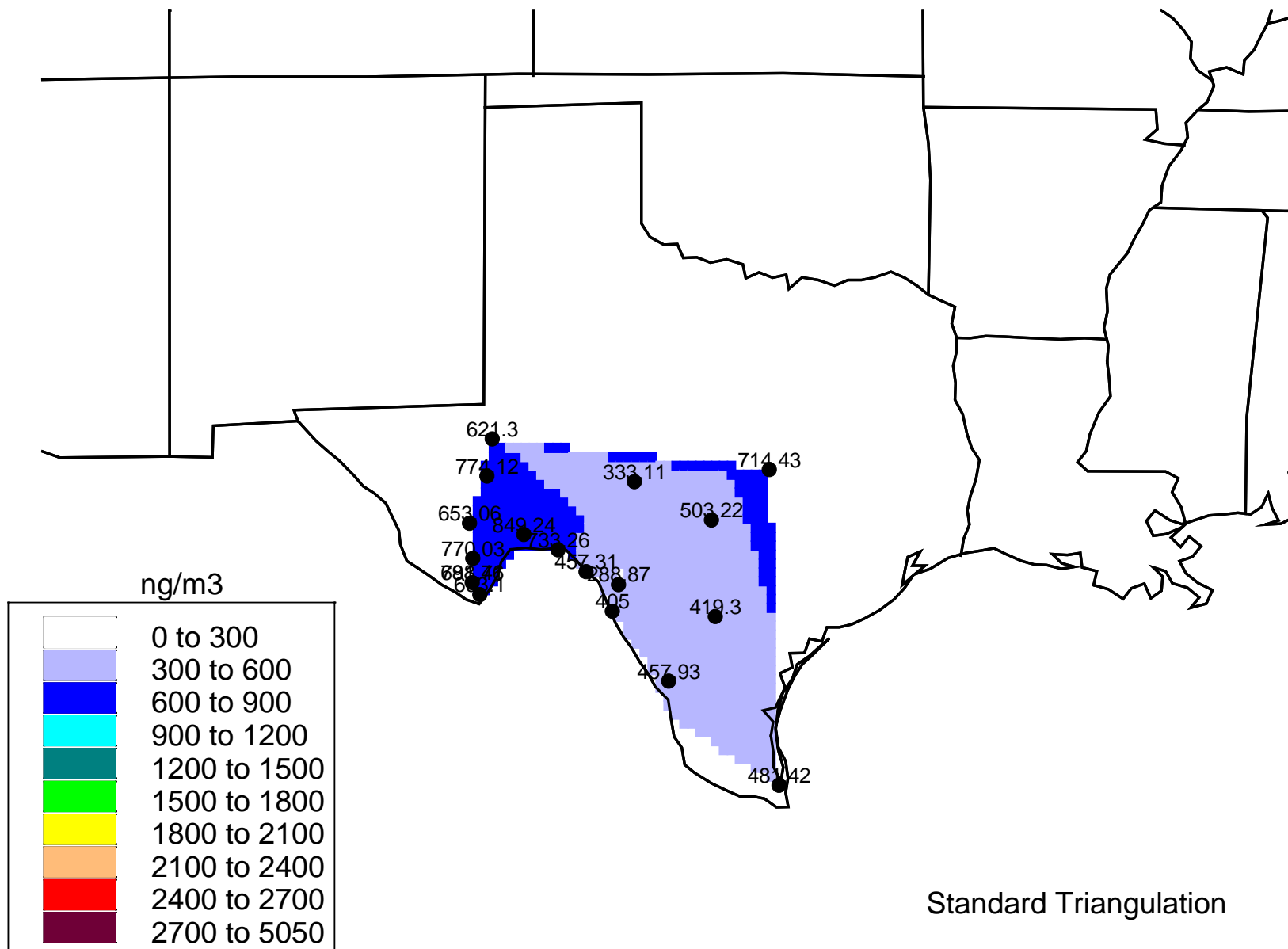
642.84

1147.02

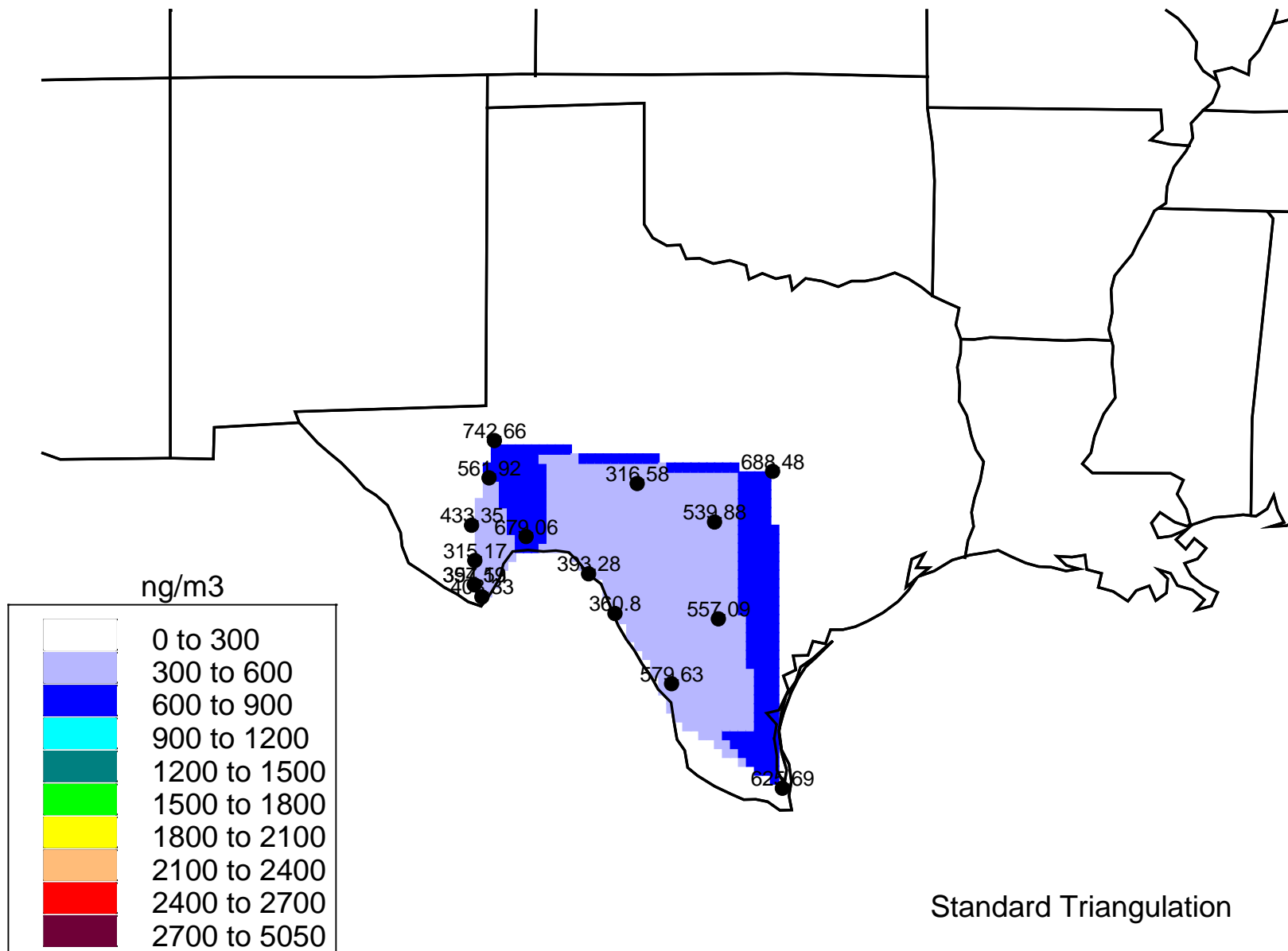
PIXE S on 7/11/1999 (jday 192)



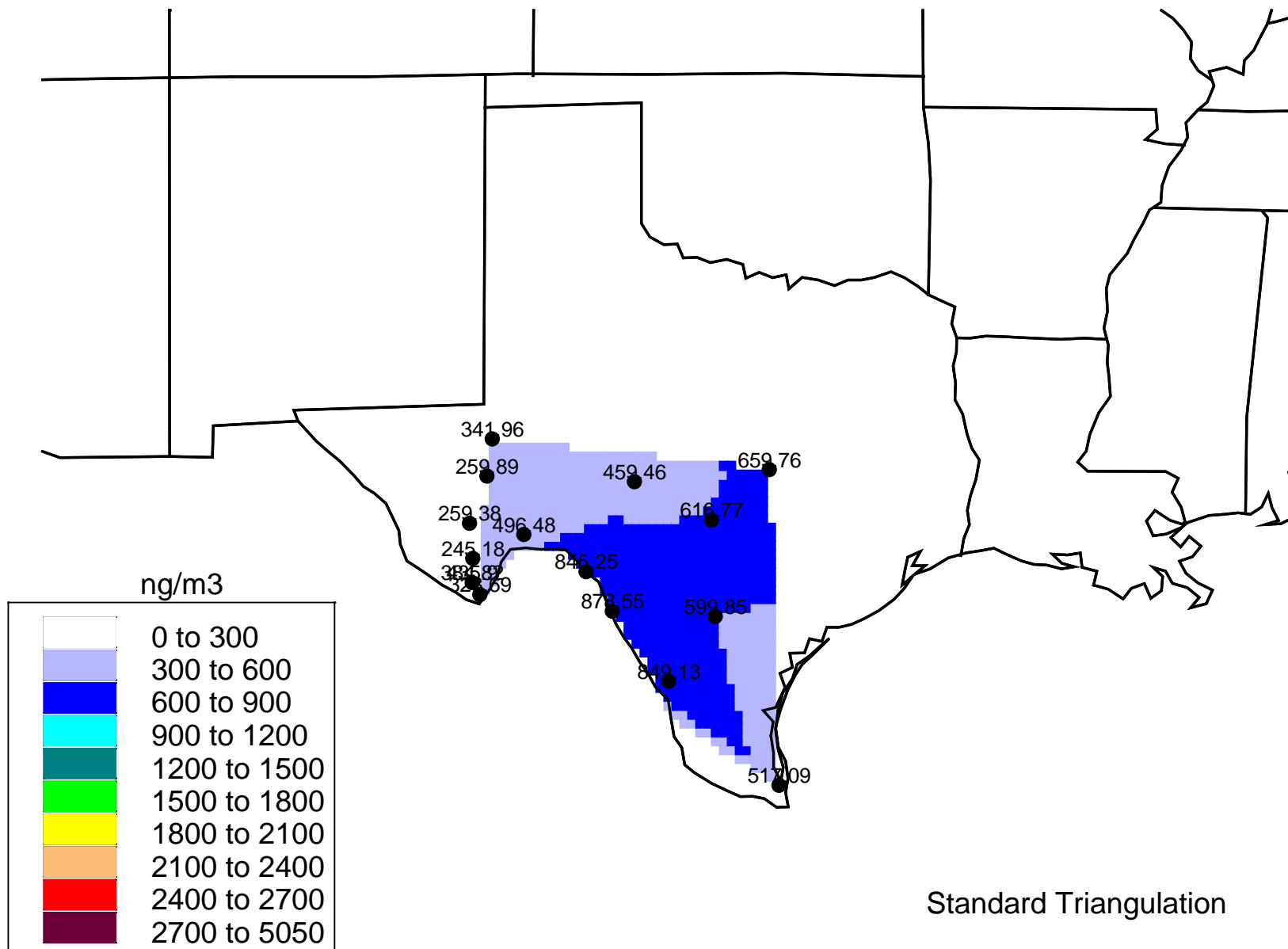
PIXE S on 7/12/1999 (jday 193)



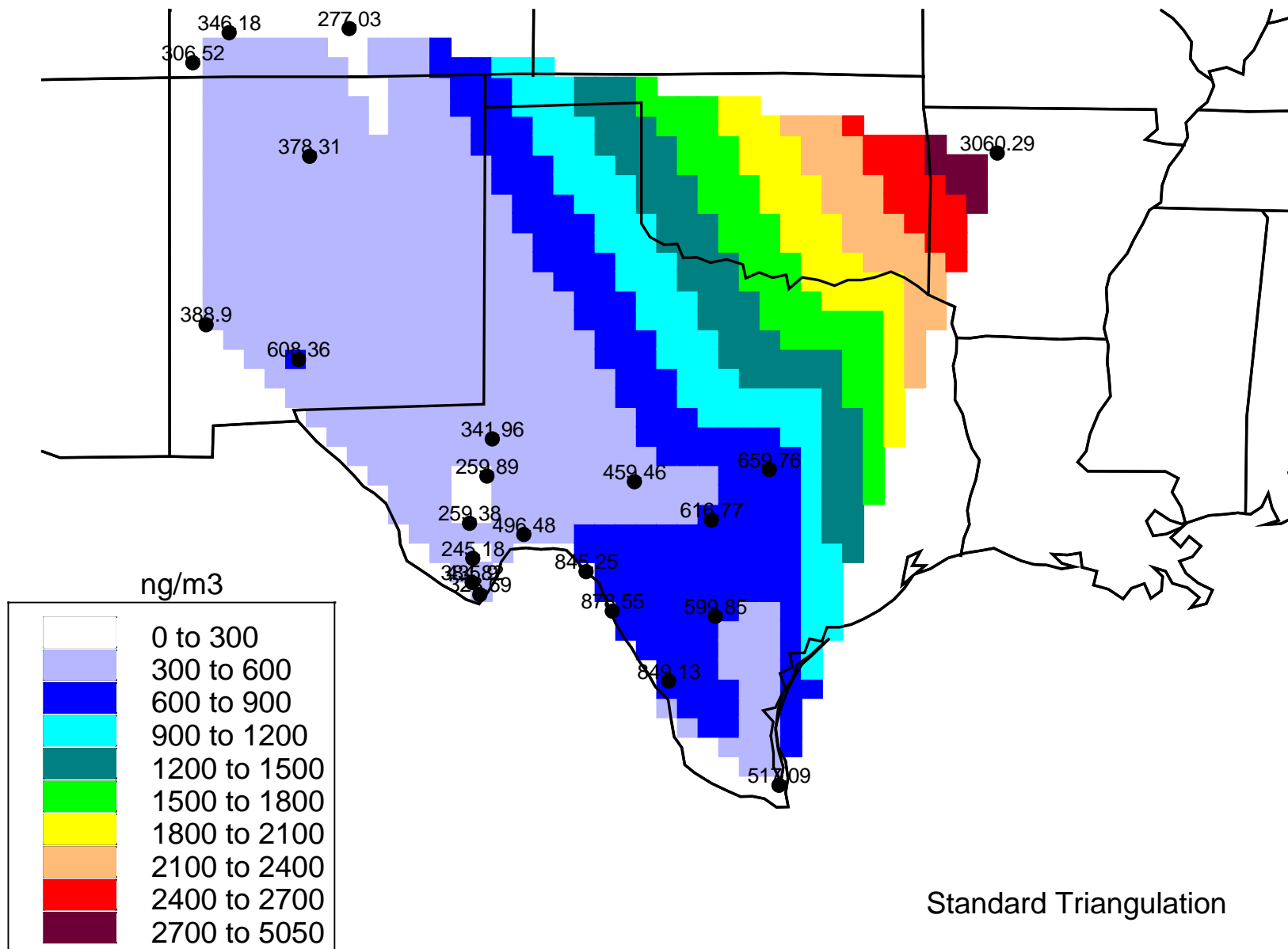
PIXE S on 7/13/1999 (jday 194)



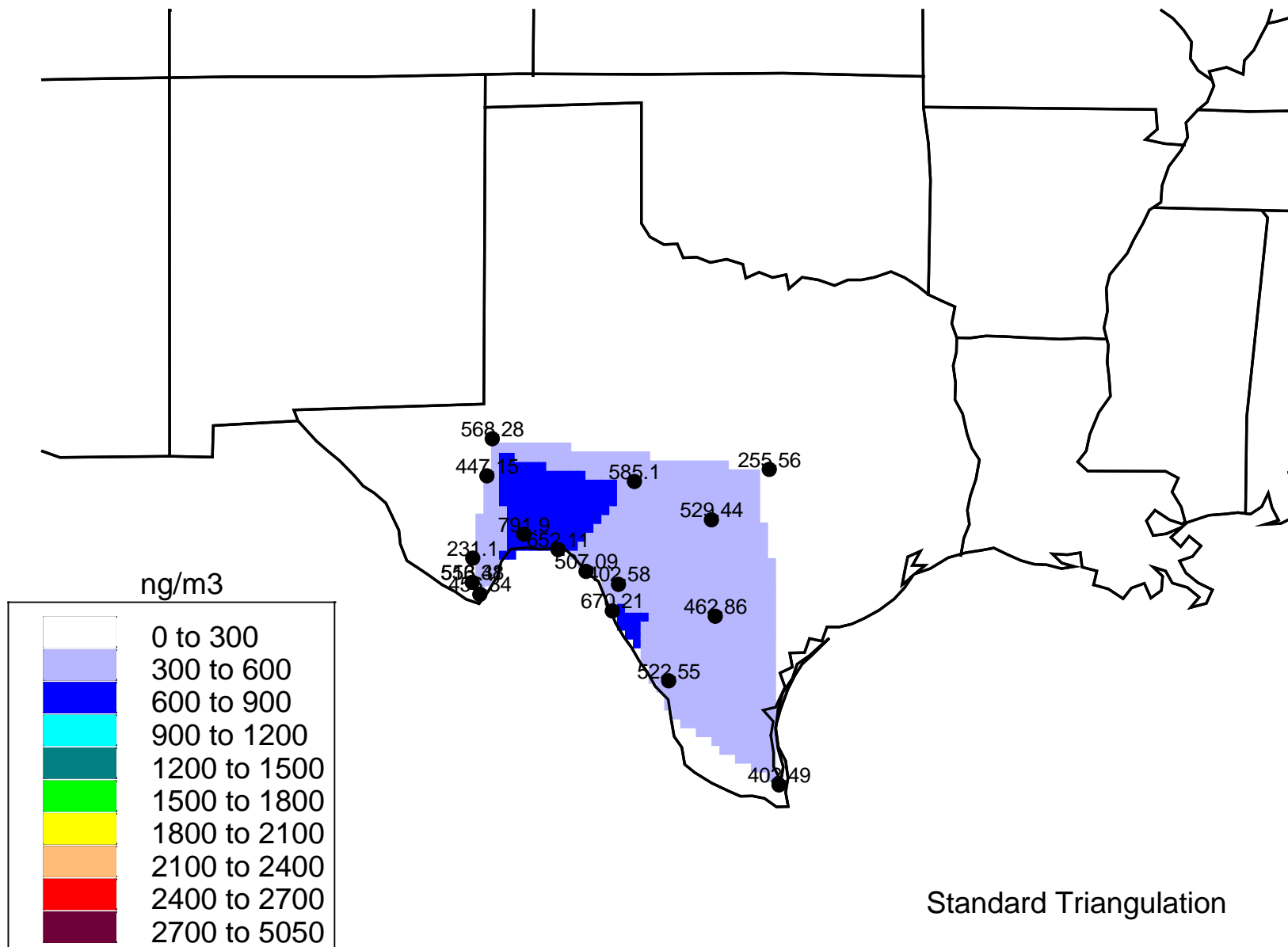
PIXE S on 7/14/1999 (jday 195)



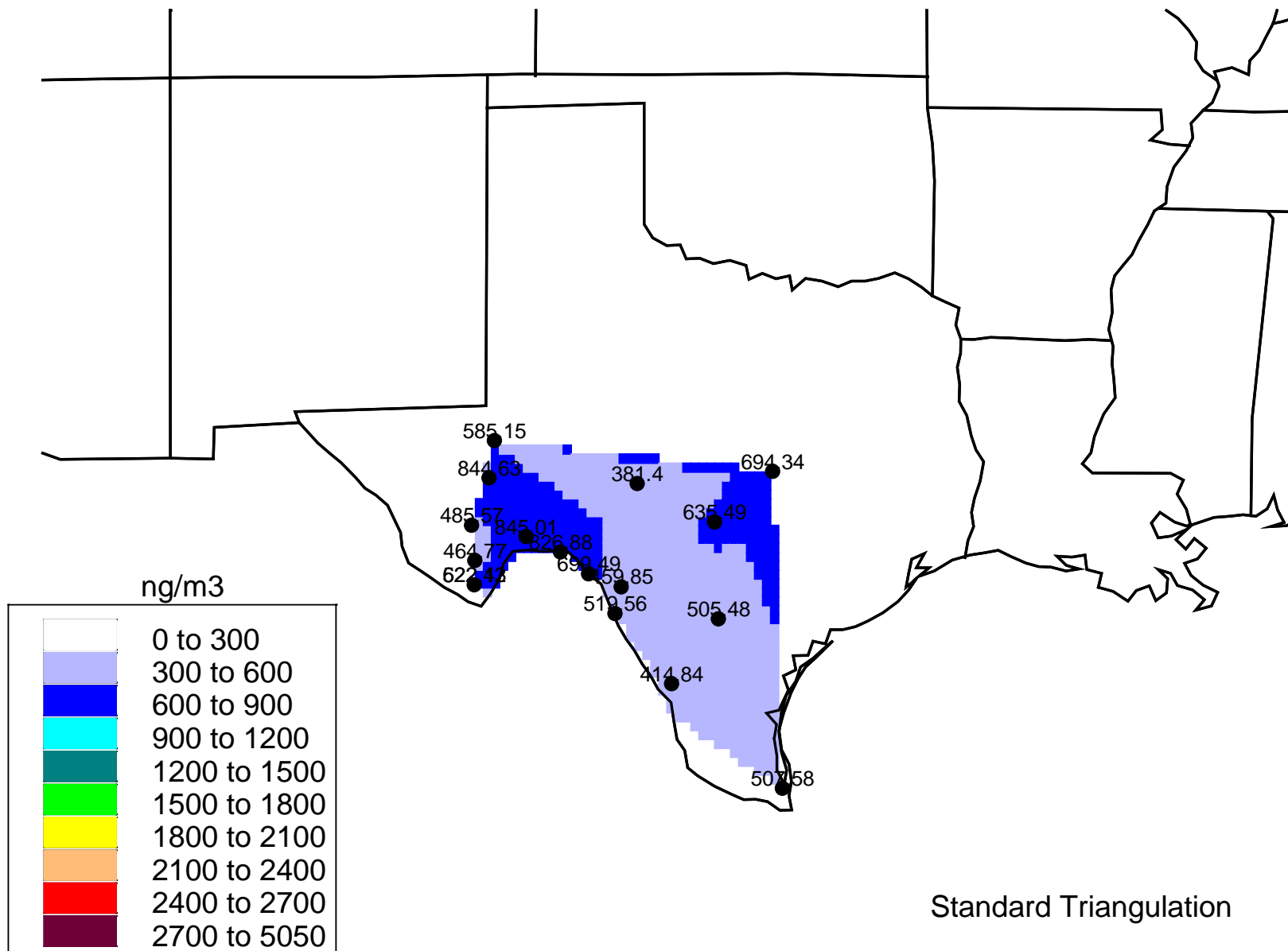
PIXE S on 7/14/1999 (jday 195)



PIXE S on 7/15/1999 (jday 196)

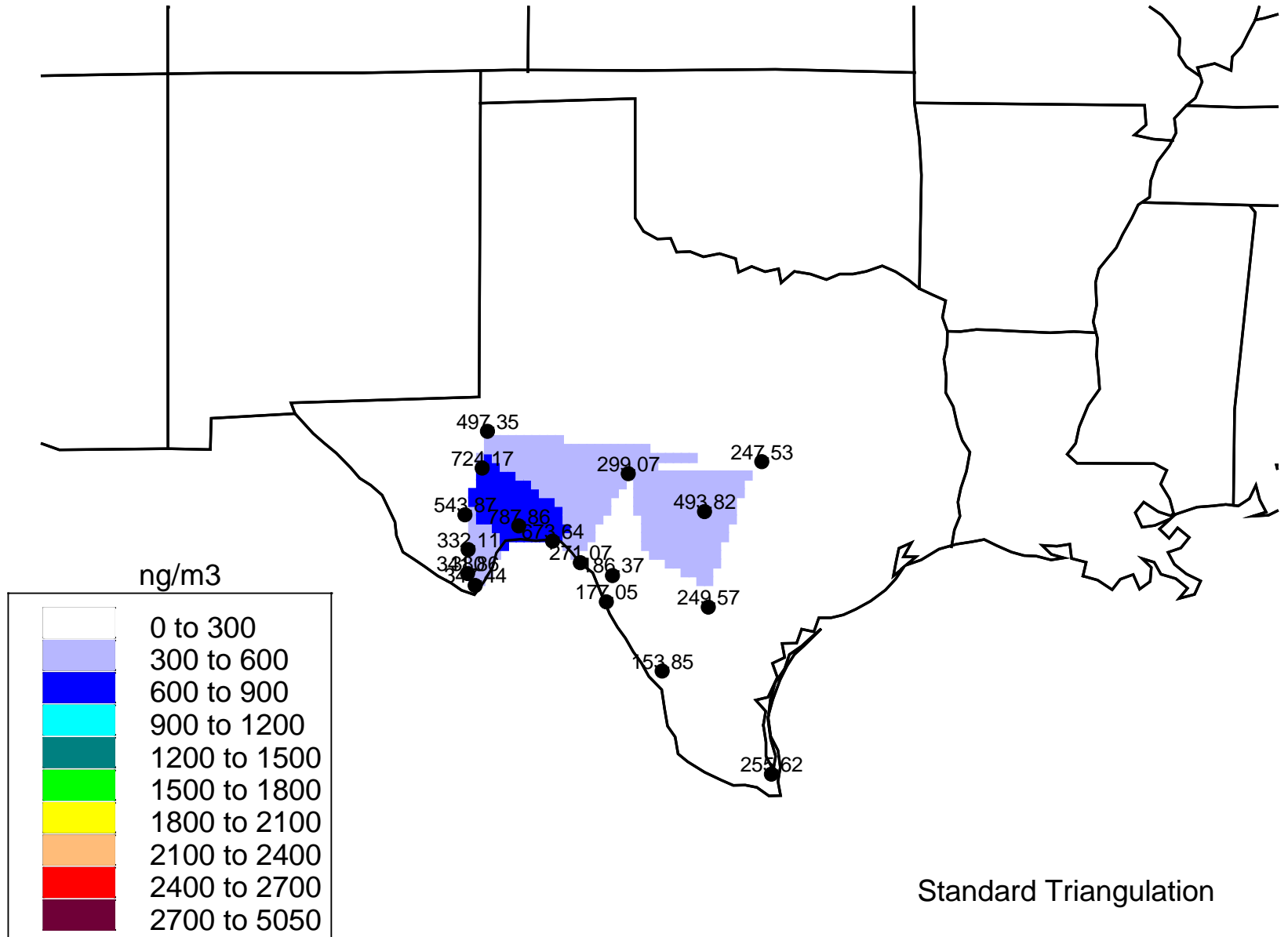


PIXE S on 7/16/1999 (jday 197)

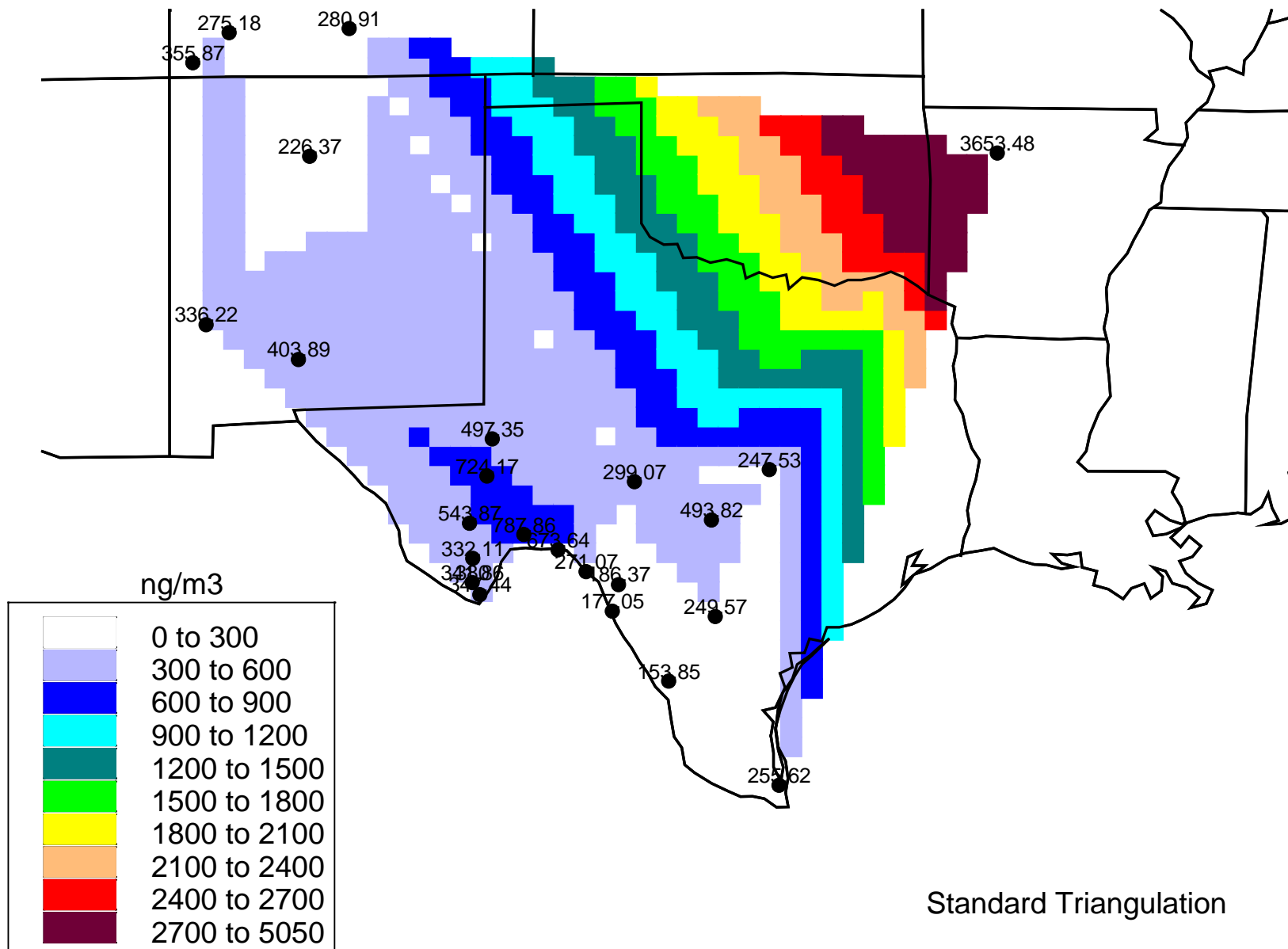


Standard Triangulation

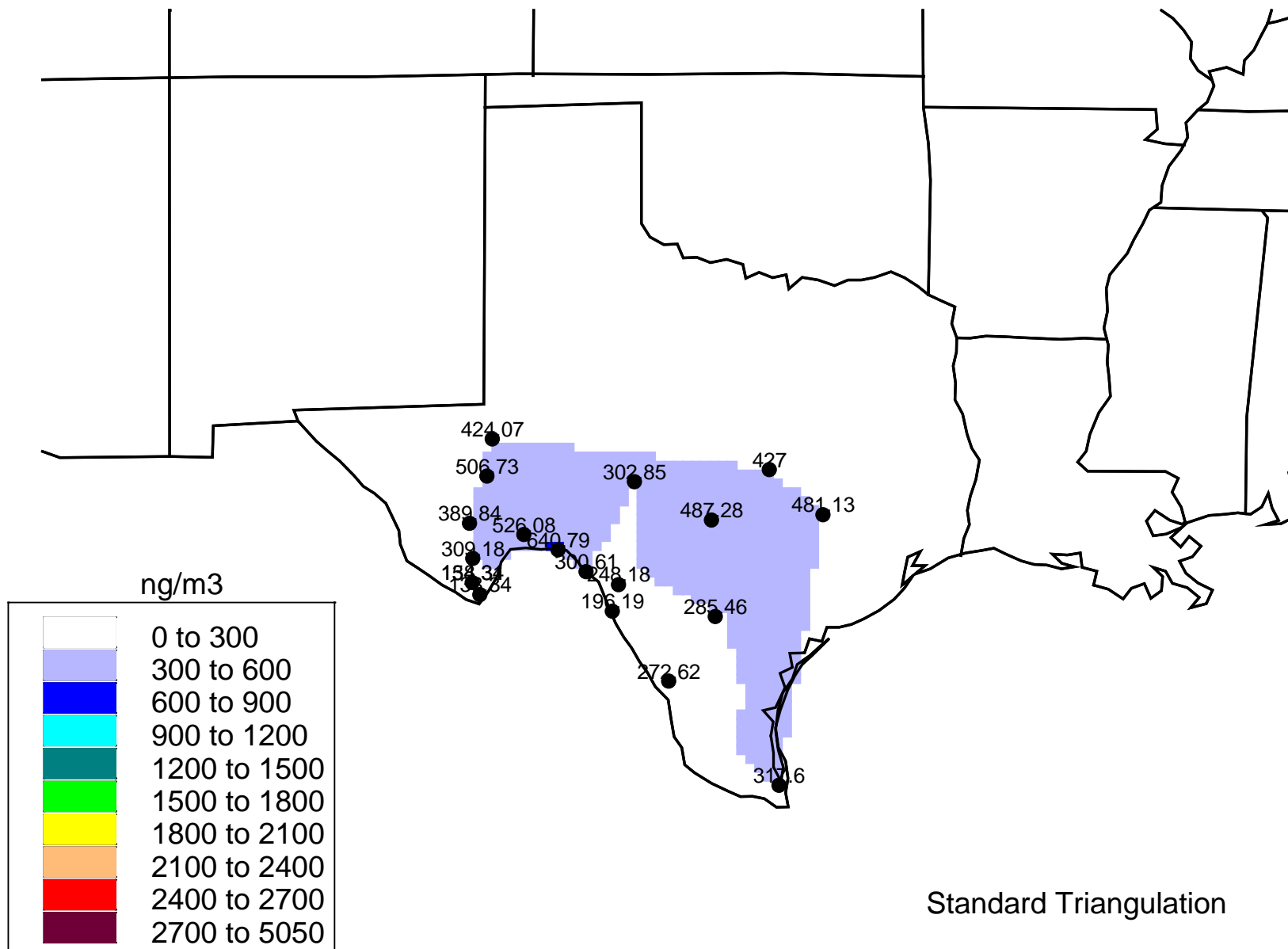
PIXE S on 7/17/1999 (jday 198)



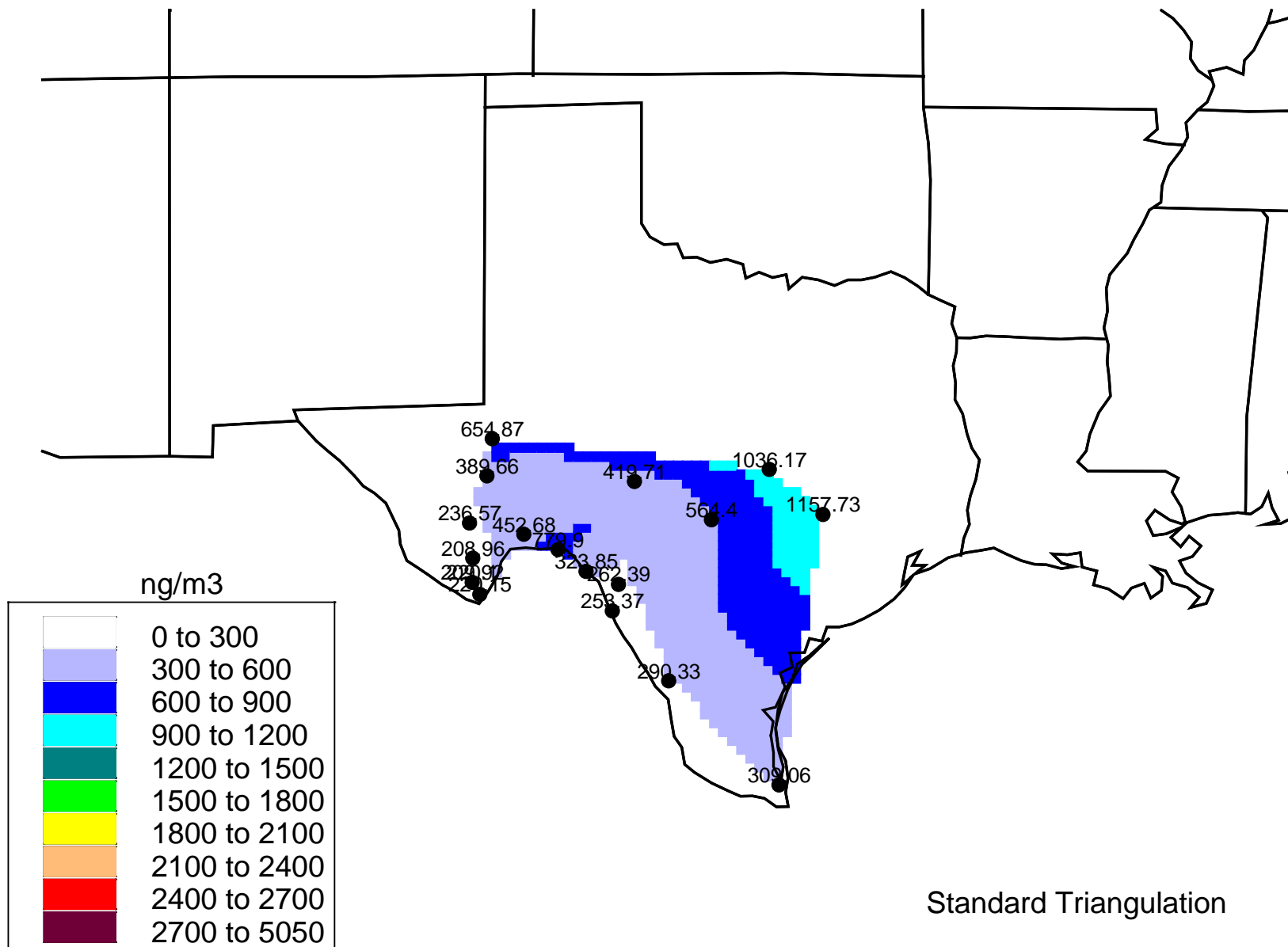
PIXE S on 7/17/1999 (jday 198)



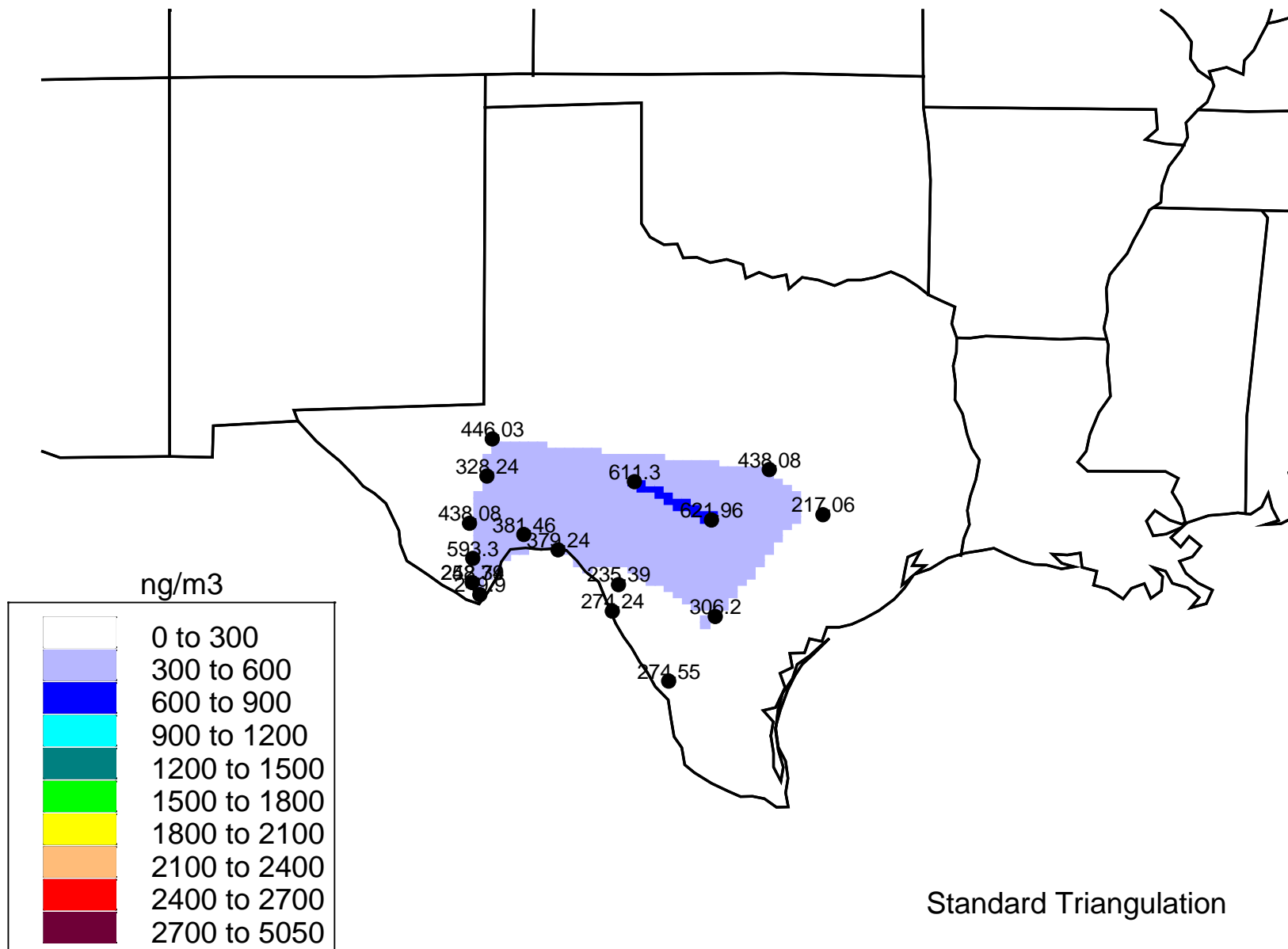
PIXE S on 7/18/1999 (jday 199)



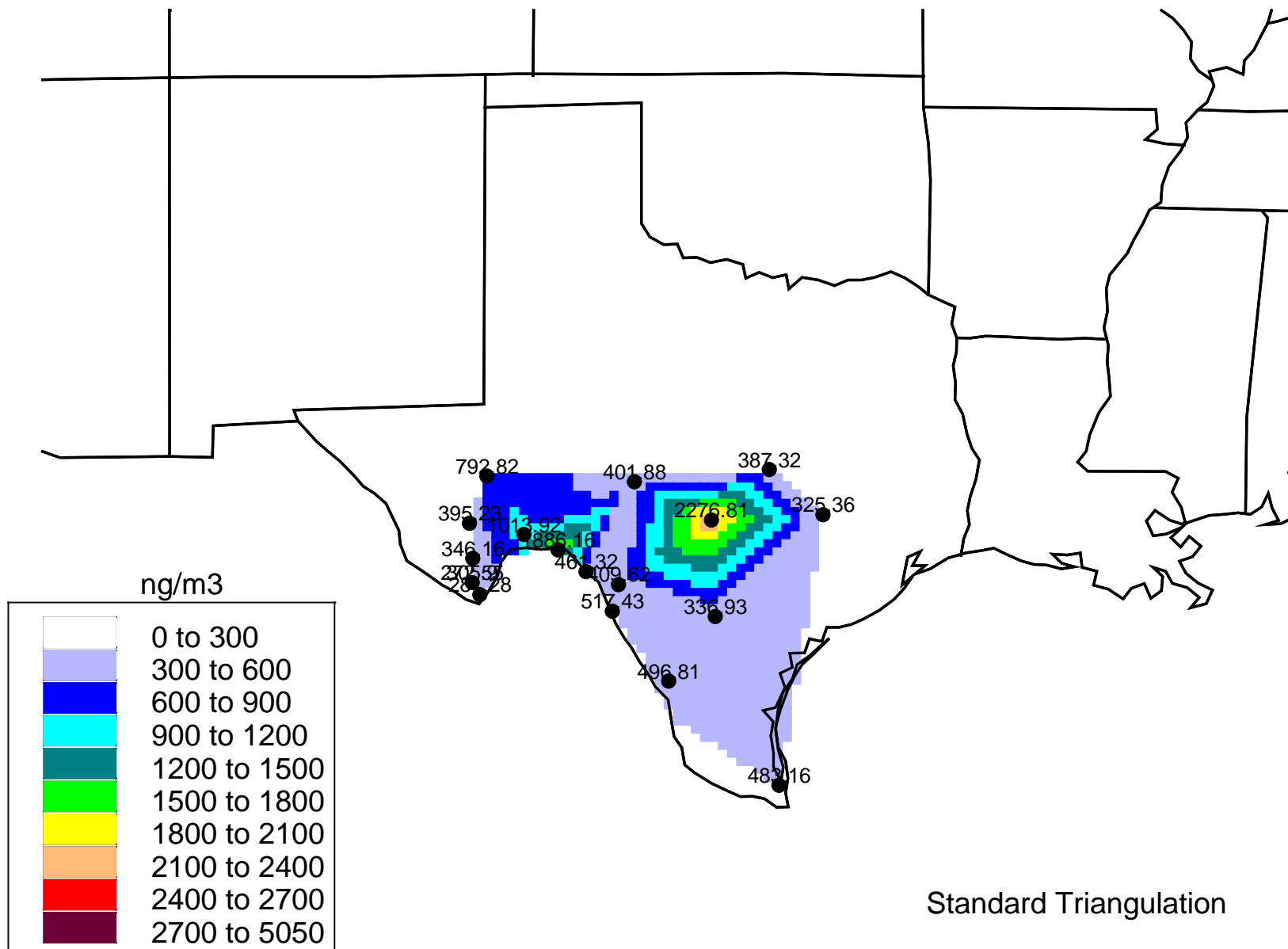
PIXE S on 7/19/1999 (jday 200)



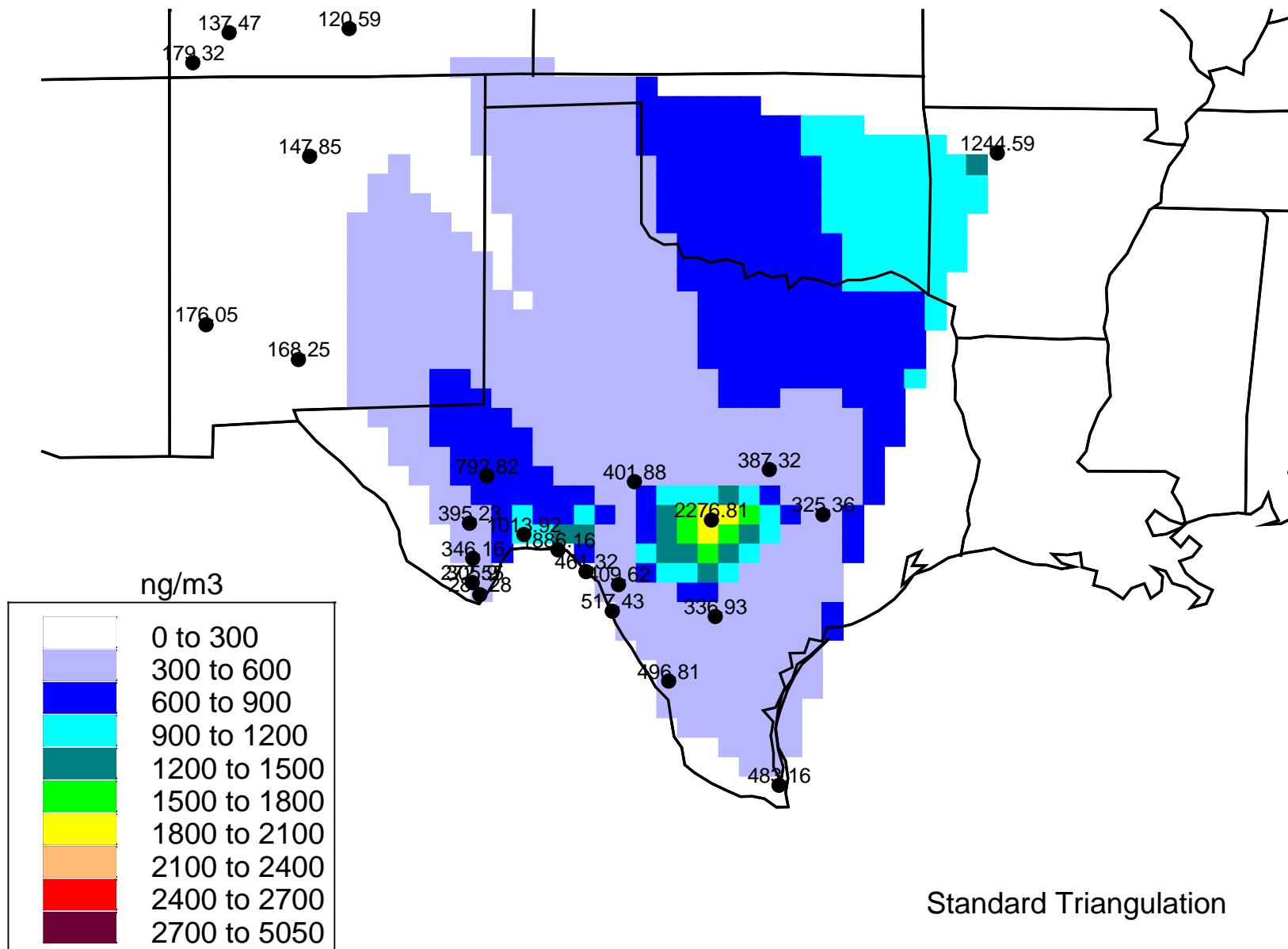
PIXE S on 7/20/1999 (jday 201)



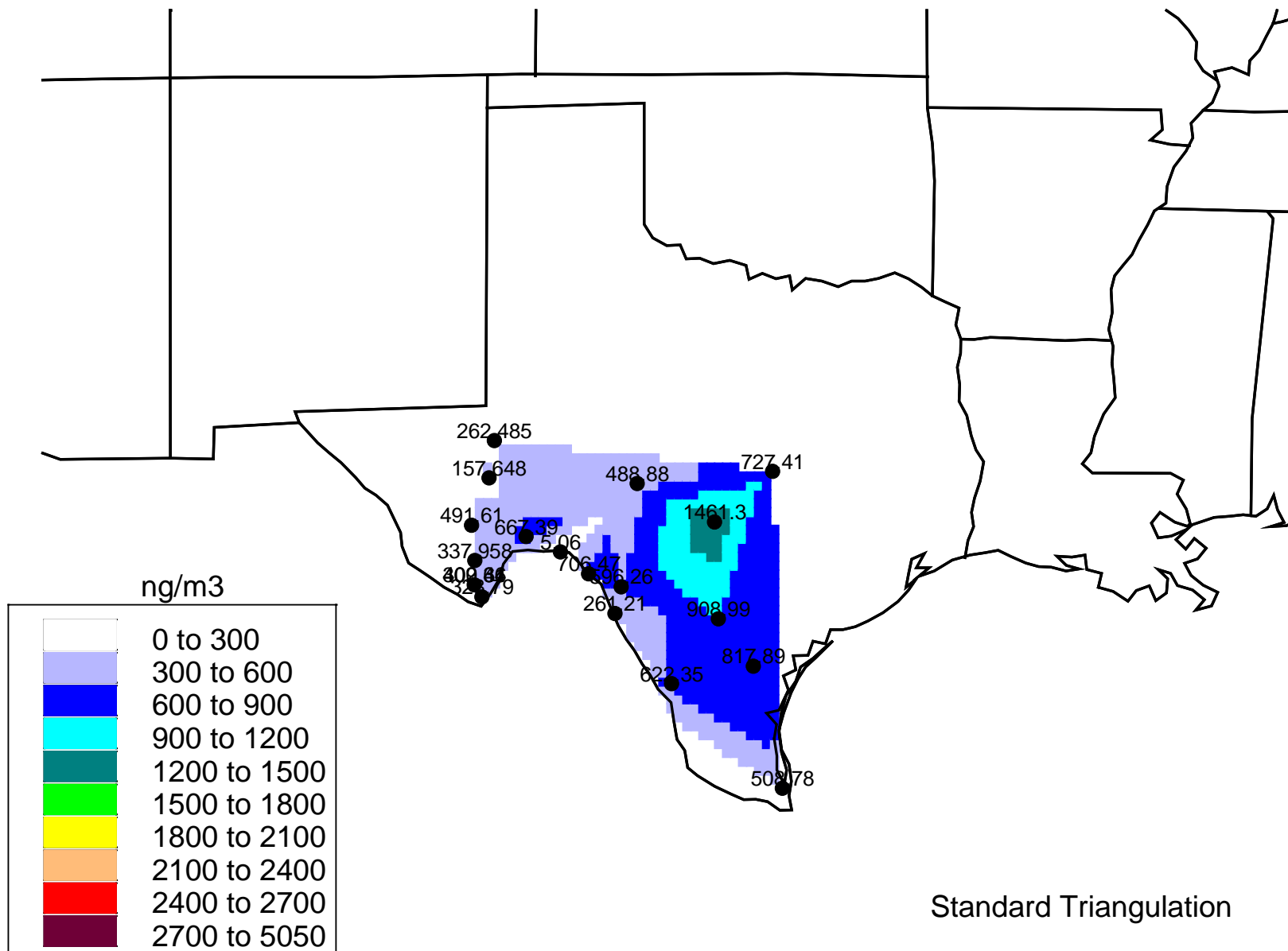
PIXE S on 7/21/1999 (jday 202)



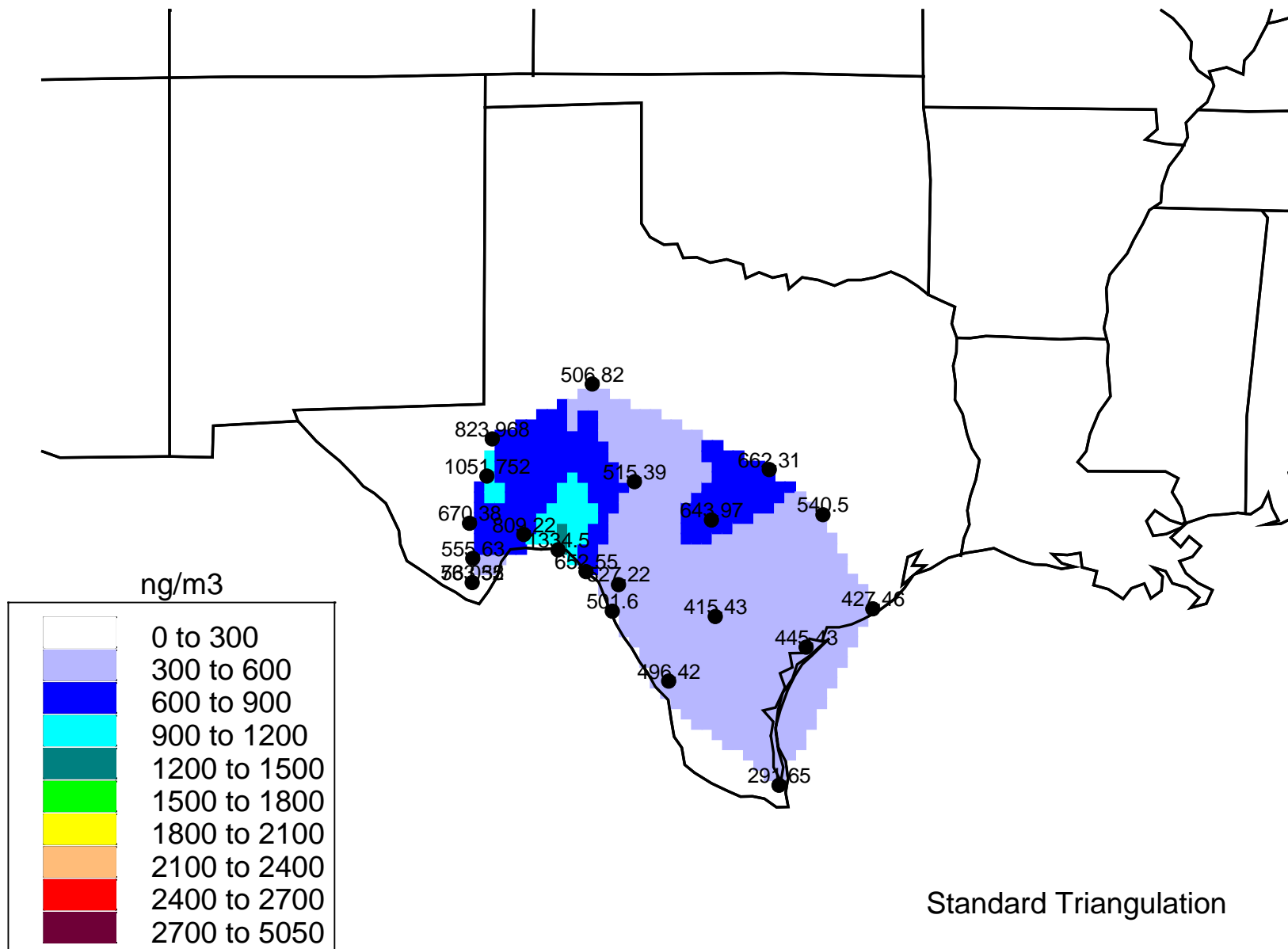
PIXE S on 7/21/1999 (jday 202)



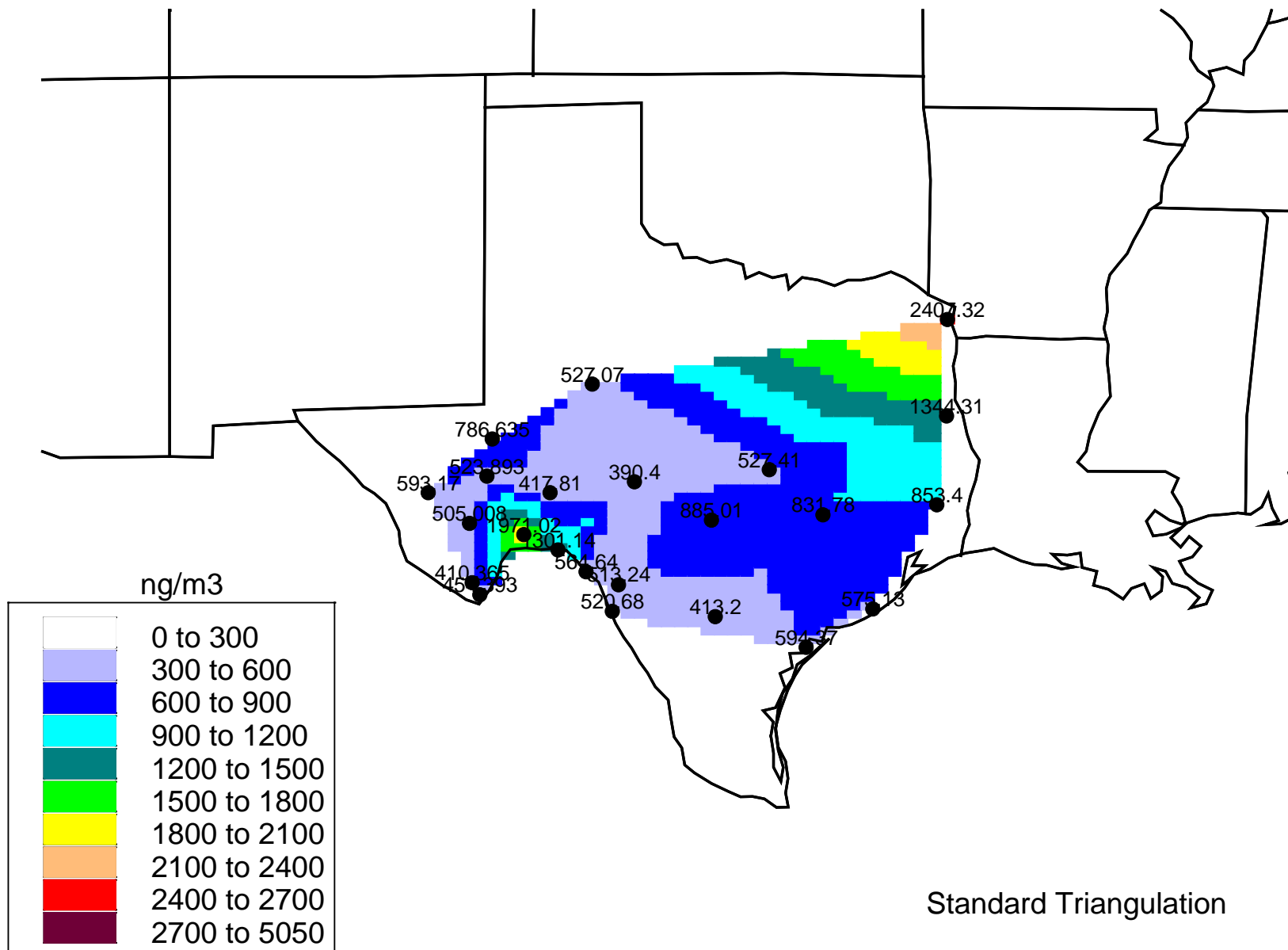
PIXE S on 7/22/1999 (jday 203)



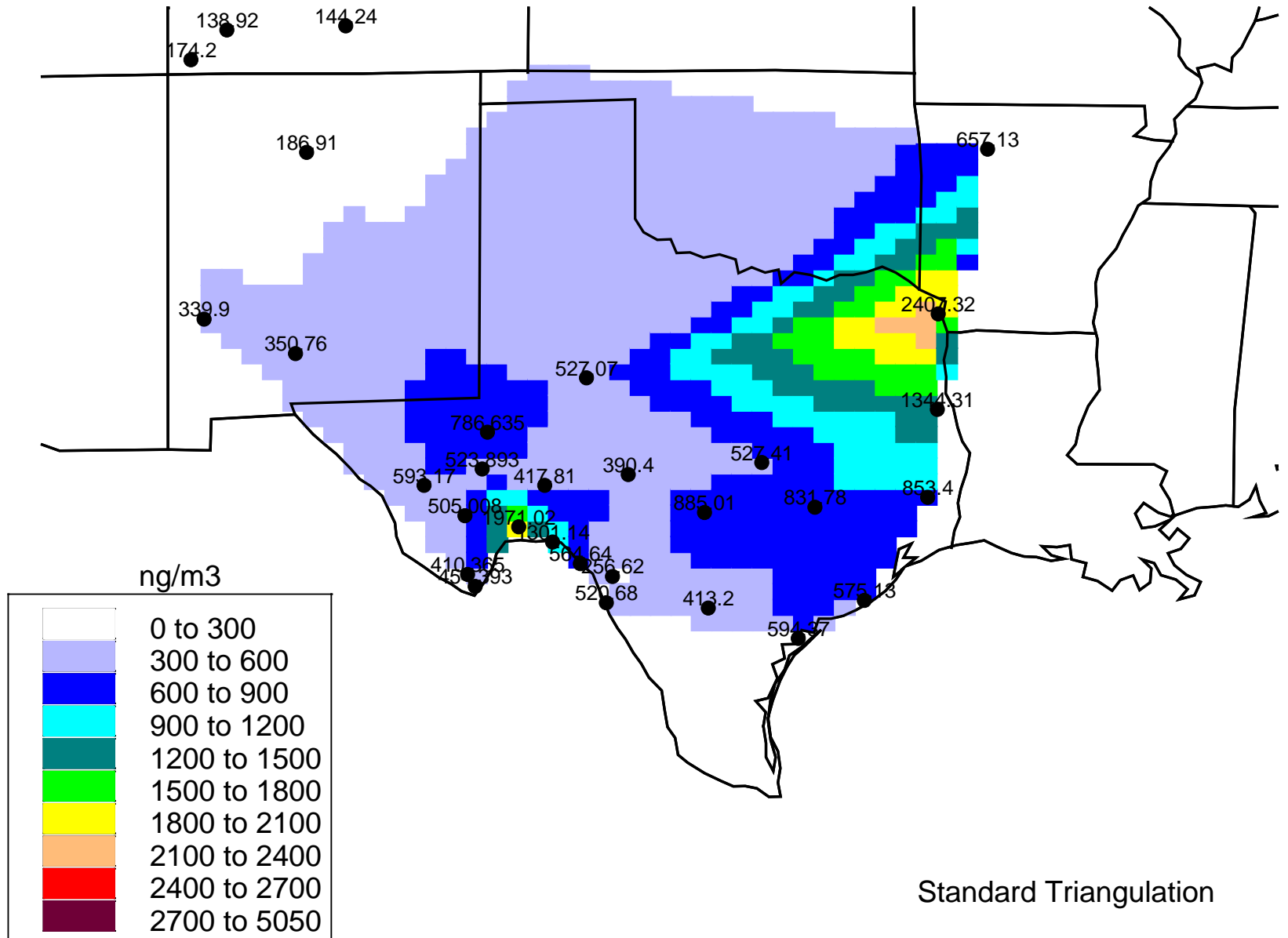
PIXE S on 7/23/1999 (jday 204)



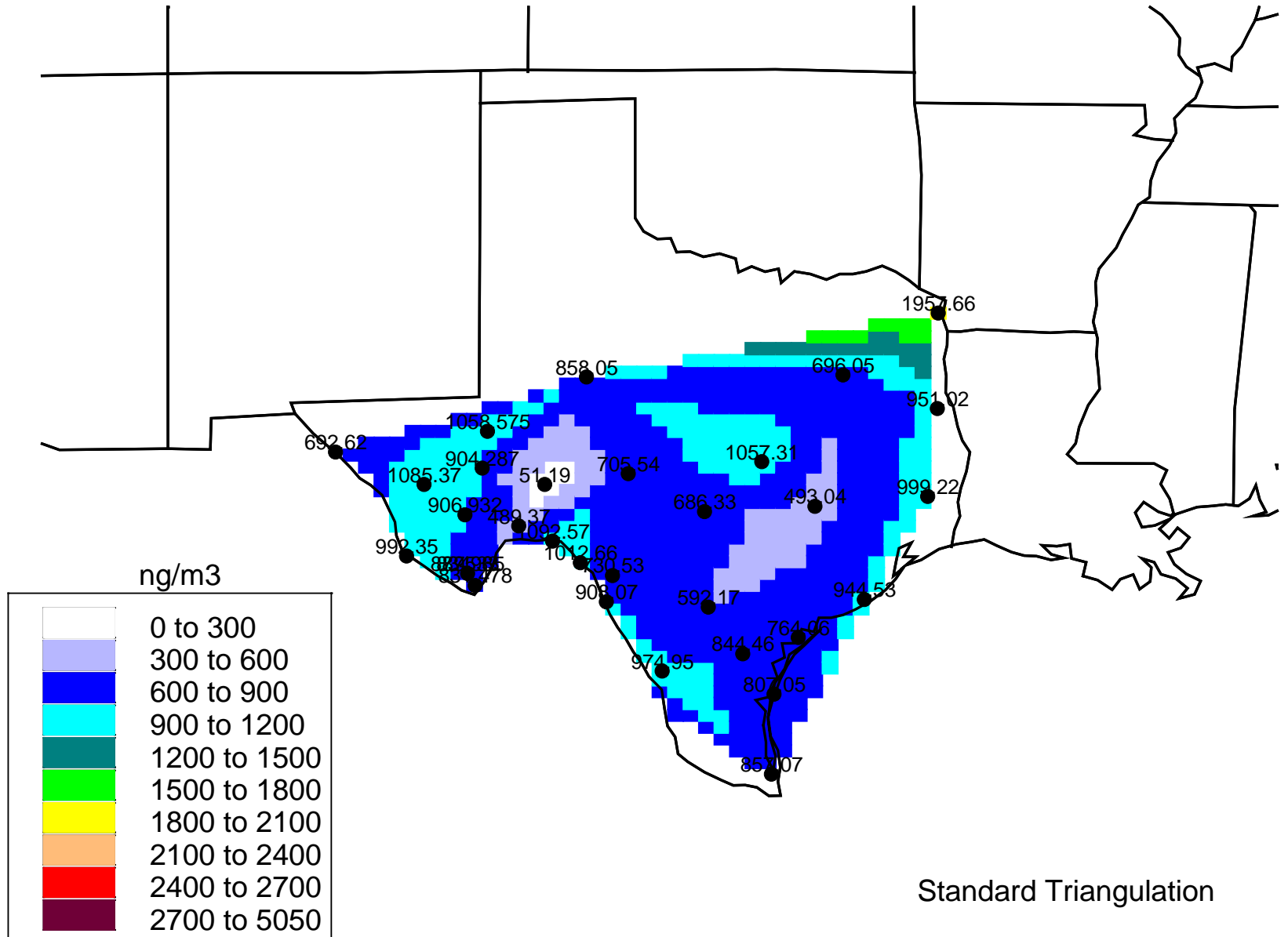
PIXE S on 7/24/1999 (jday 205)



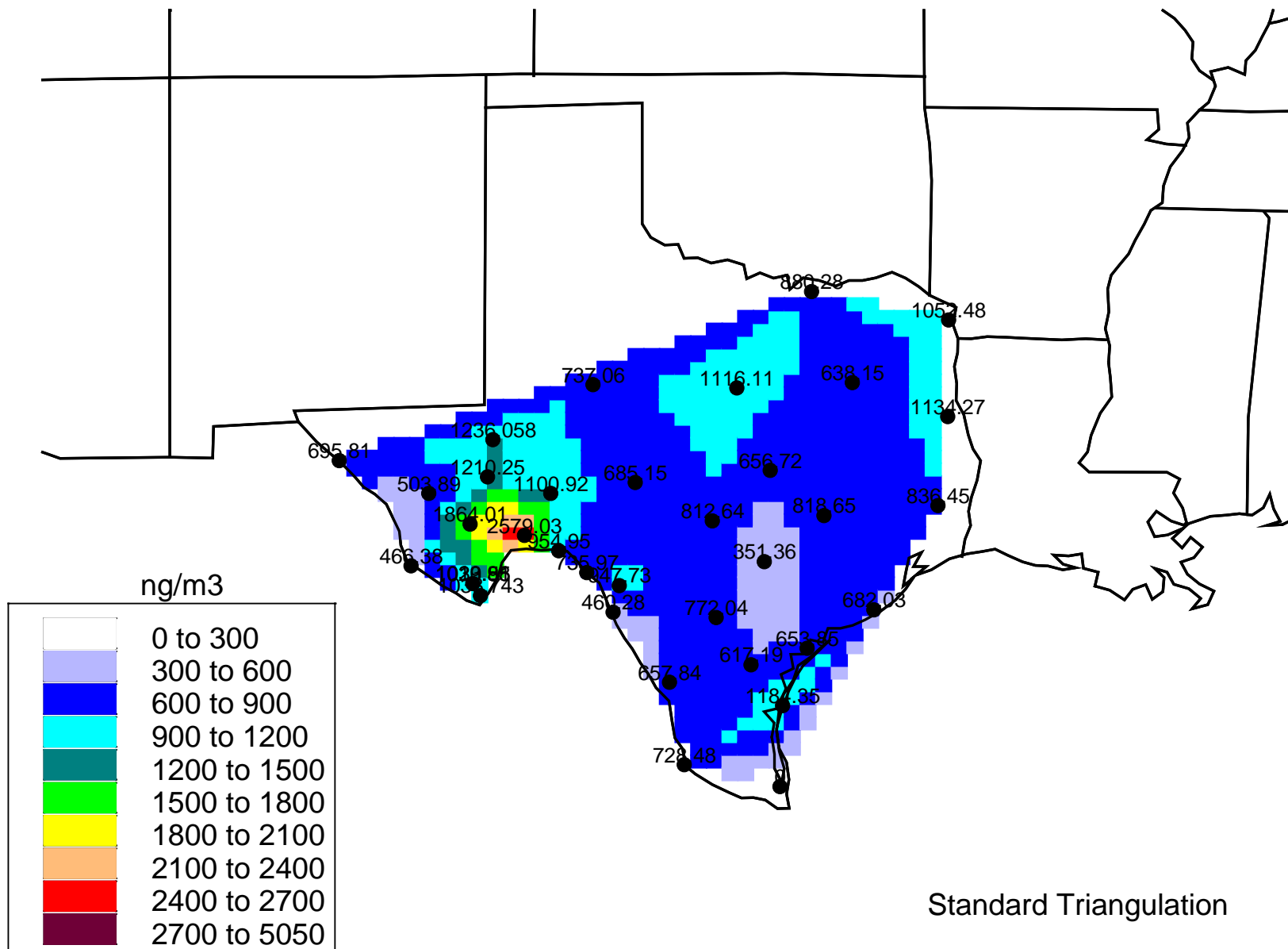
PIXE S on 7/24/1999 (jday 205)



PIXE S on 7/26/1999 (jday 207)

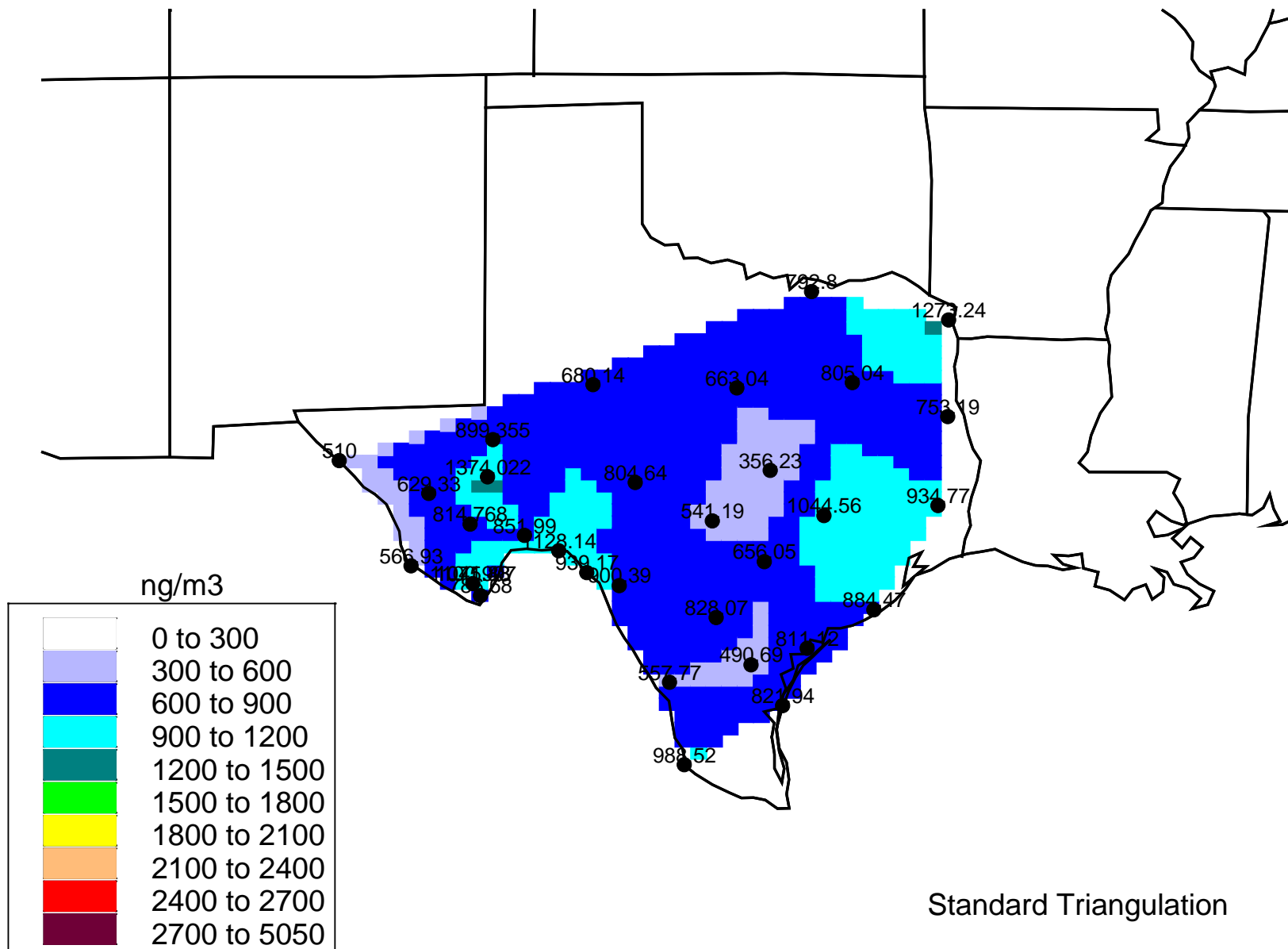


PIXE S on 7/27/1999 (jday 208)

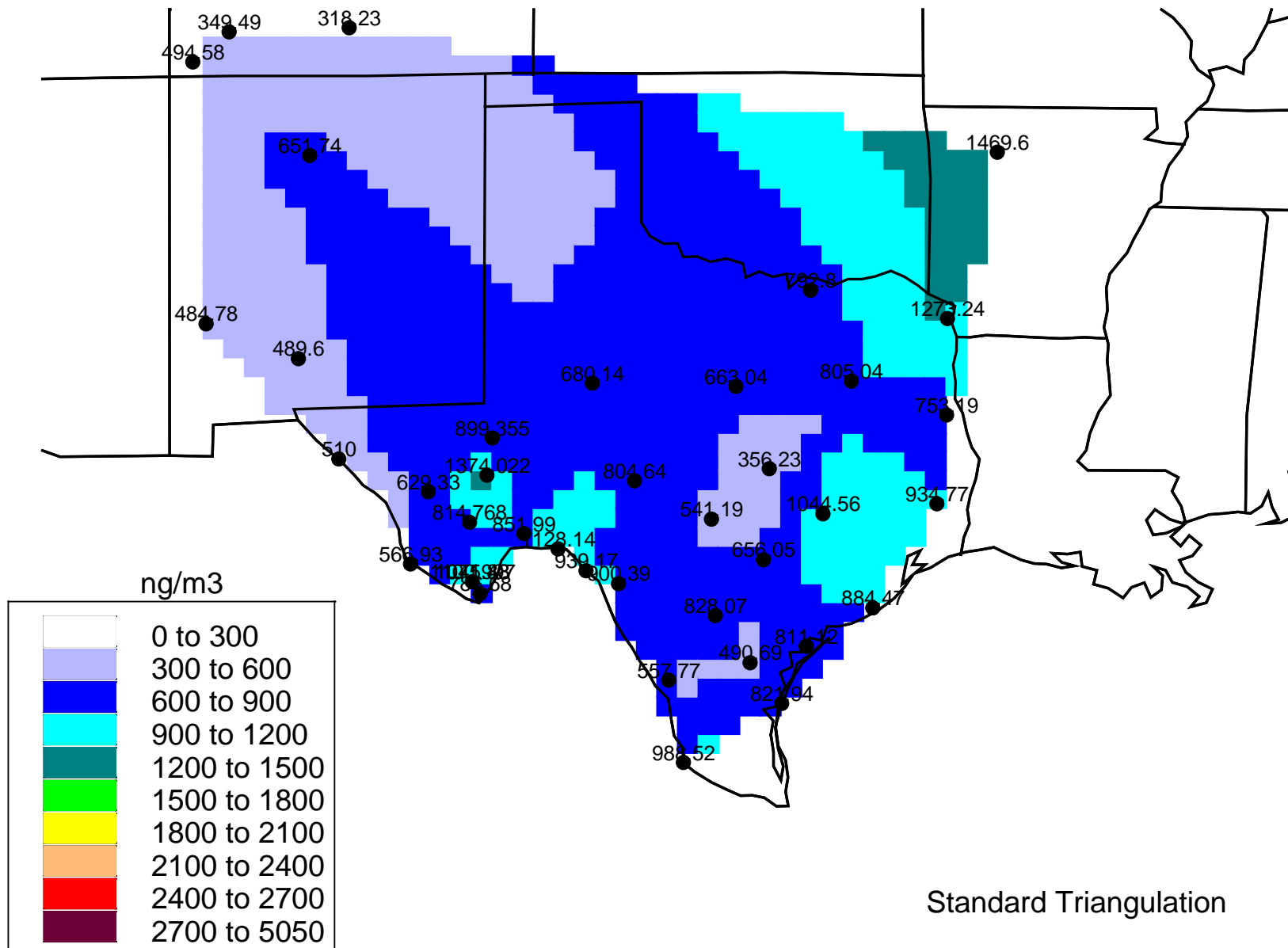


Standard Triangulation

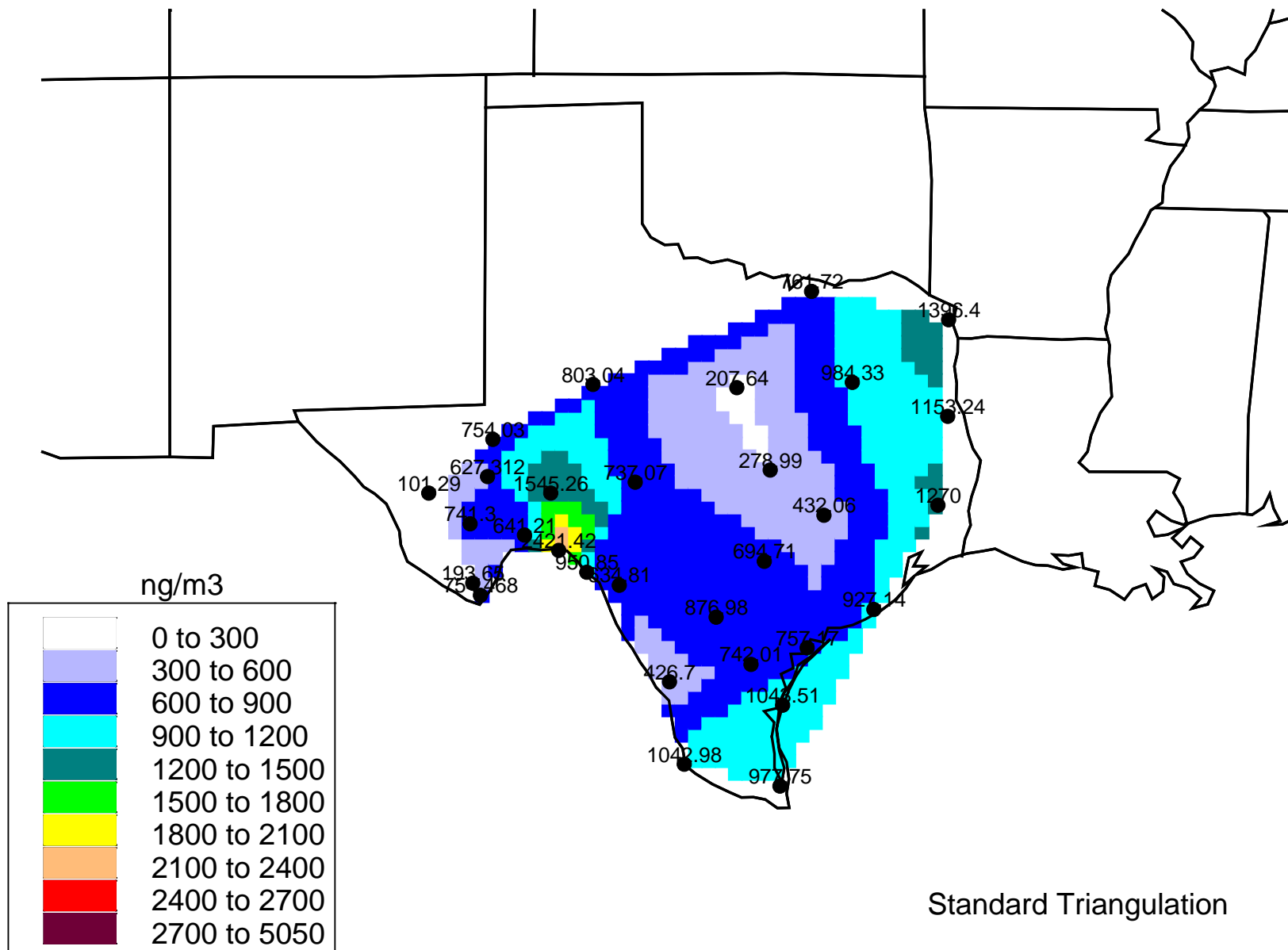
PIXE S on 7/28/1999 (jday 209)



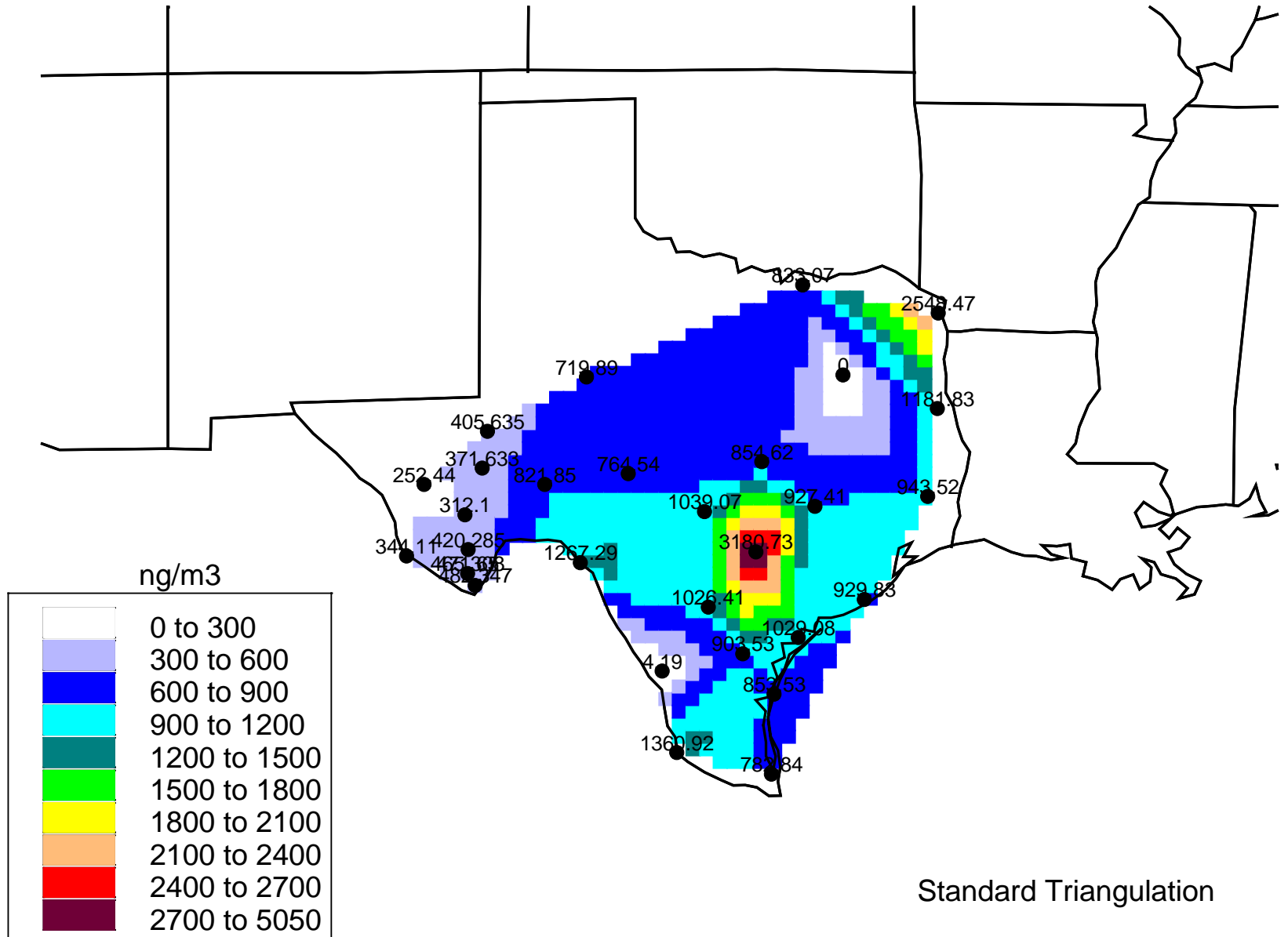
PIXE S on 7/28/1999 (jday 209)



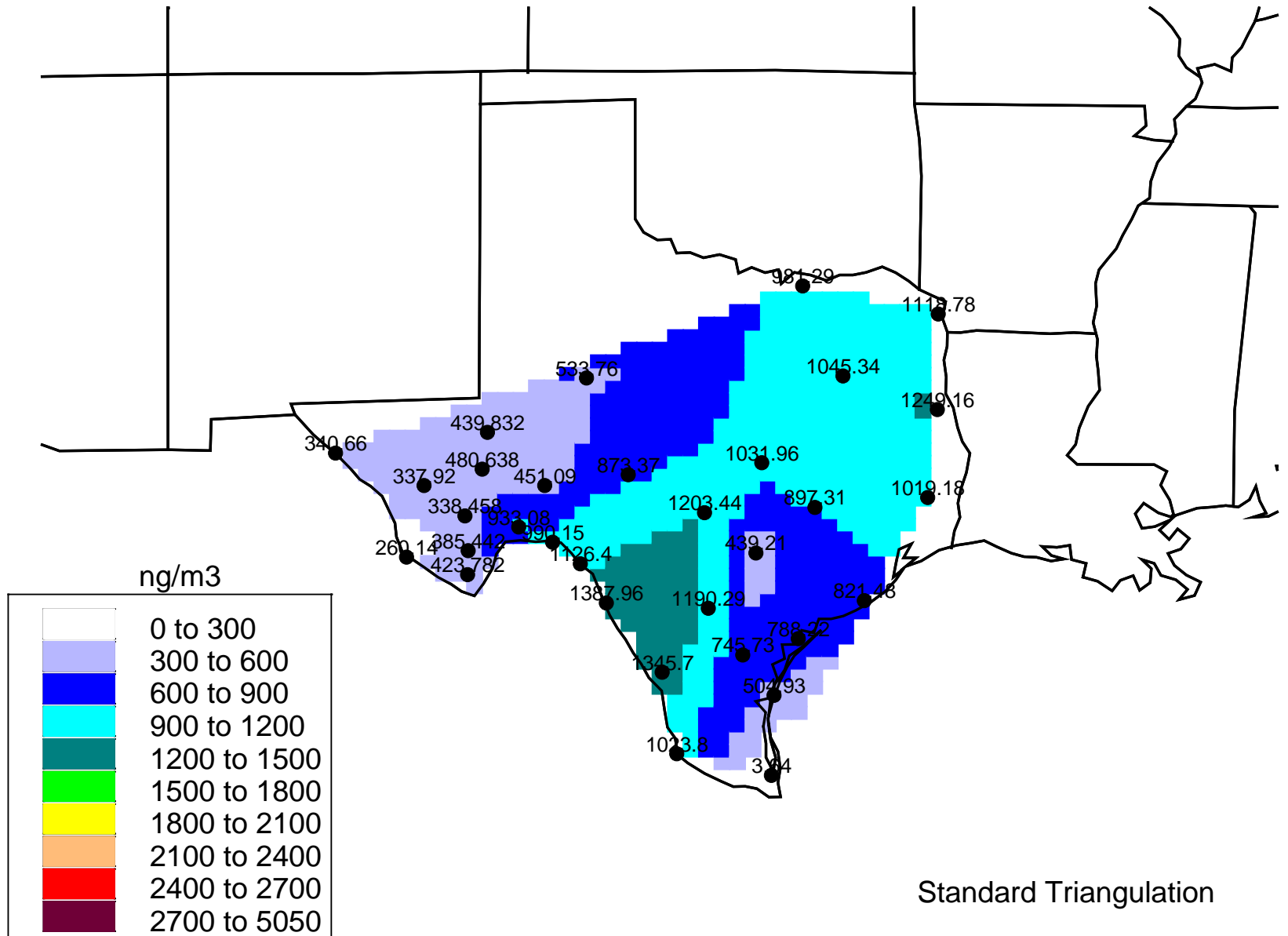
PIXE S on 7/29/1999 (jday 210)



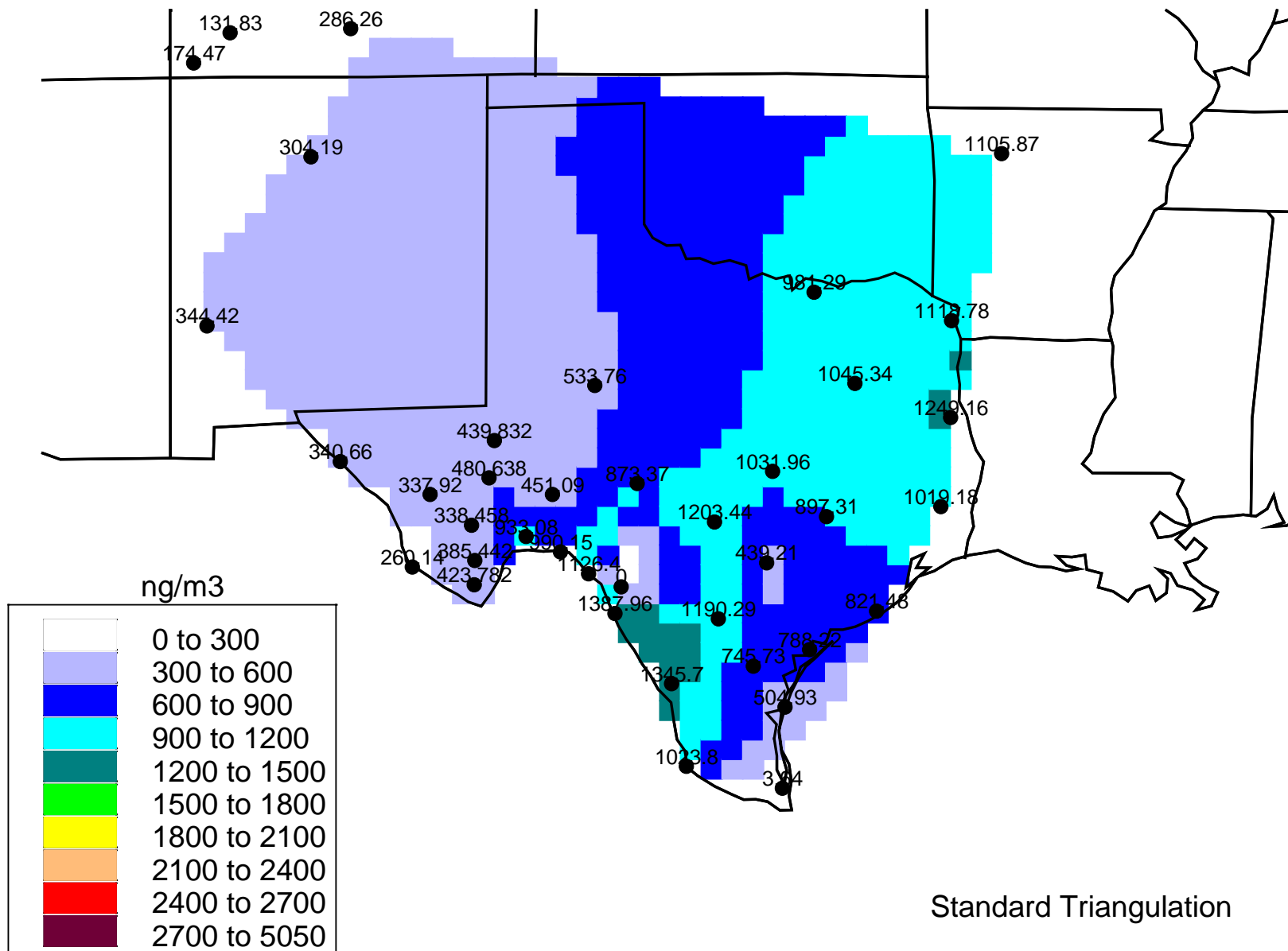
PIXE S on 7/30/1999 (jday 211)



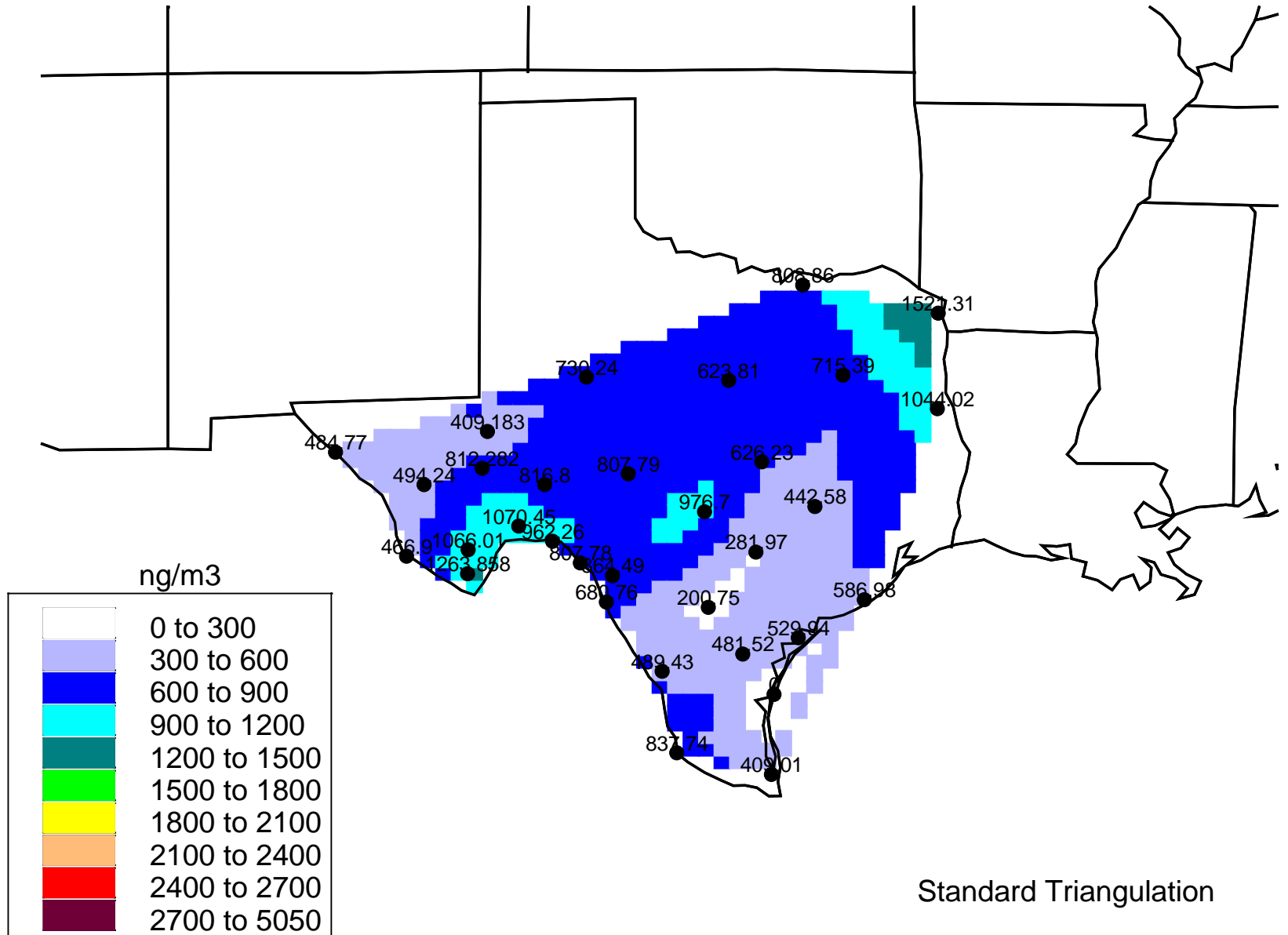
PIXE S on 7/31/1999 (jday 212)



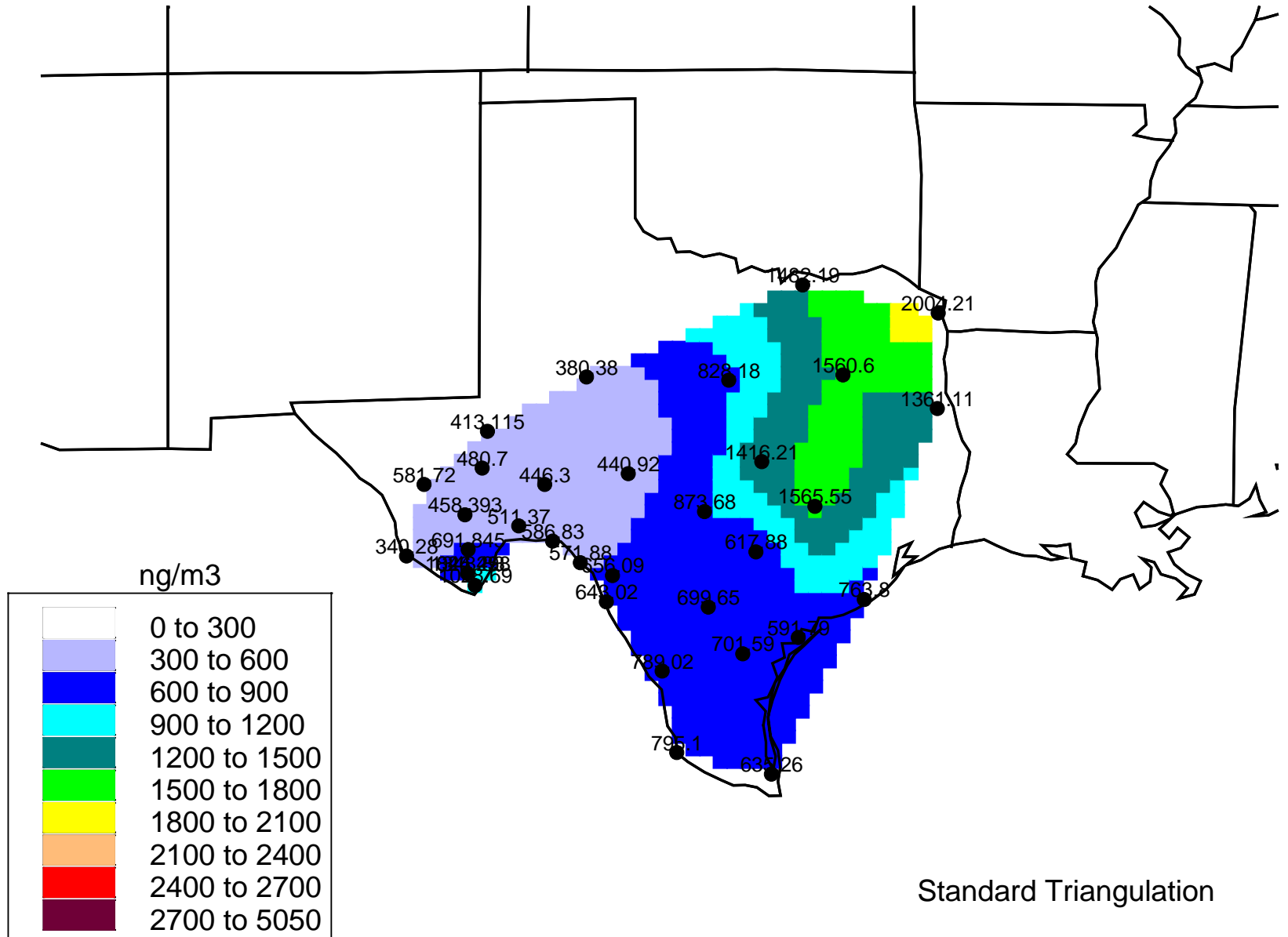
PIXE S on 7/31/1999 (jday 212)



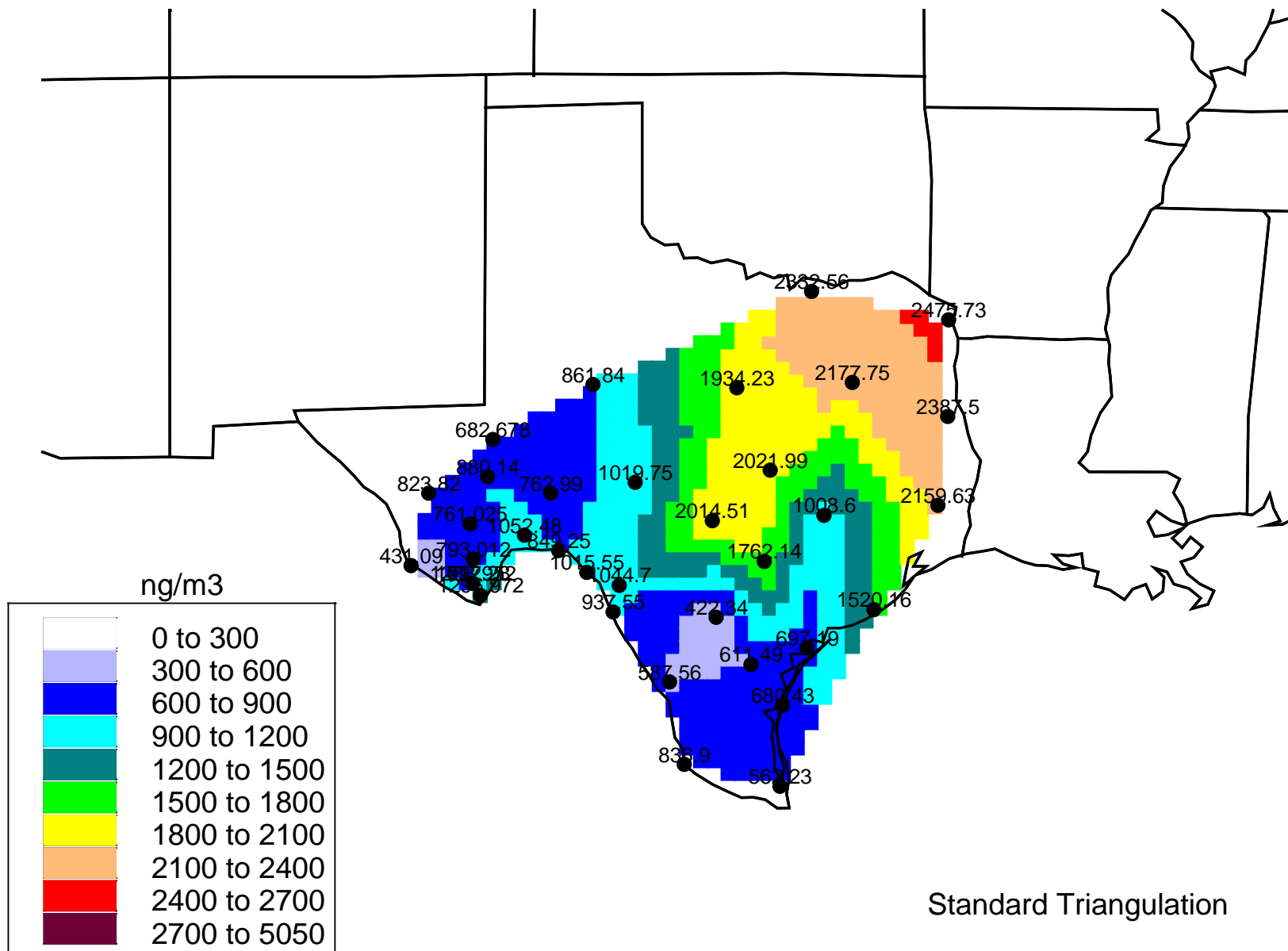
PIXE S on 8/1/1999 (jday 213)



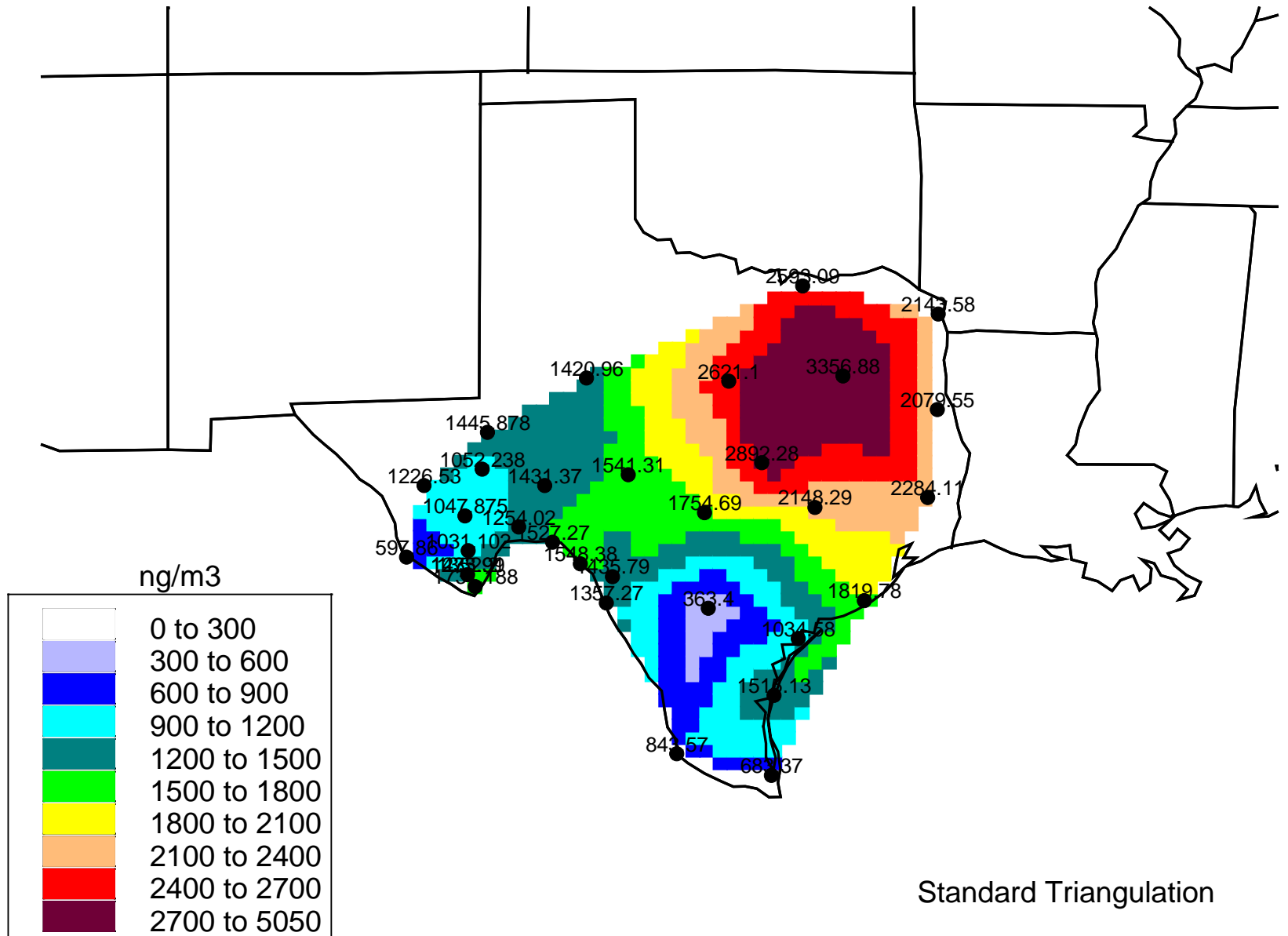
PIXE S on 8/2/1999 (jday 214)



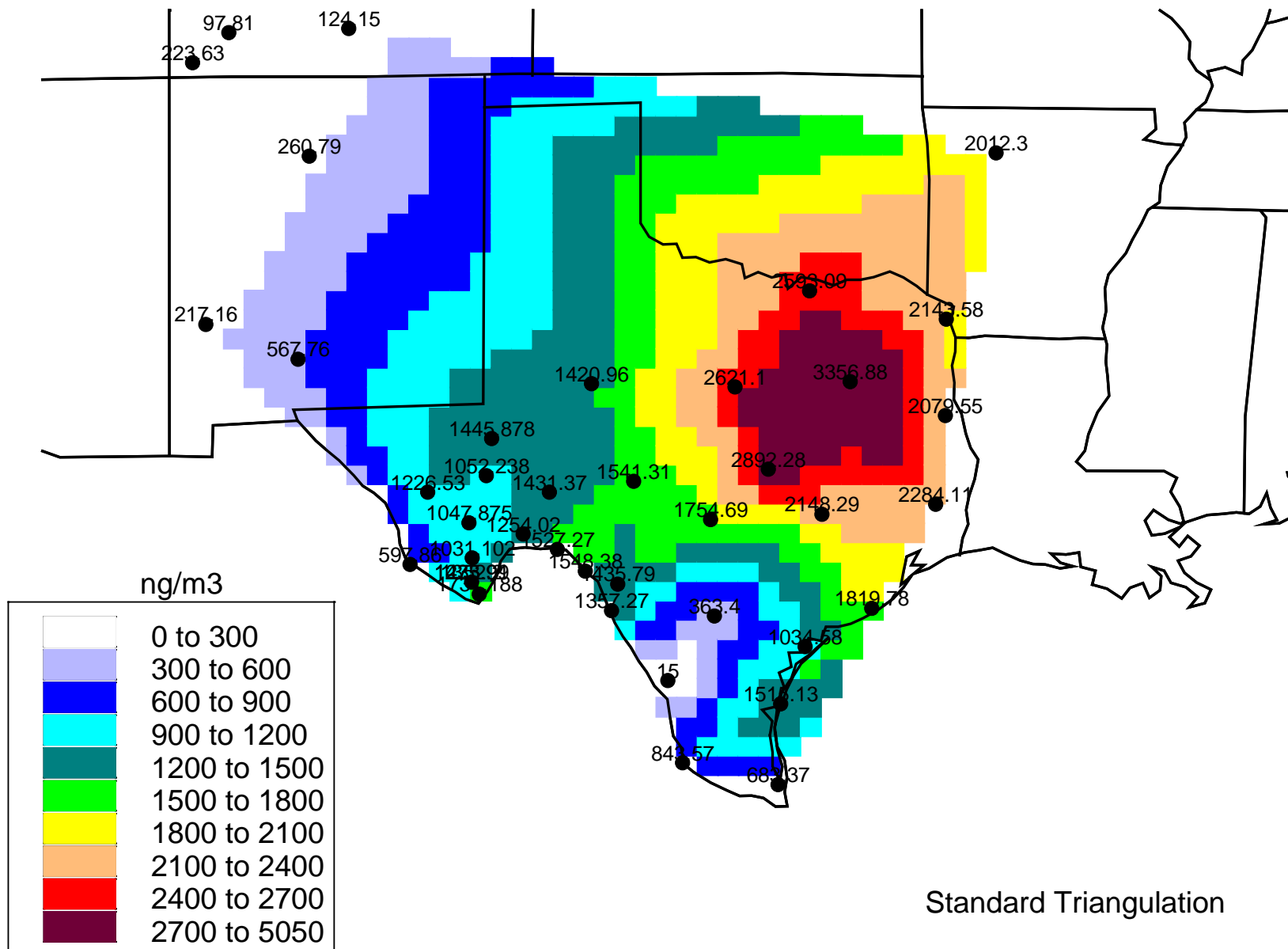
PIXE S on 8/3/1999 (jday 215)



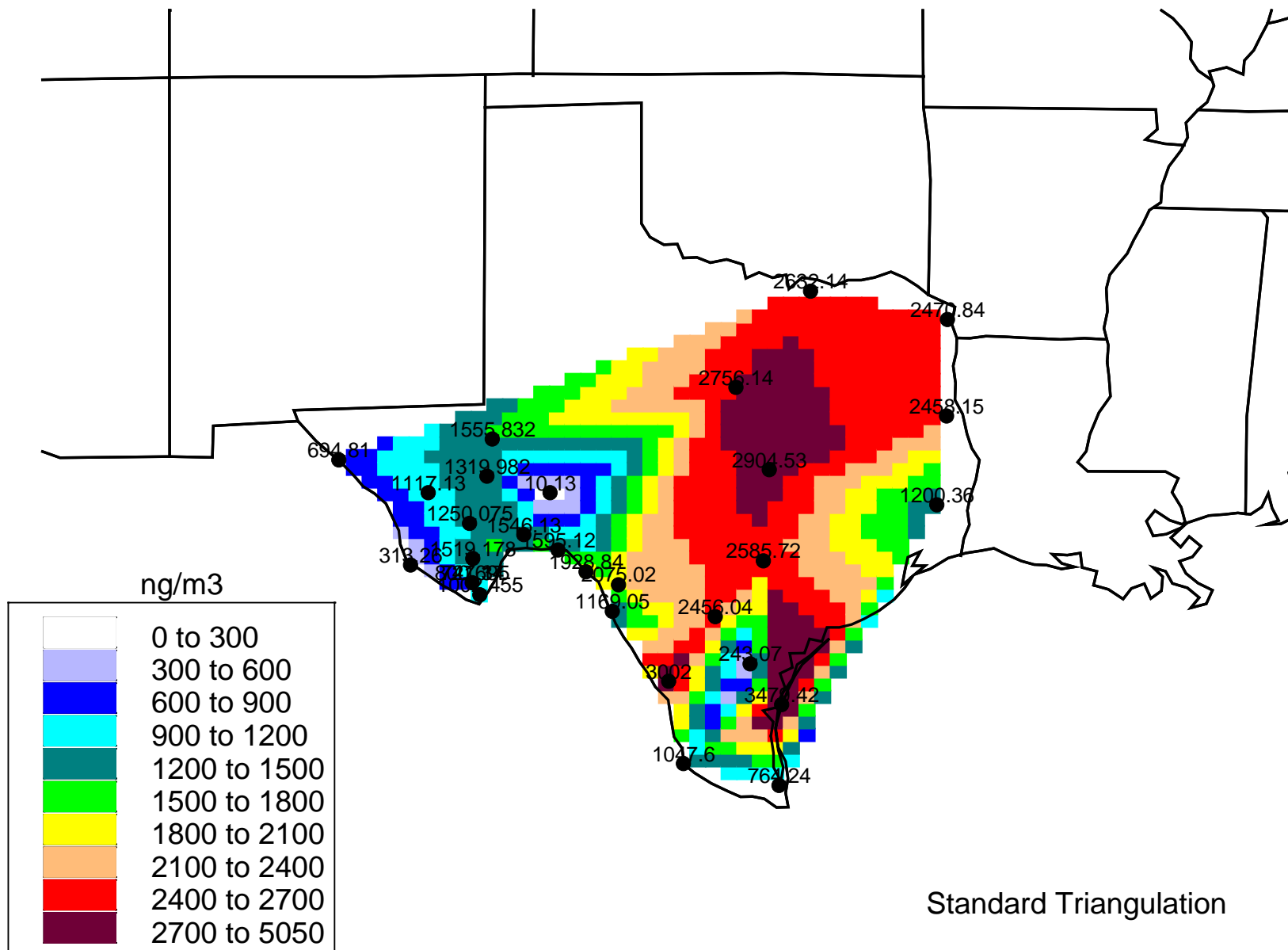
PIXE S on 8/4/1999 (jday 216)



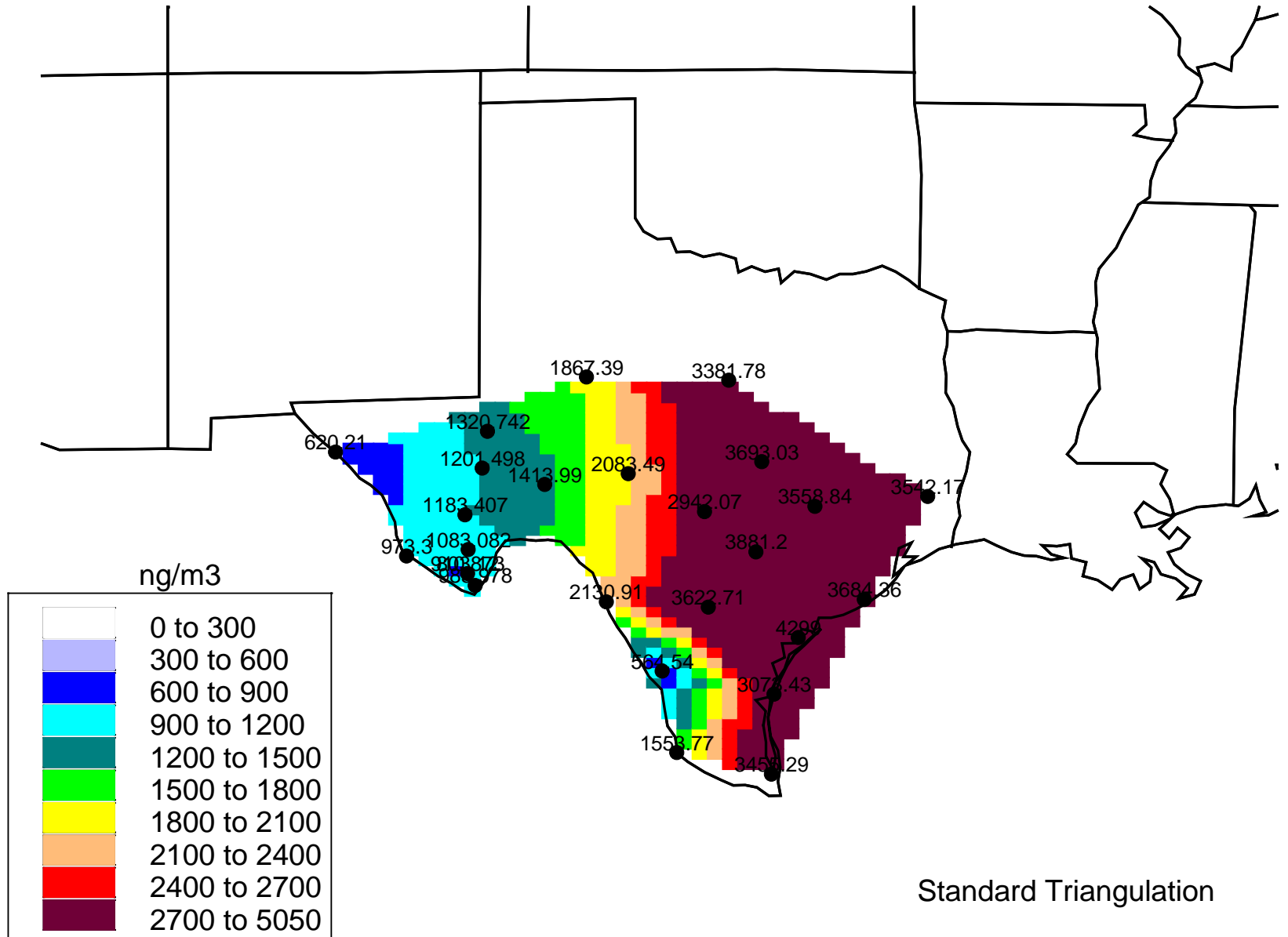
PIXE S on 8/4/1999 (jday 216)



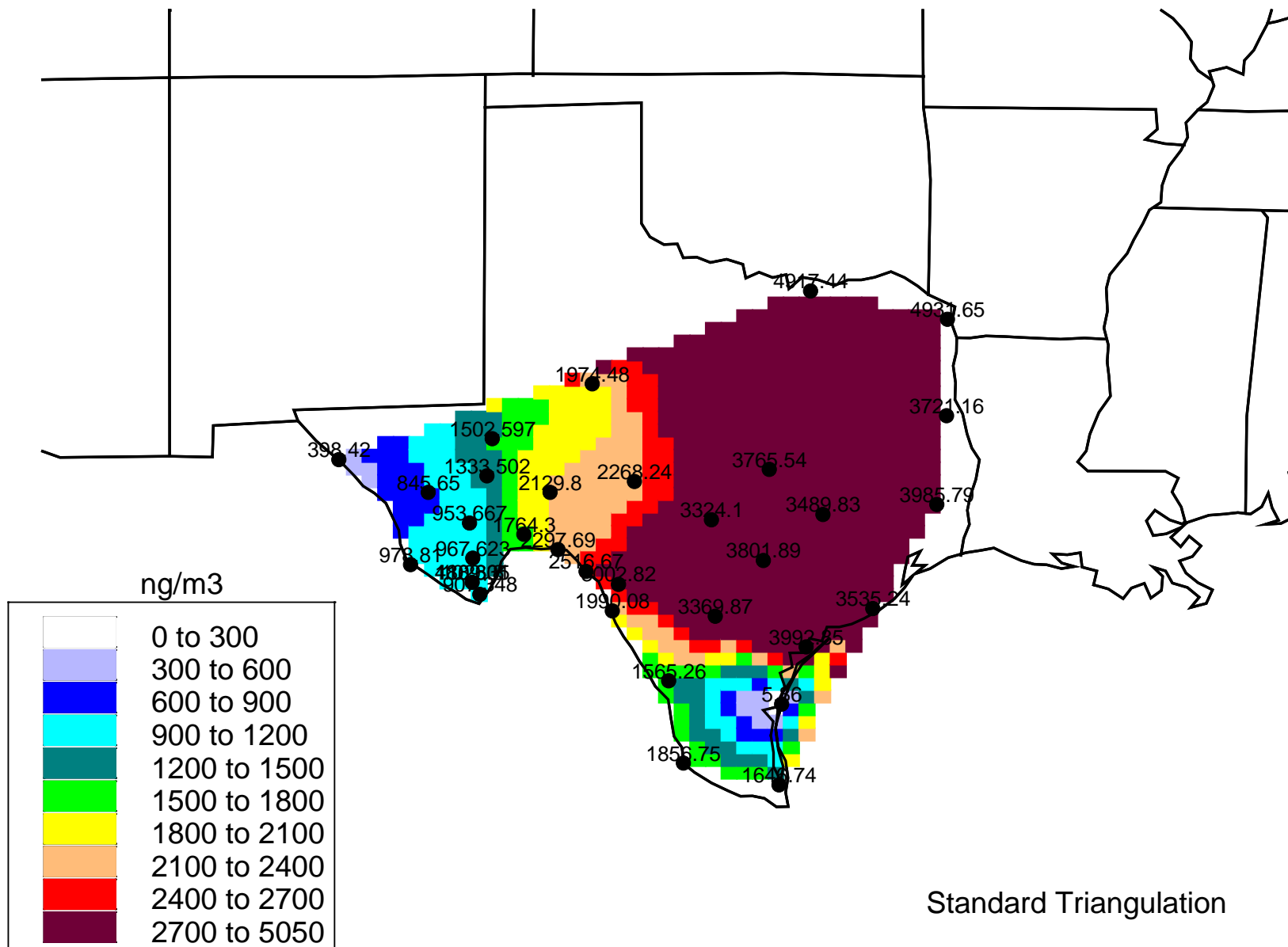
PIXE S on 8/5/1999 (jday 217)



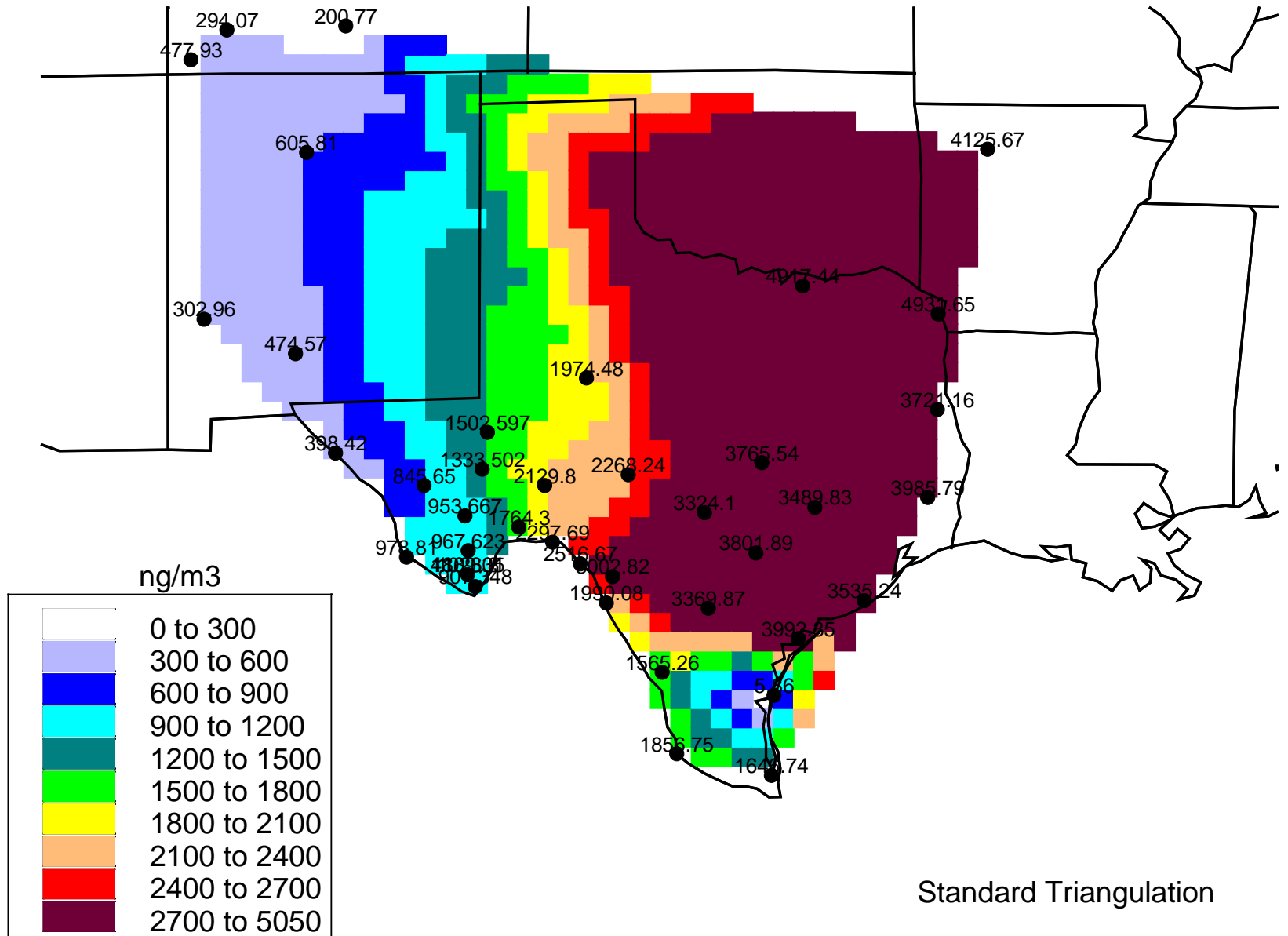
PIXE S on 8/6/1999 (jday 218)



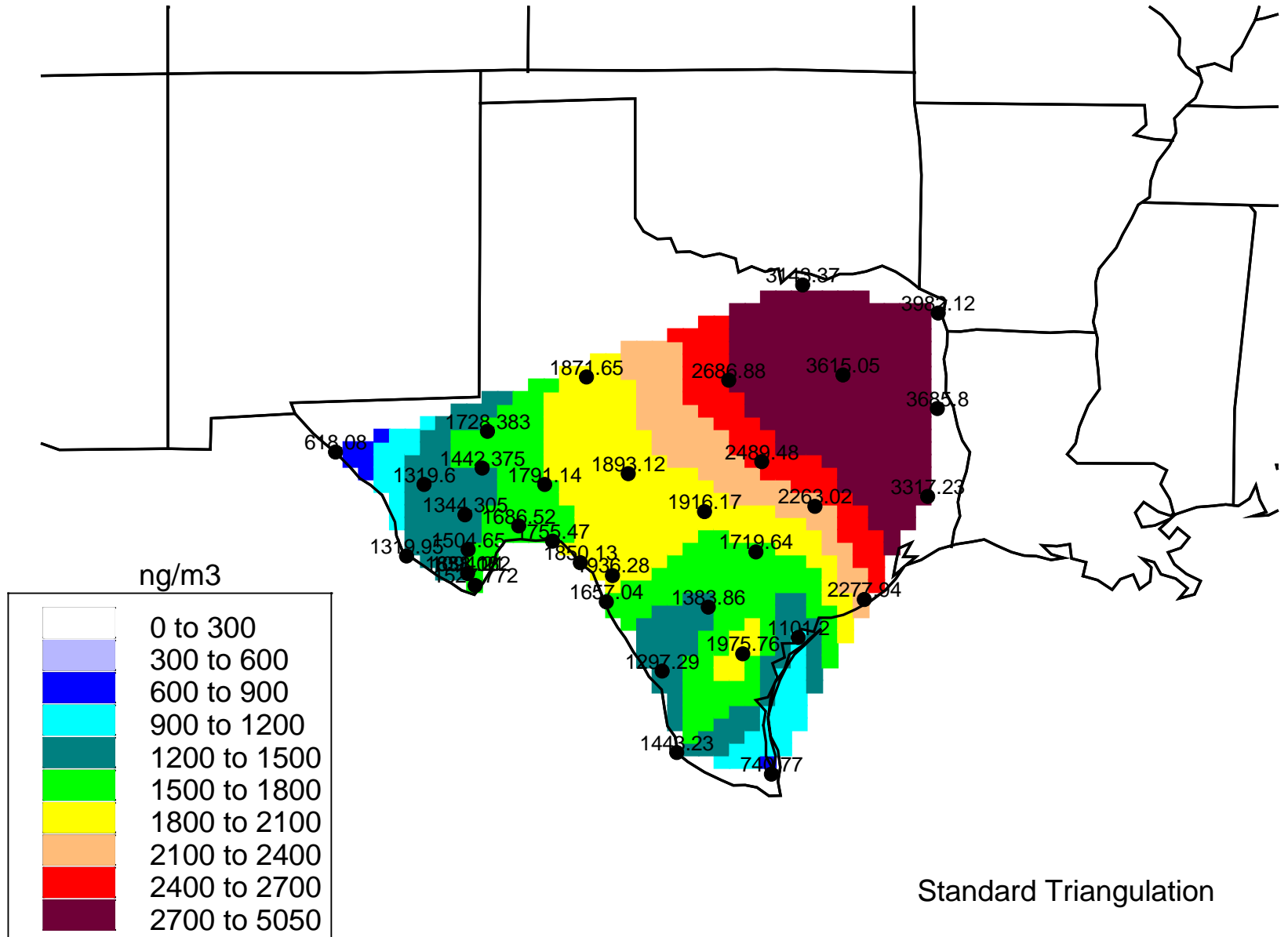
PIXE S on 8/7/1999 (jday 219)



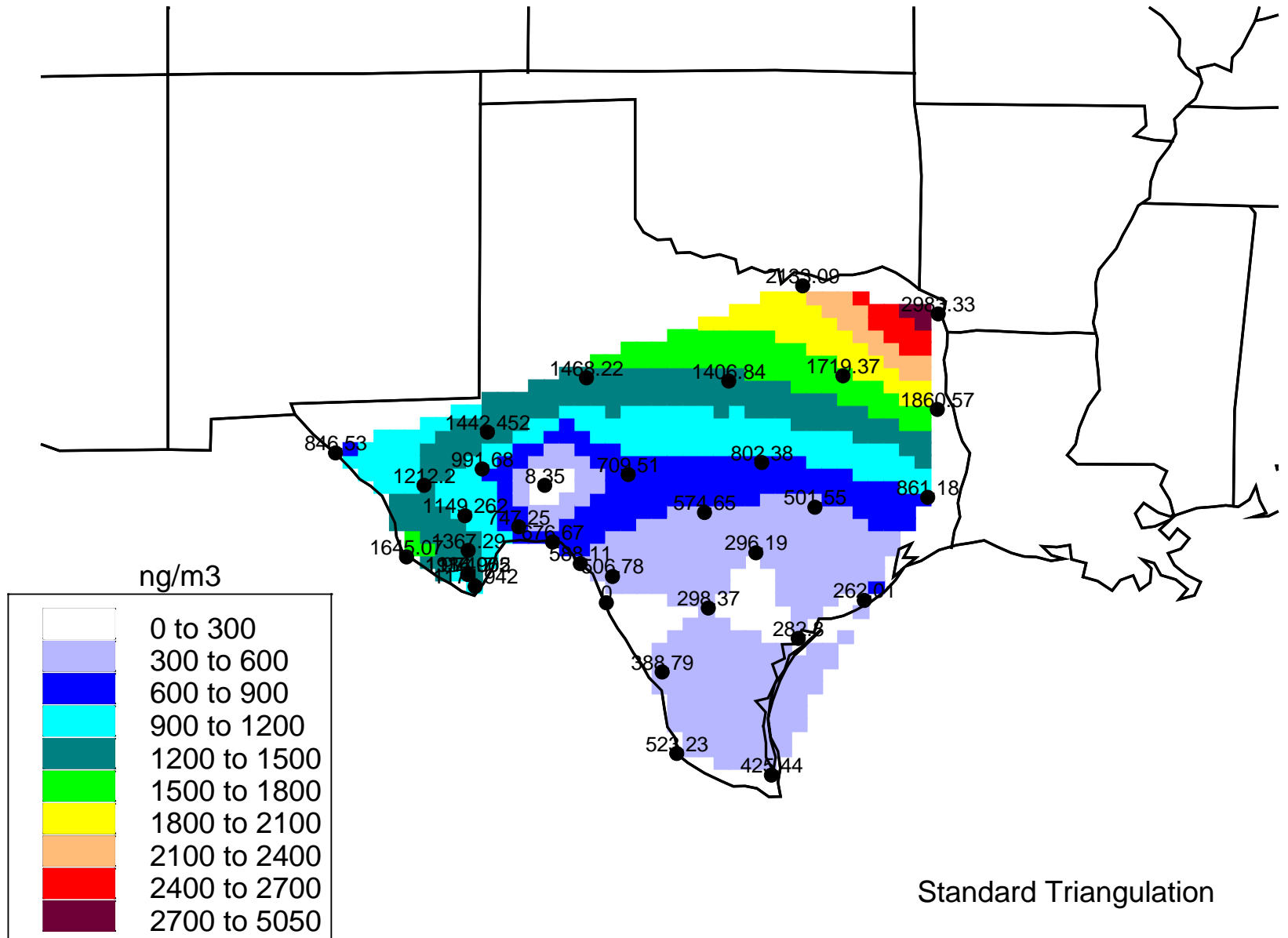
PIXE S on 8/7/1999 (jday 219)



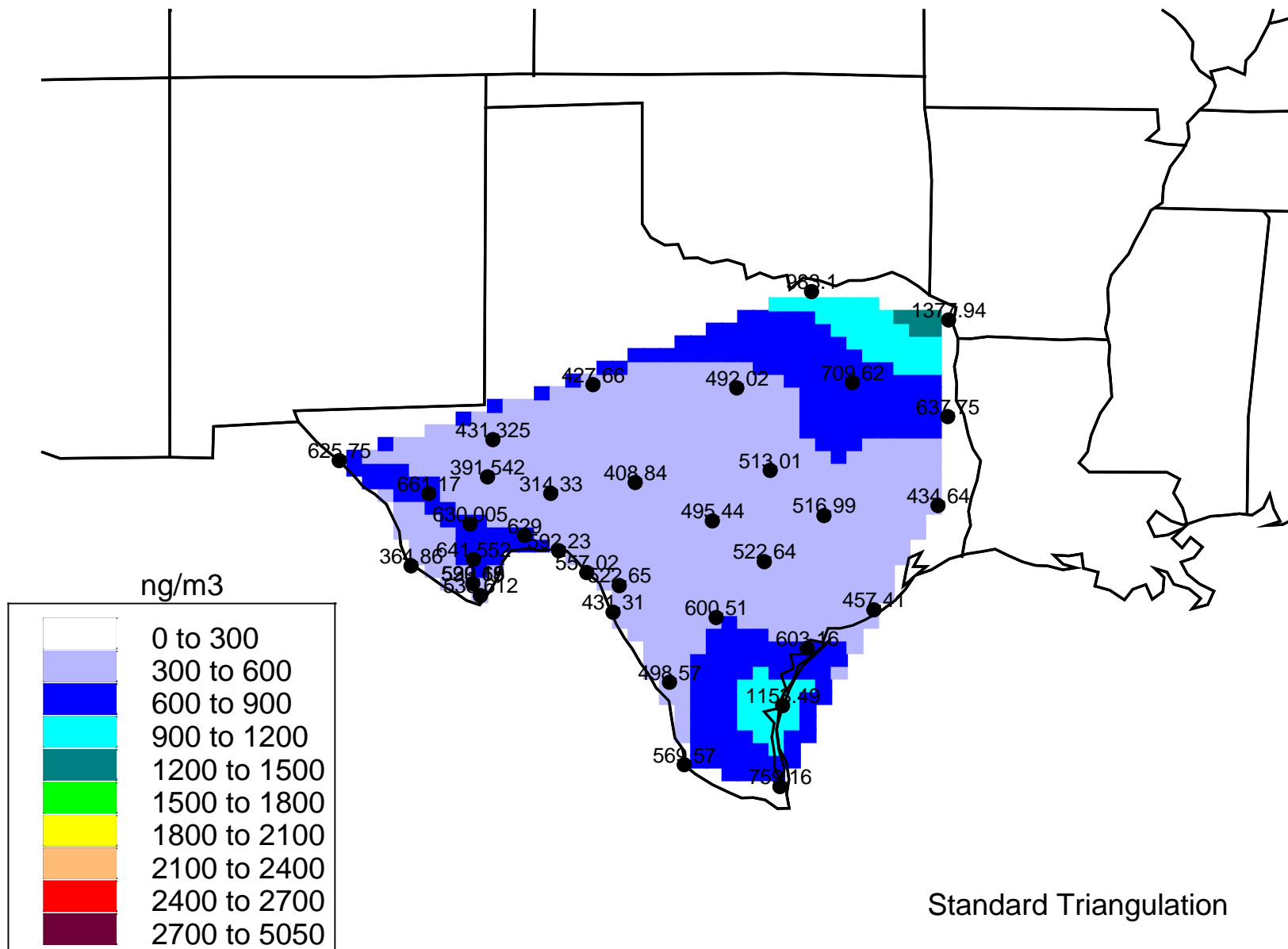
PIXE S on 8/8/1999 (jday 220)



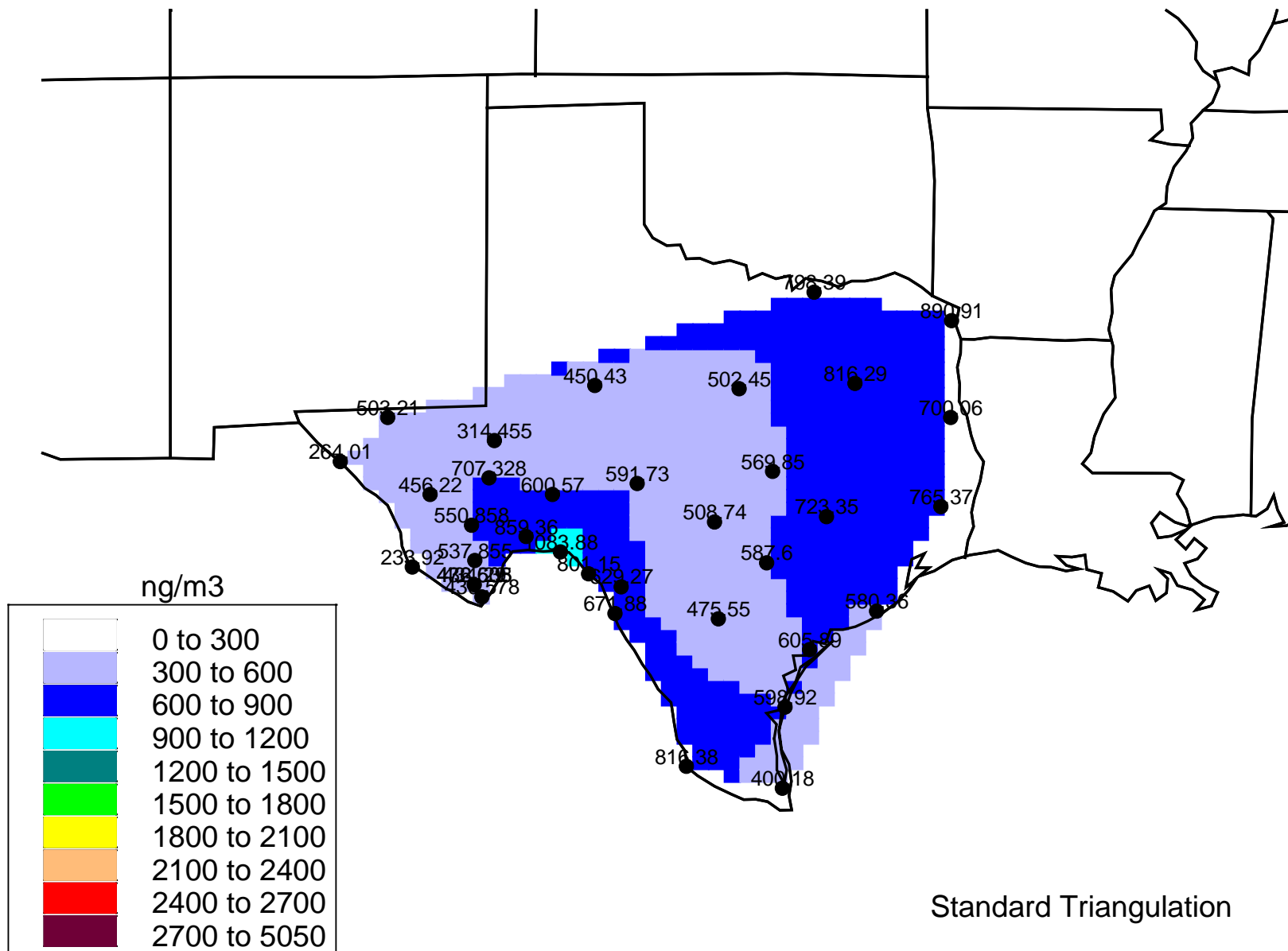
PIXE S on 8/9/1999 (jday 221)



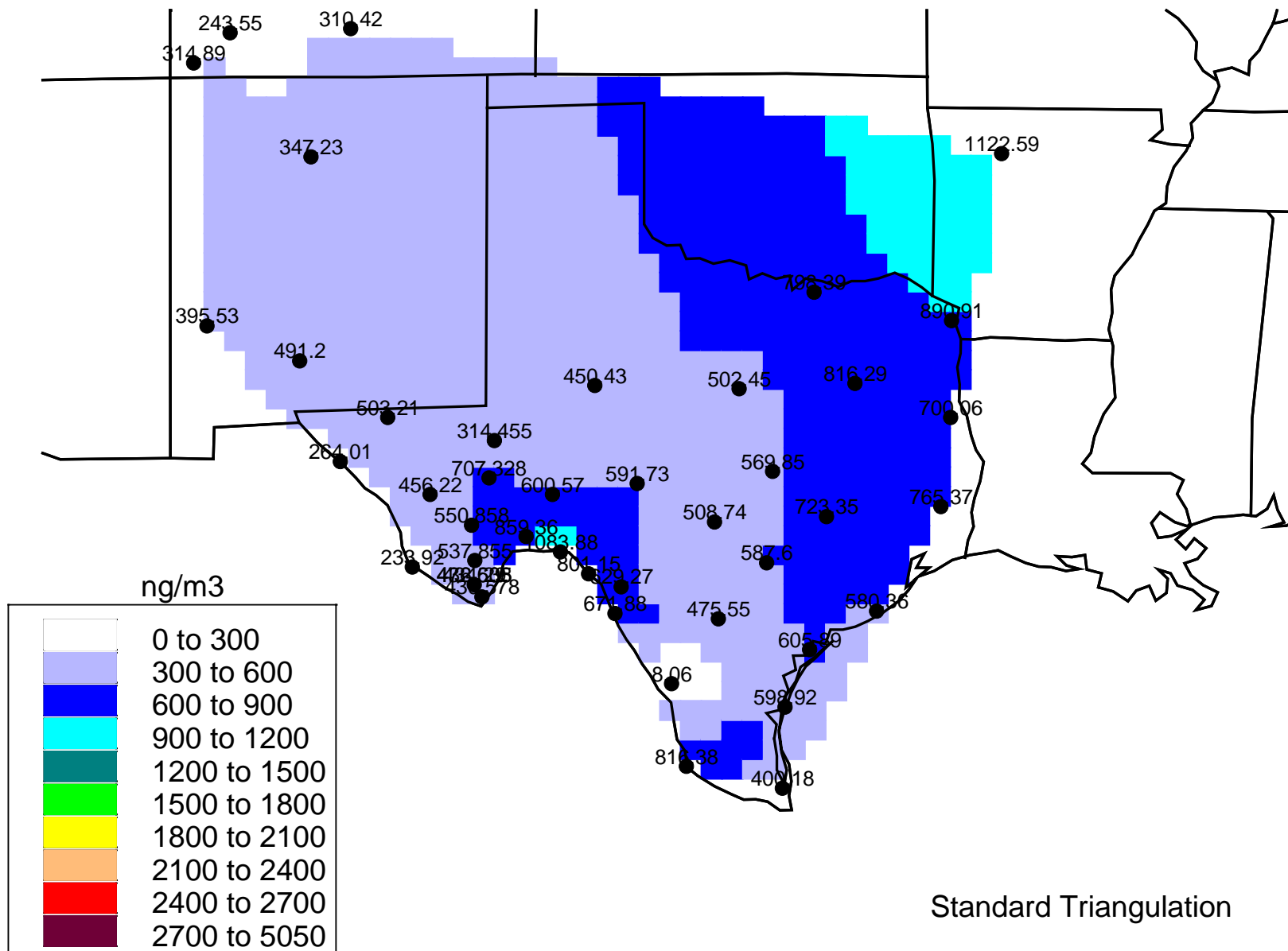
PIXE S on 8/10/1999 (jday 222)



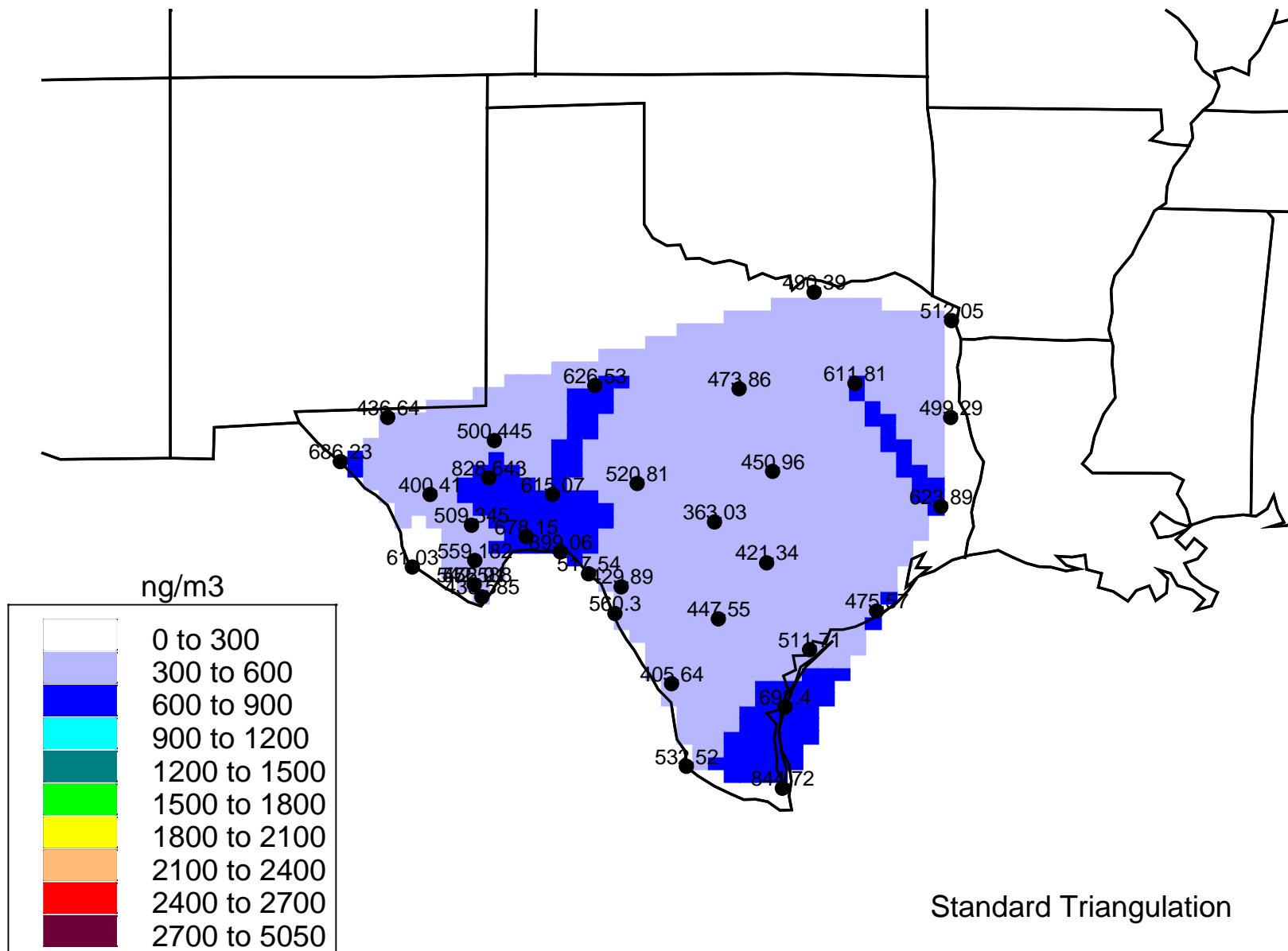
PIXE S on 8/11/1999 (jday 223)



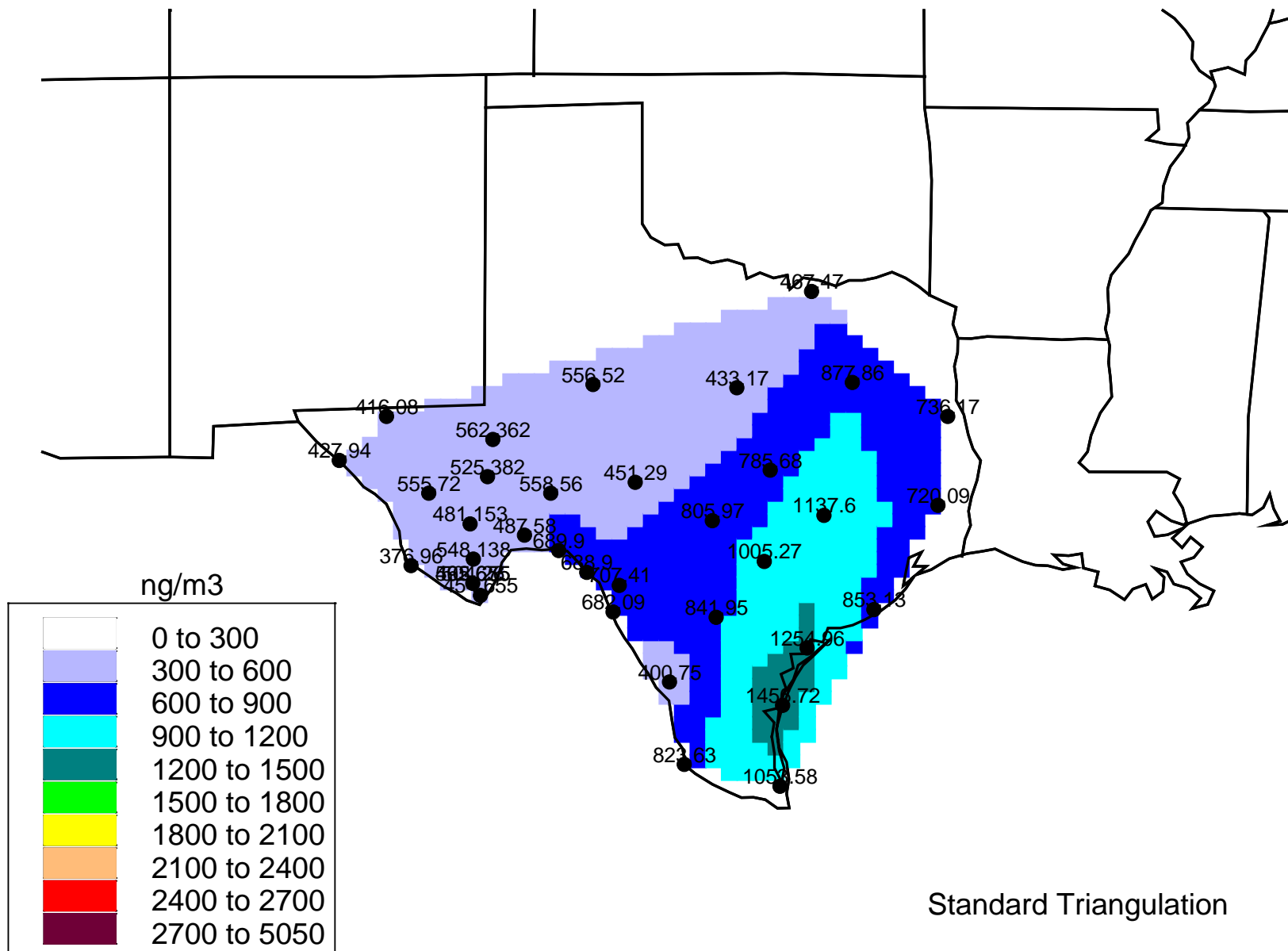
PIXE S on 8/11/1999 (jday 223)



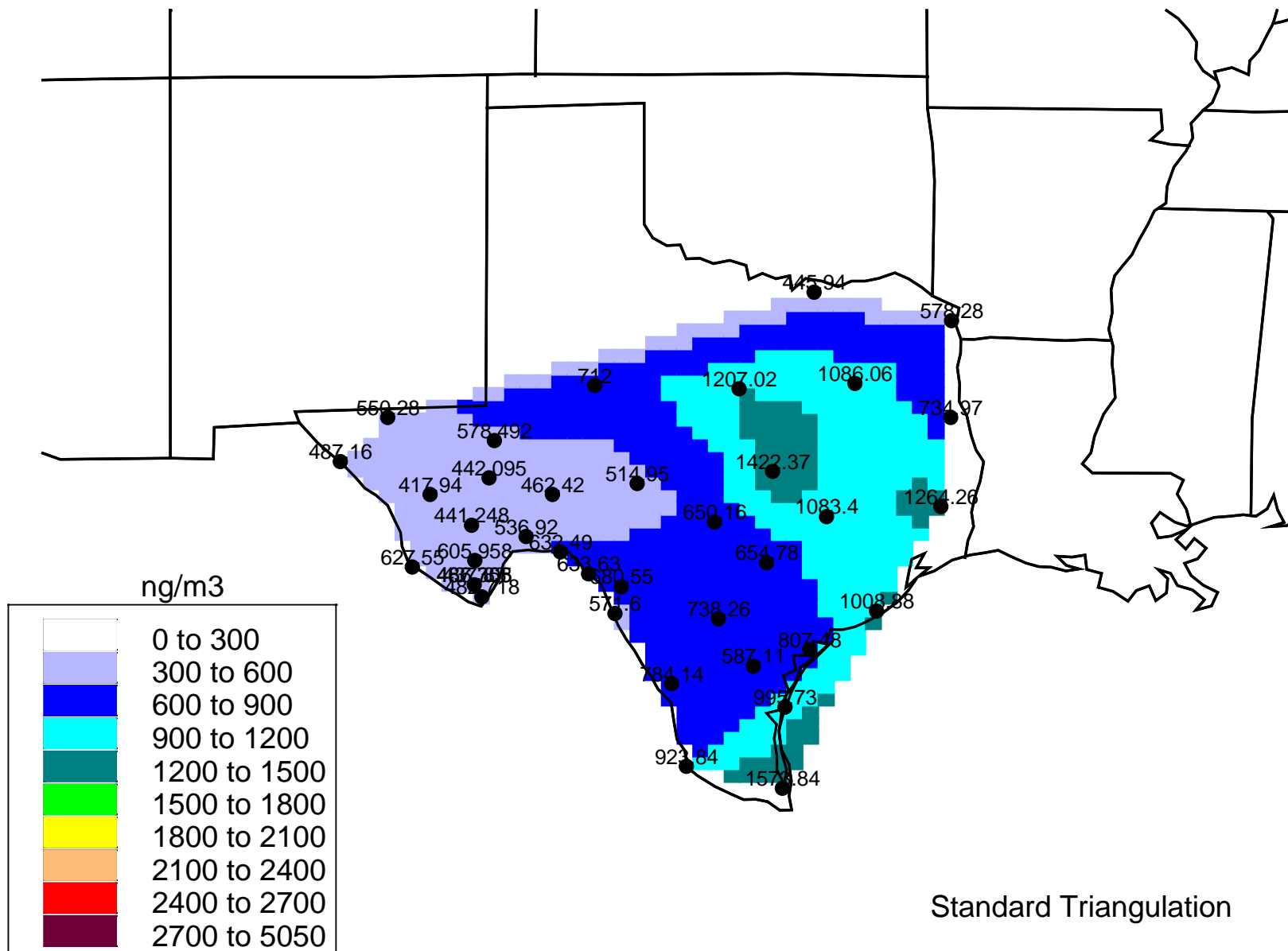
PIXE S on 8/12/1999 (jday 224)



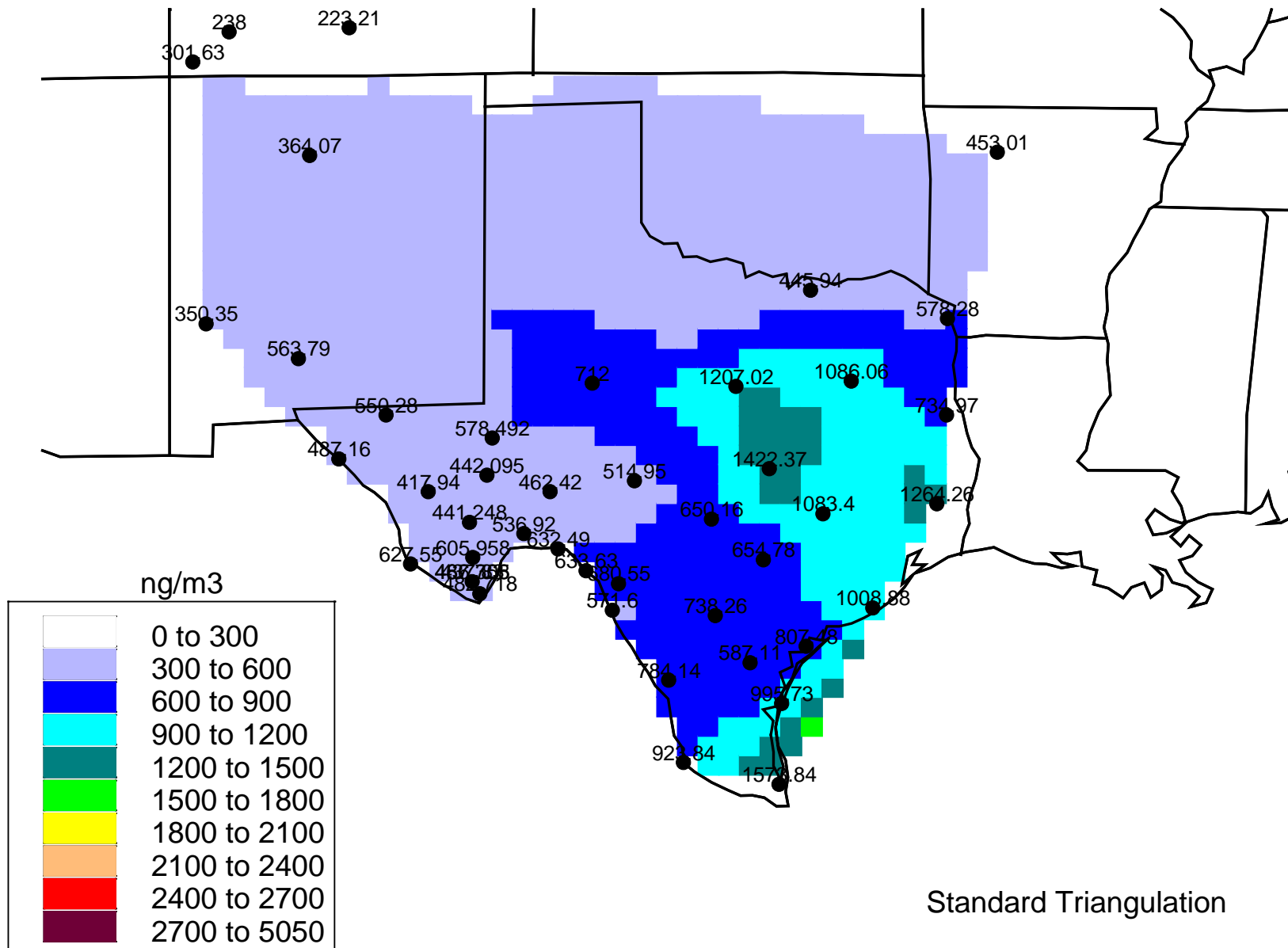
PIXE S on 8/13/1999 (jday 225)



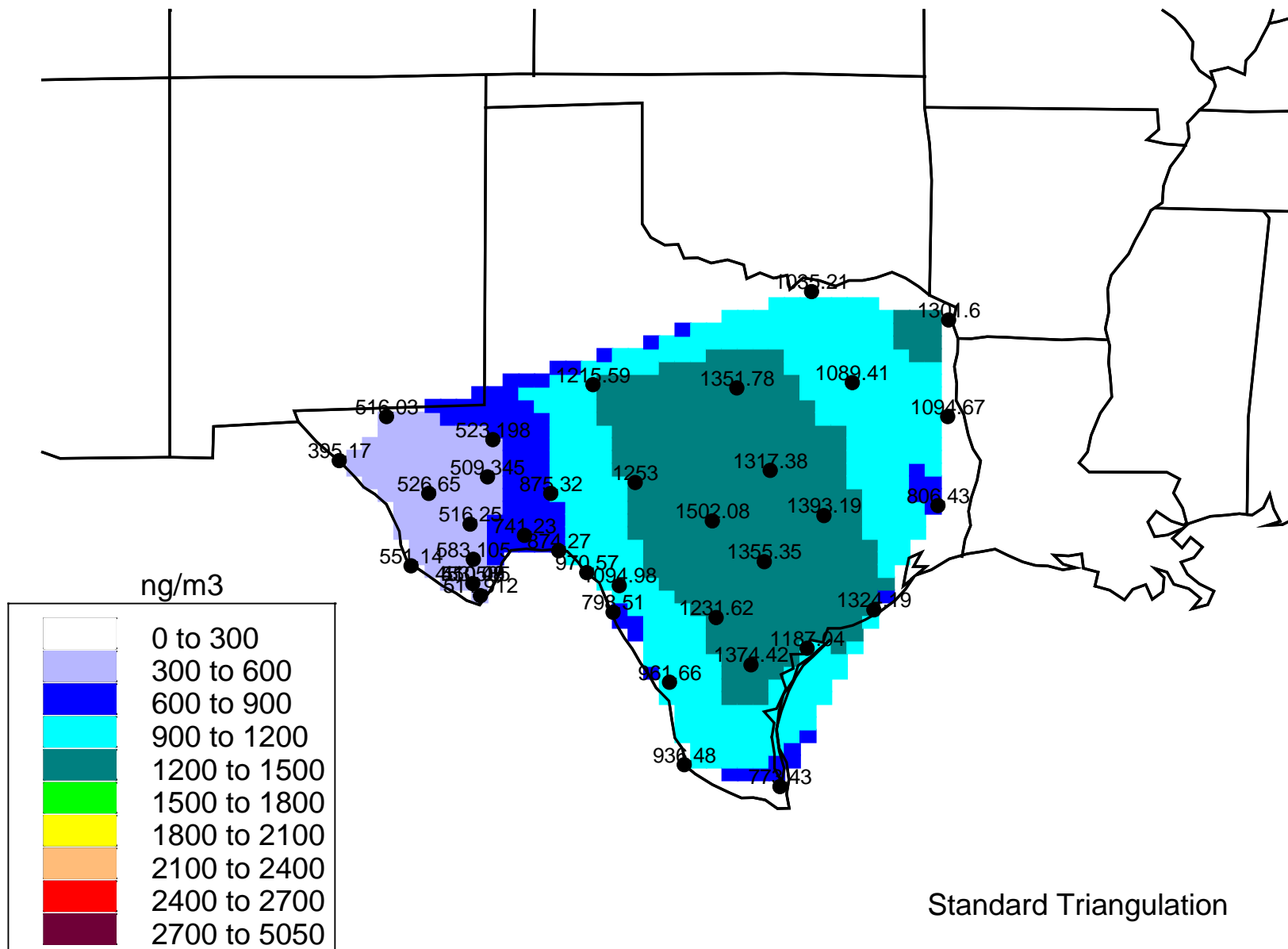
PIXE S on 8/14/1999 (jday 226)



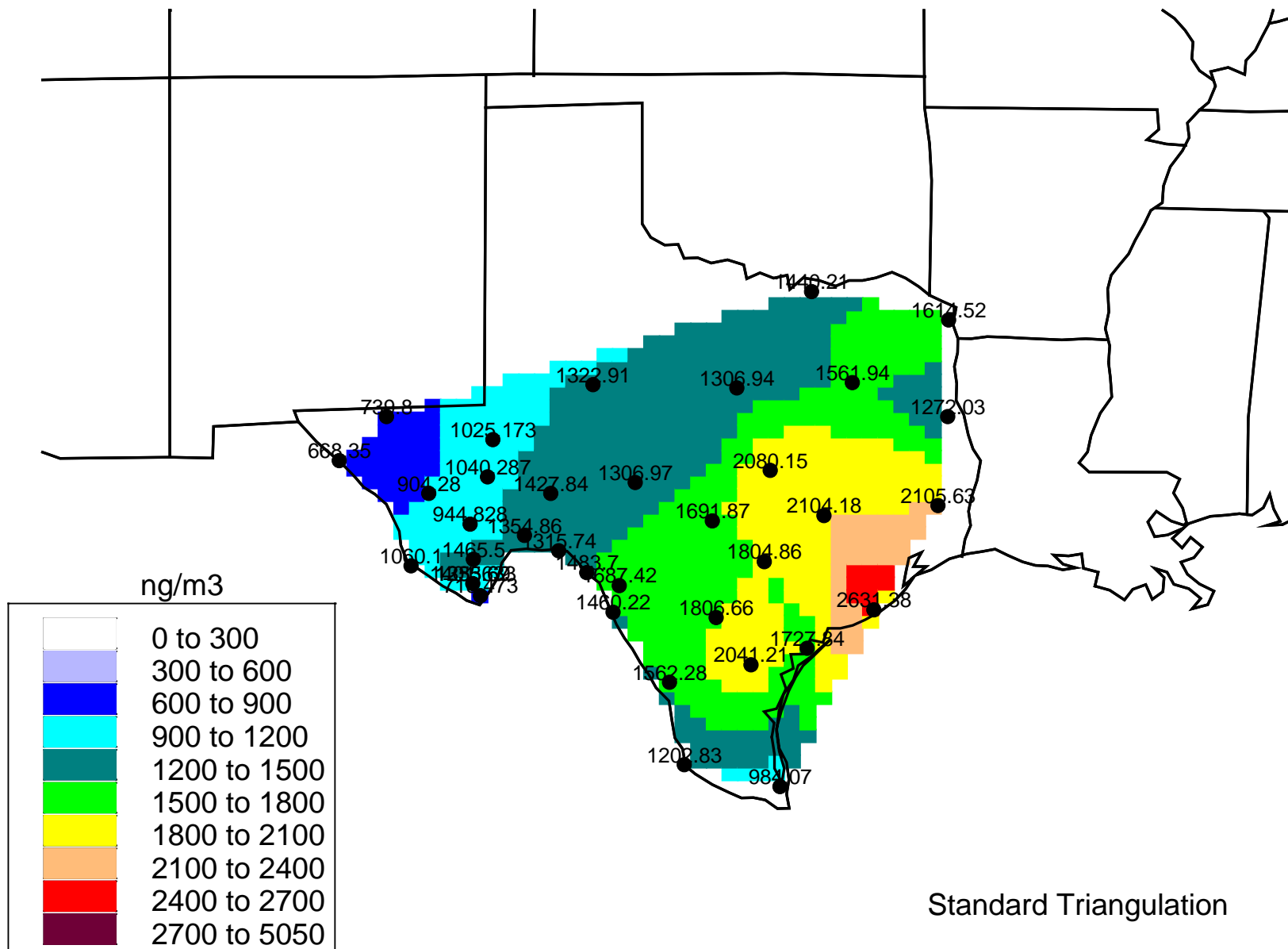
PIXE S on 8/14/1999 (jday 226)



PIXE S on 8/15/1999 (jday 227)

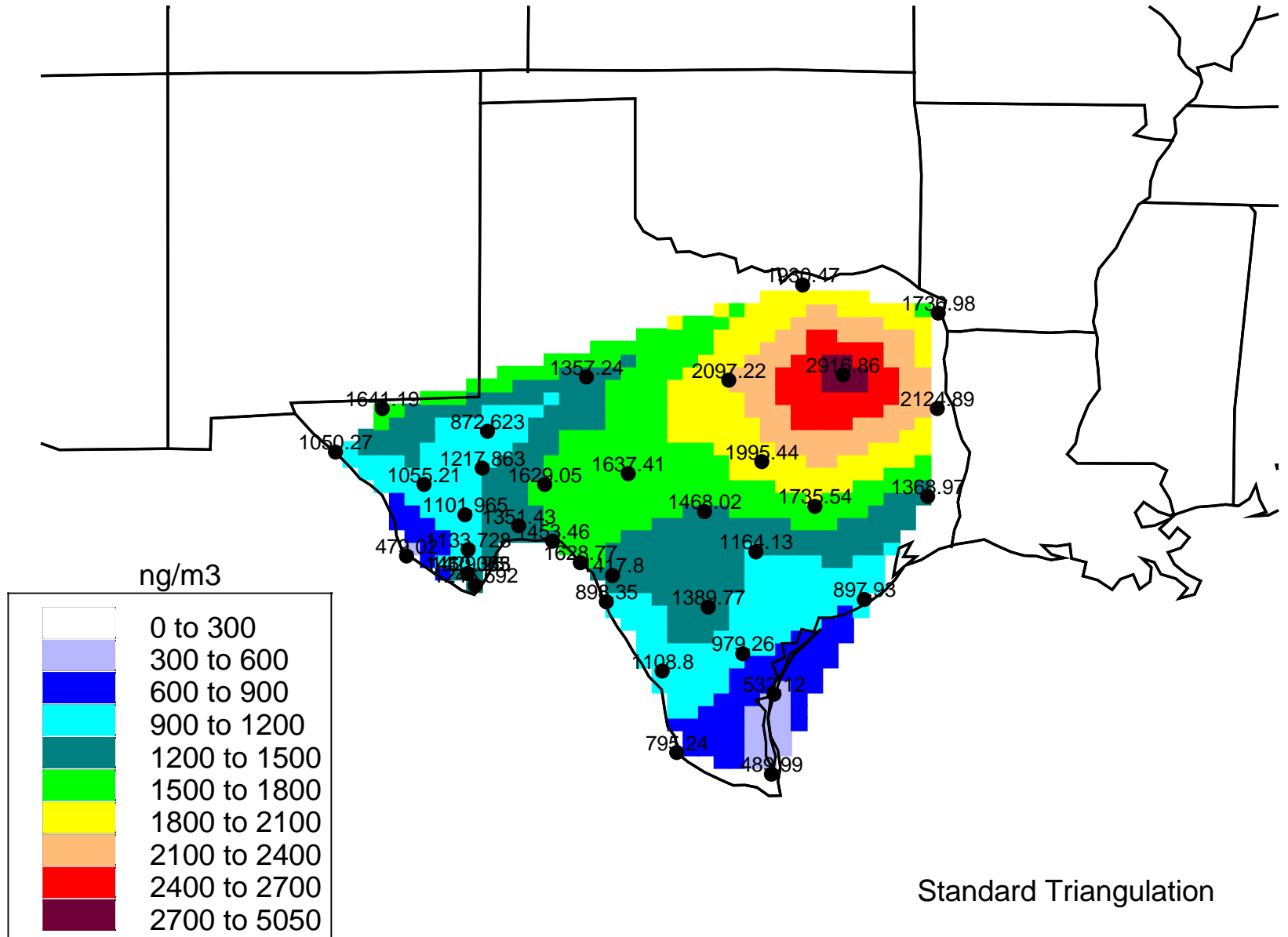


PIXE S on 8/16/1999 (jday 228)

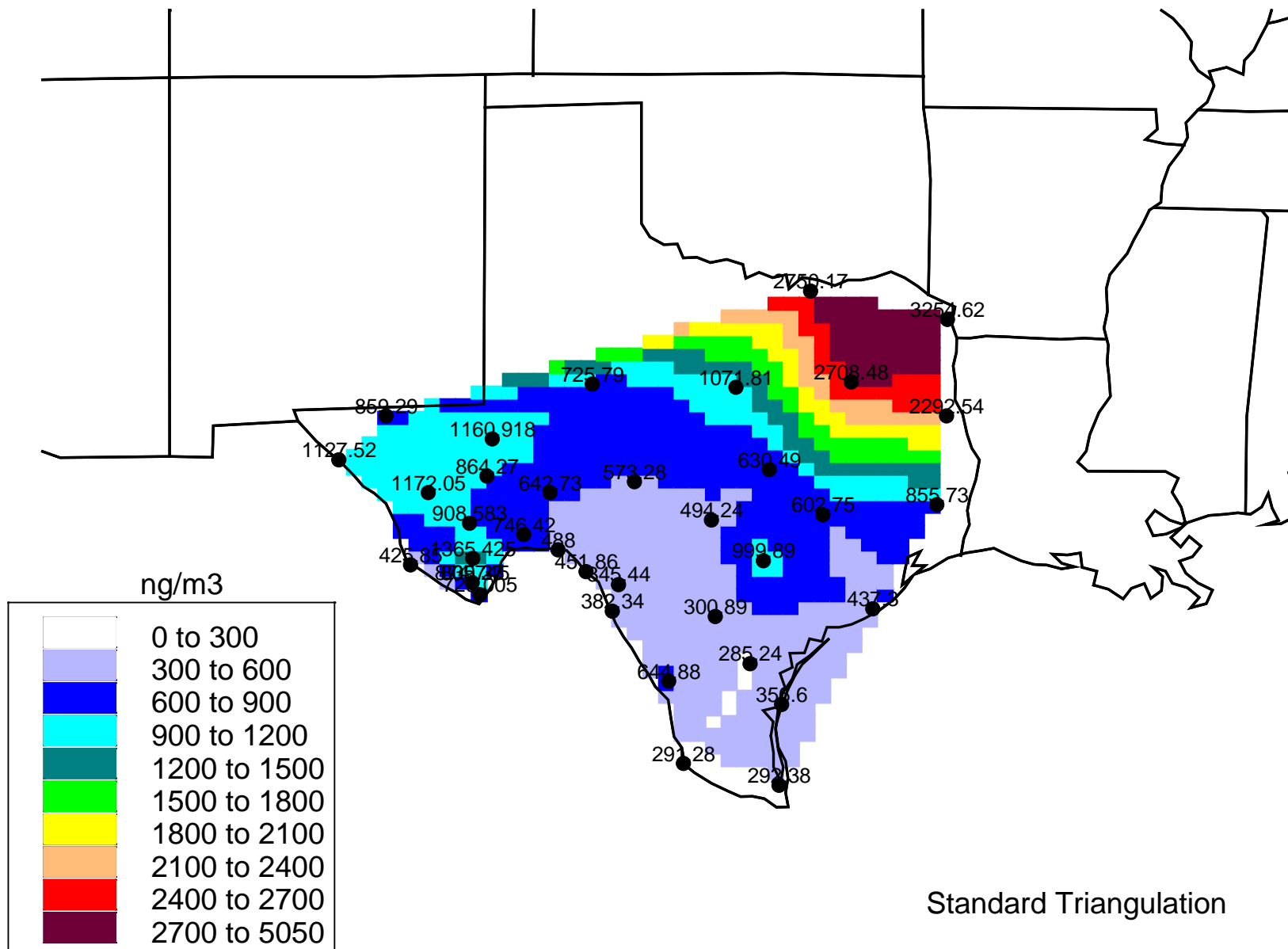


Standard Triangulation

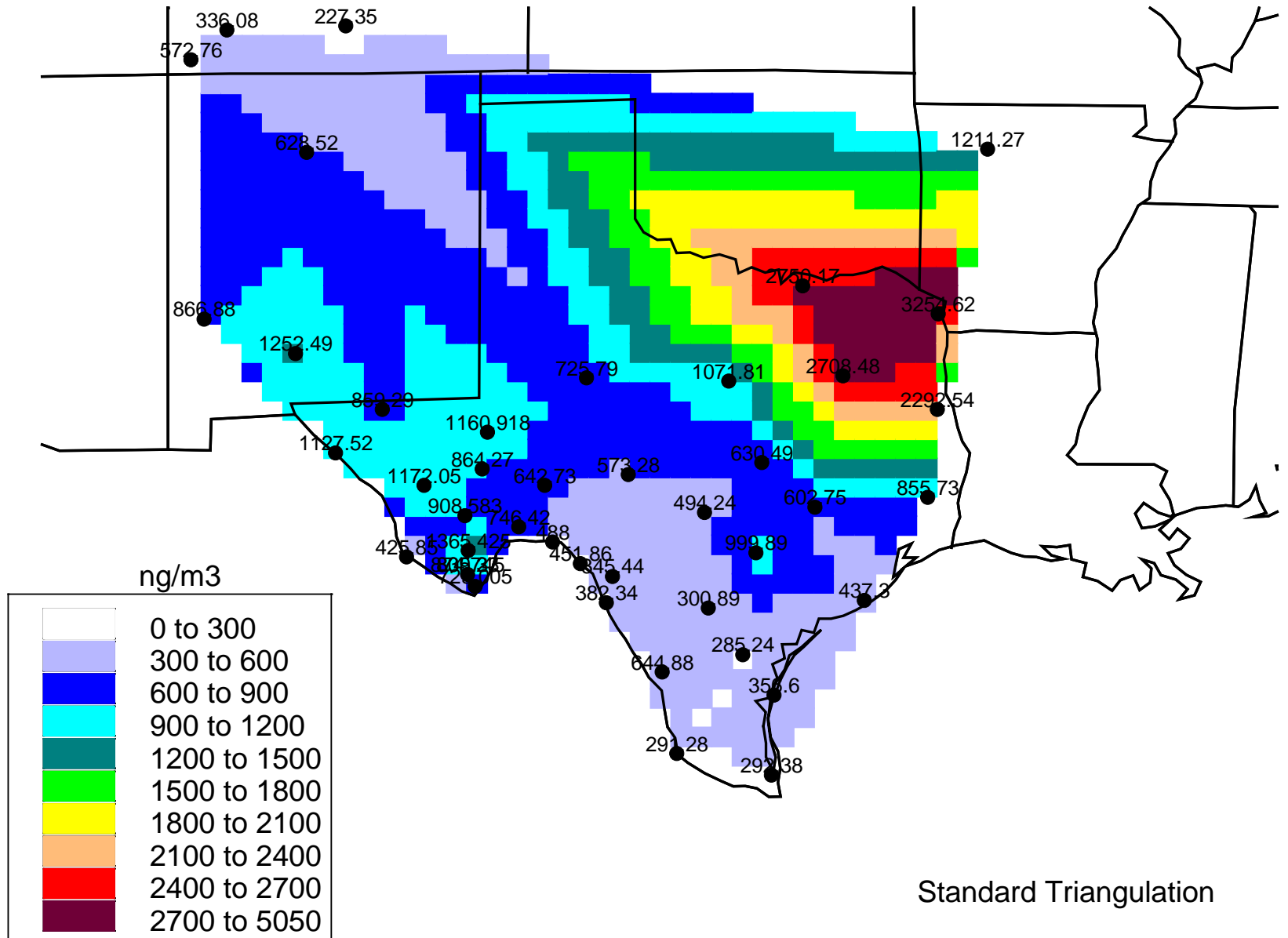
PIXE S on 8/17/1999 (jday 229)



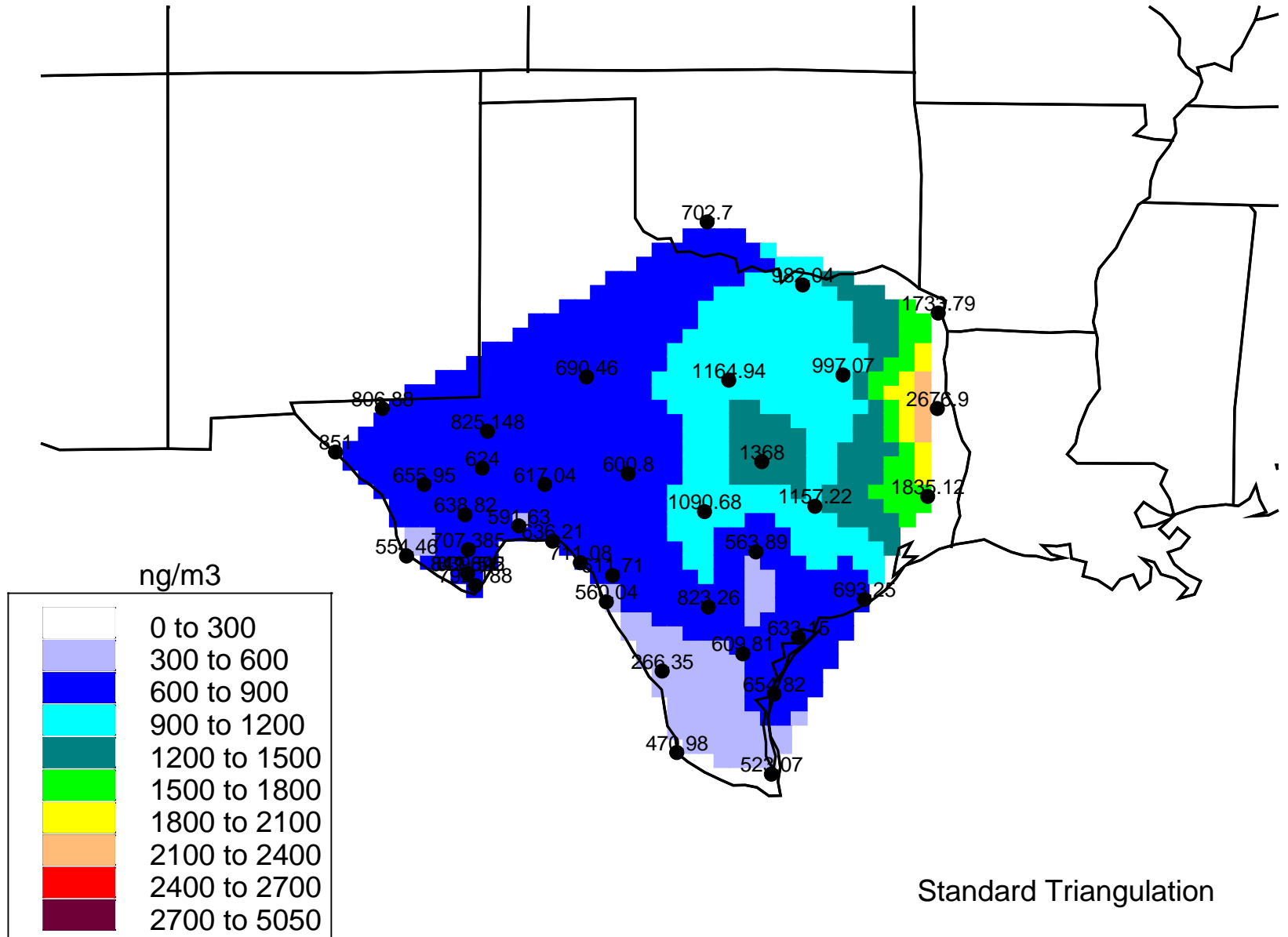
PIXE S on 8/18/1999 (jday 230)



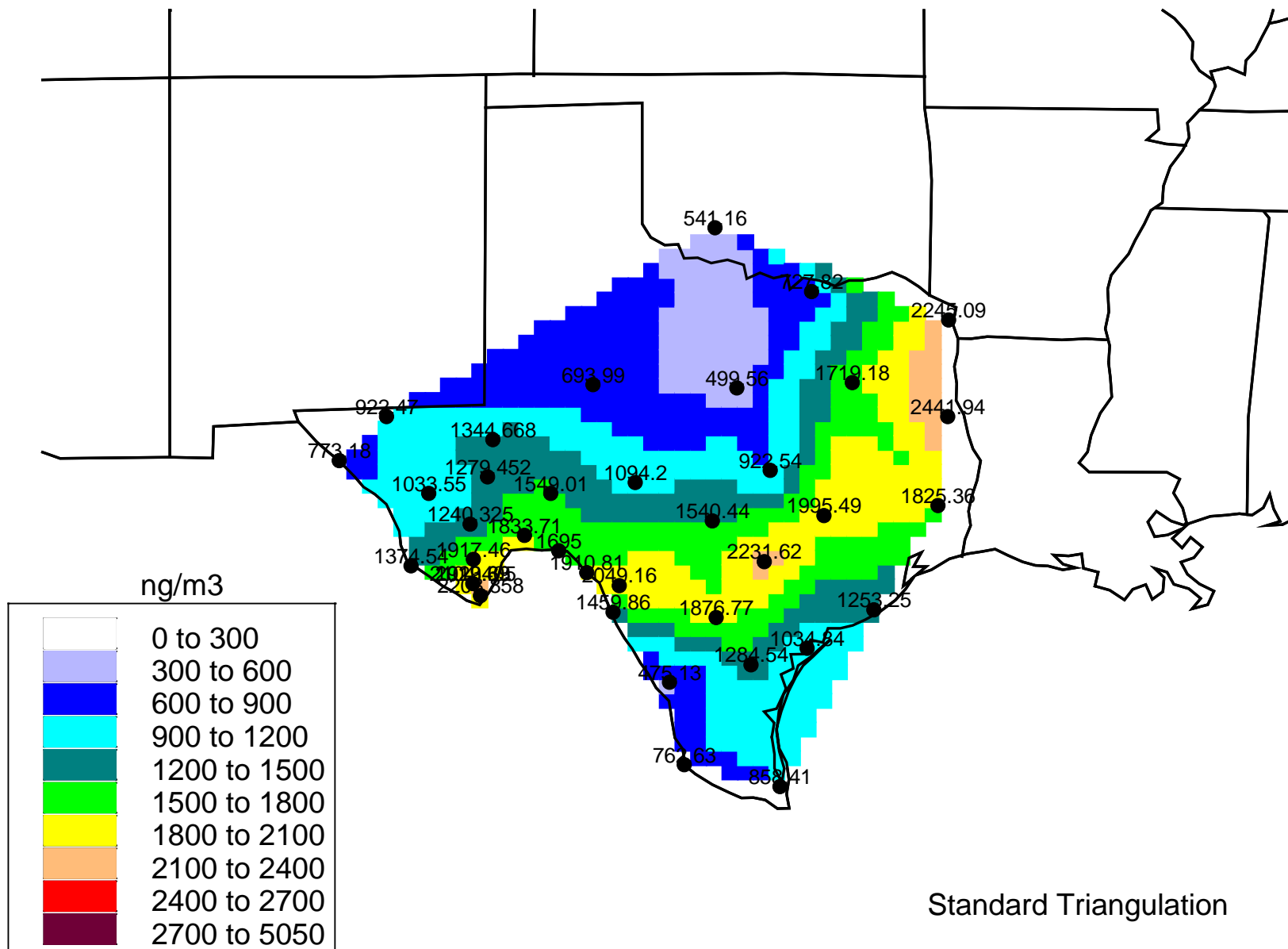
PIXE S on 8/18/1999 (jday 230)



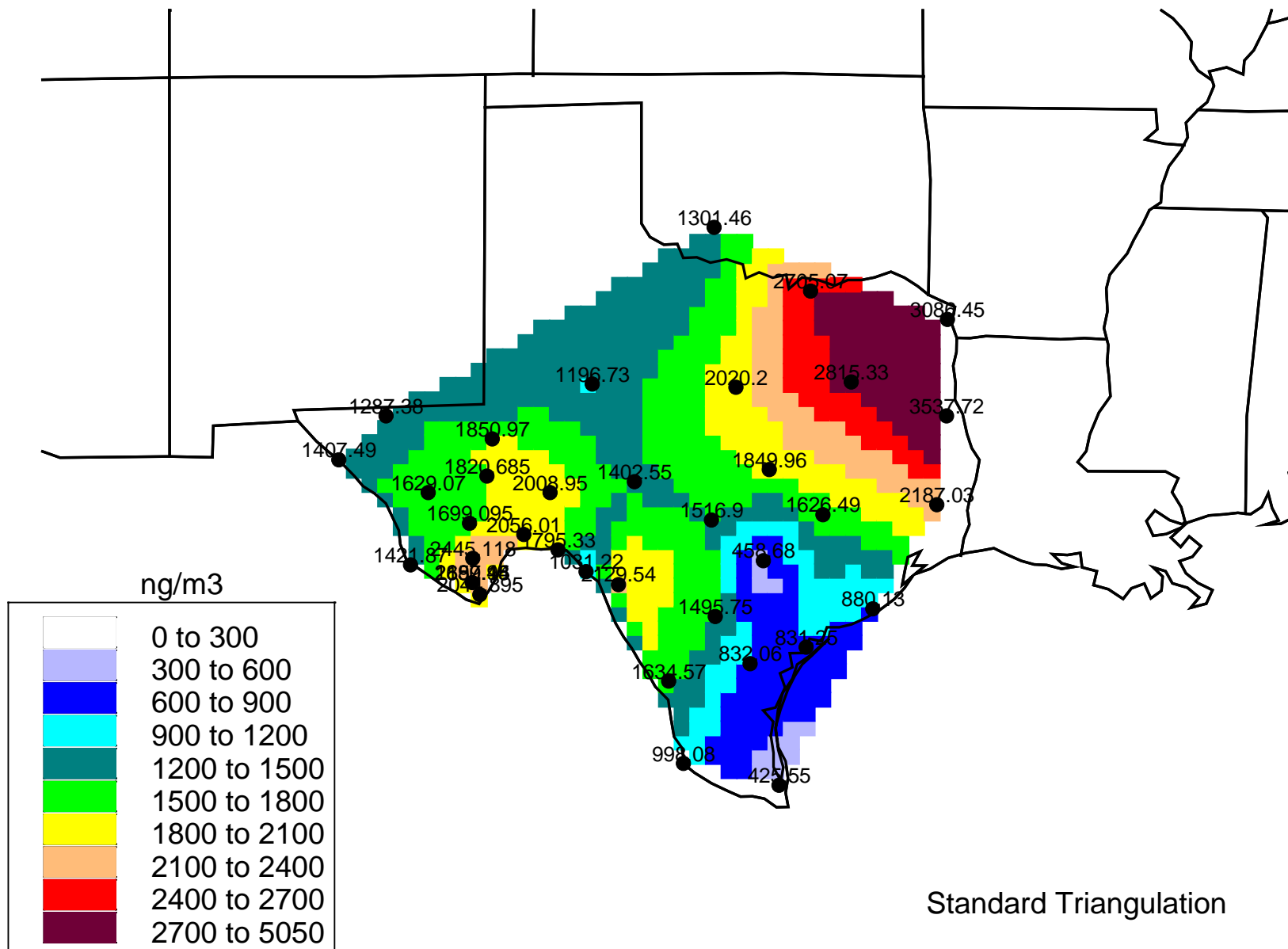
PIXE S on 8/19/1999 (jday 231)



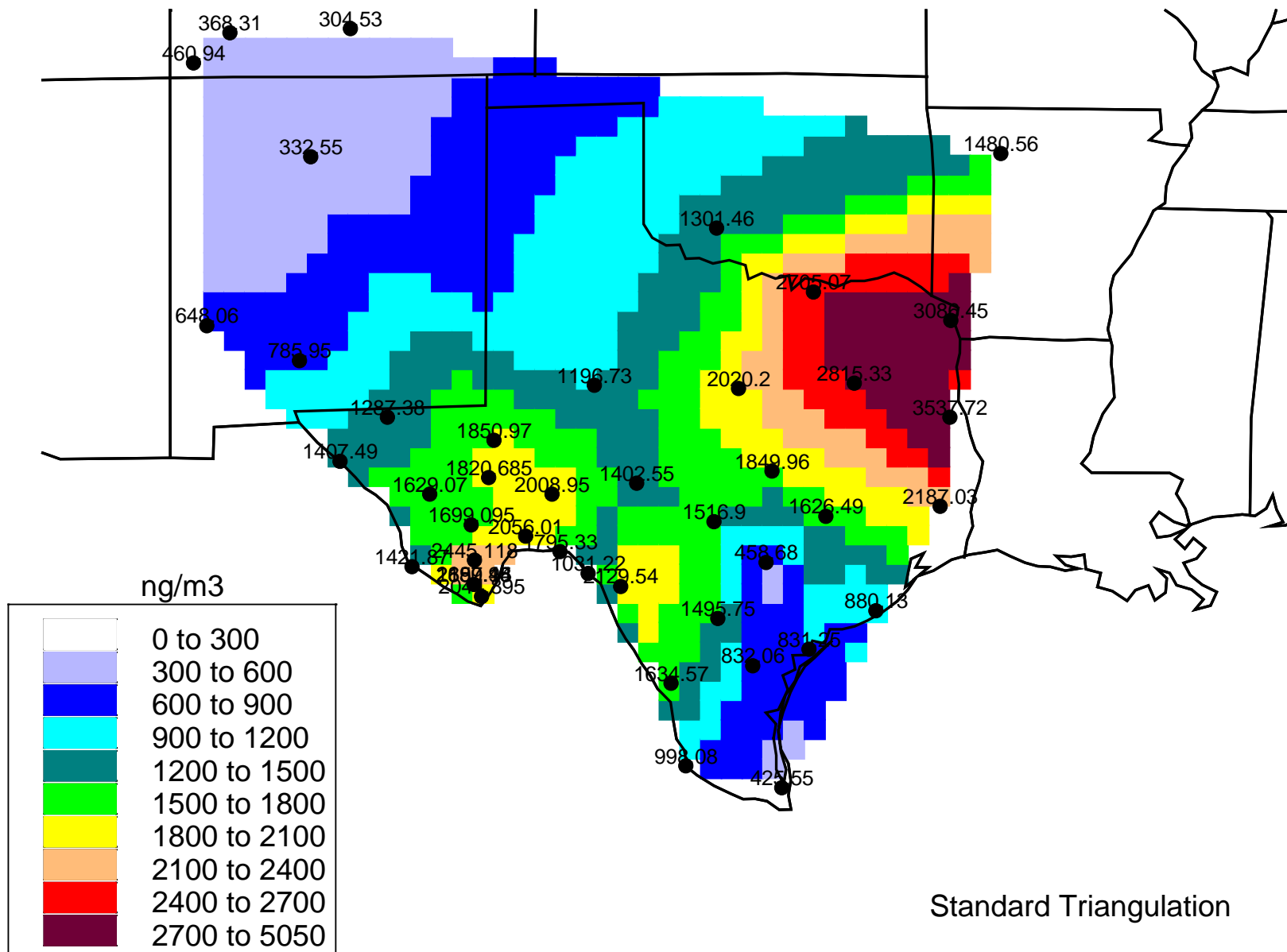
PIXE S on 8/20/1999 (jday 232)



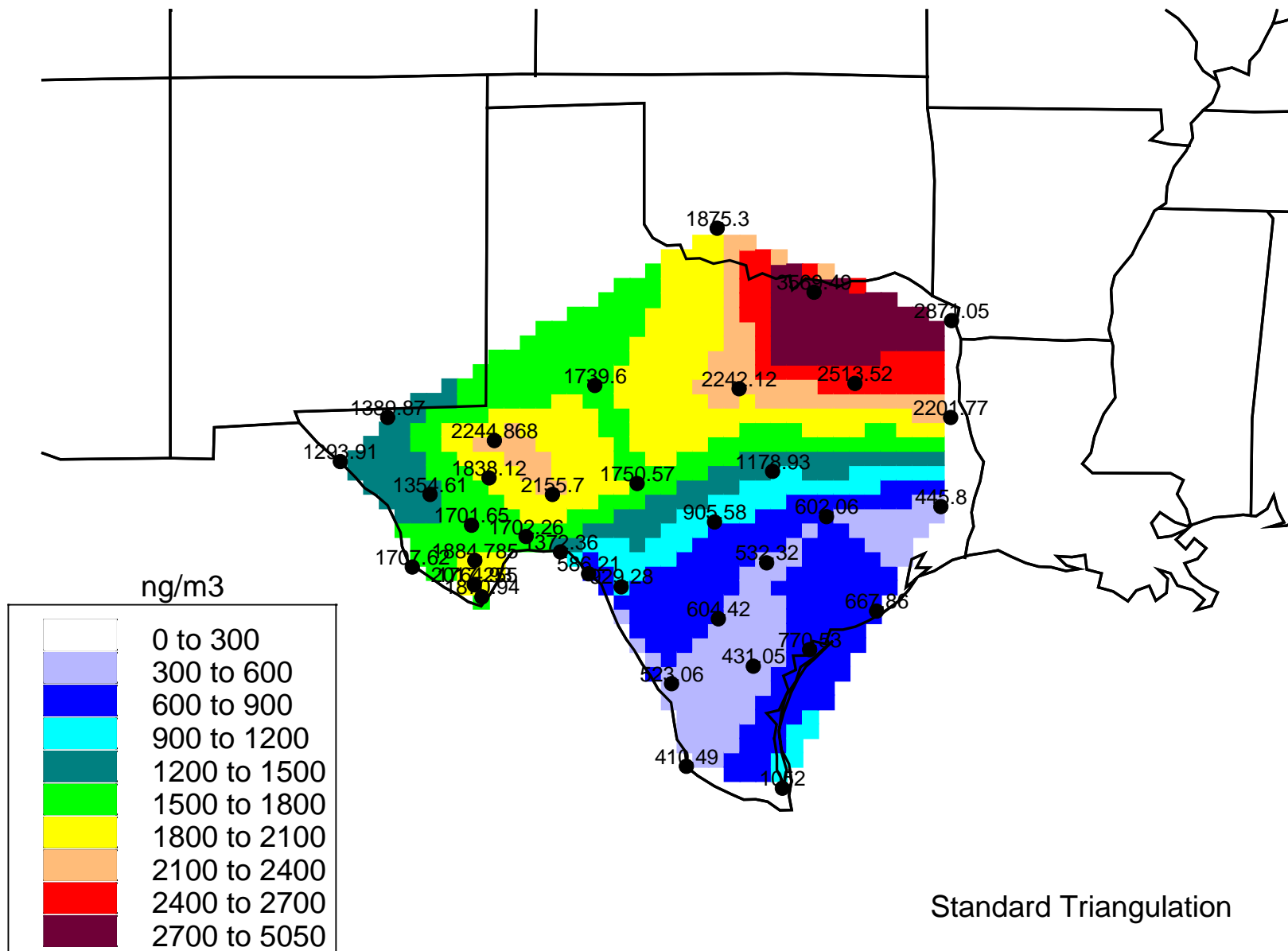
PIXE S on 8/21/1999 (jday 233)



PIXE S on 8/21/1999 (jday 233)

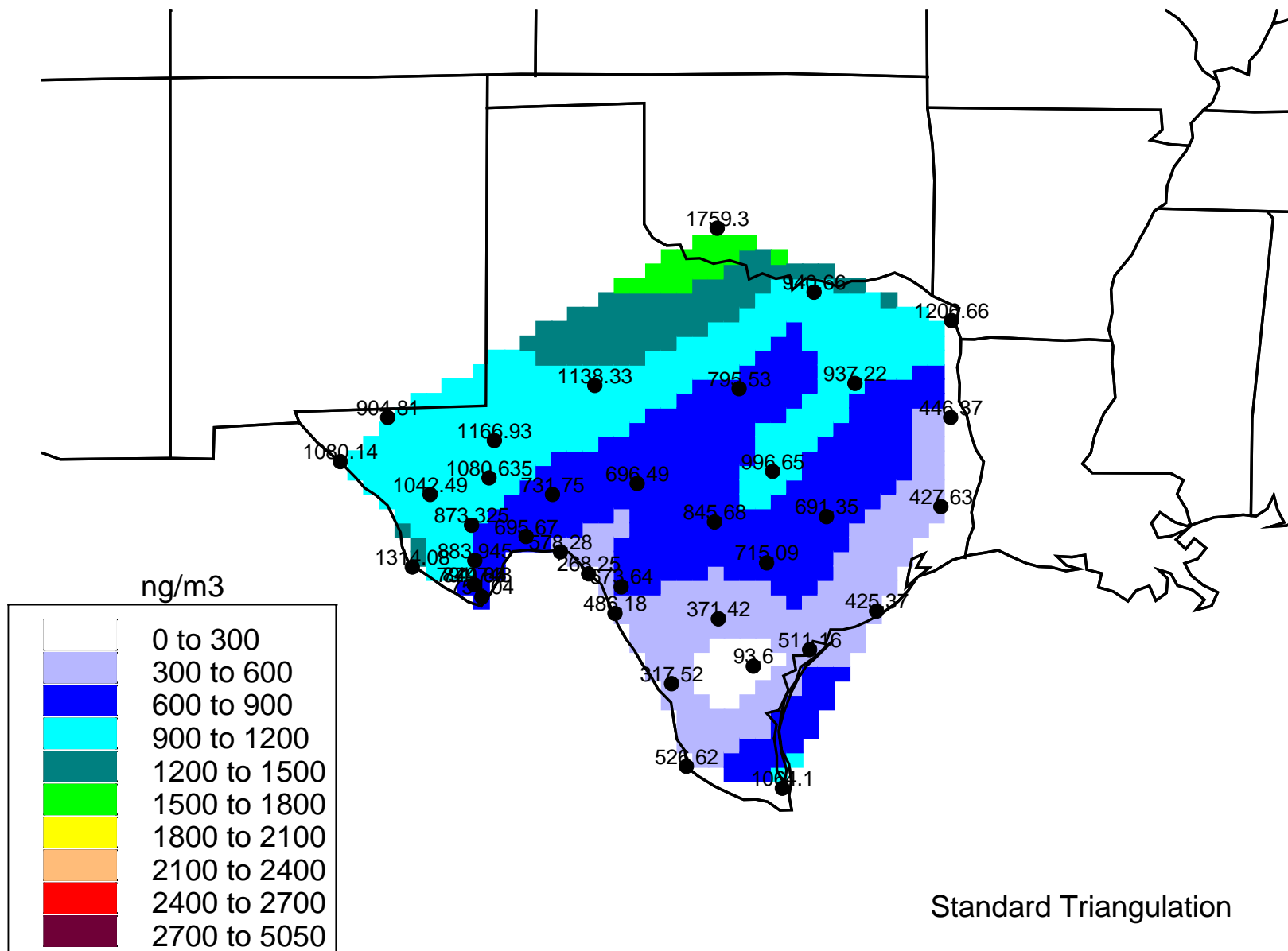


PIXE S on 8/22/1999 (jday 234)

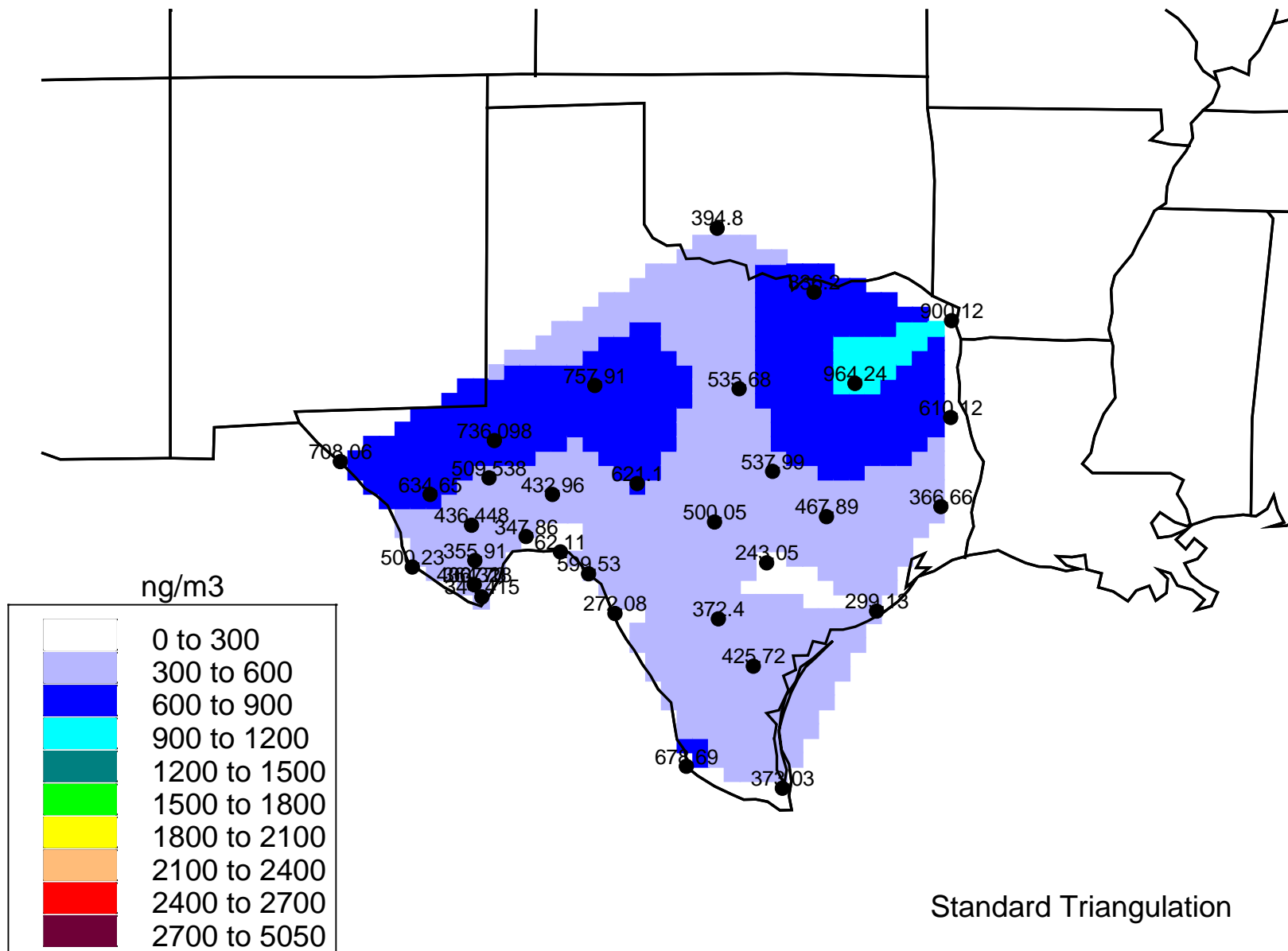


Standard Triangulation

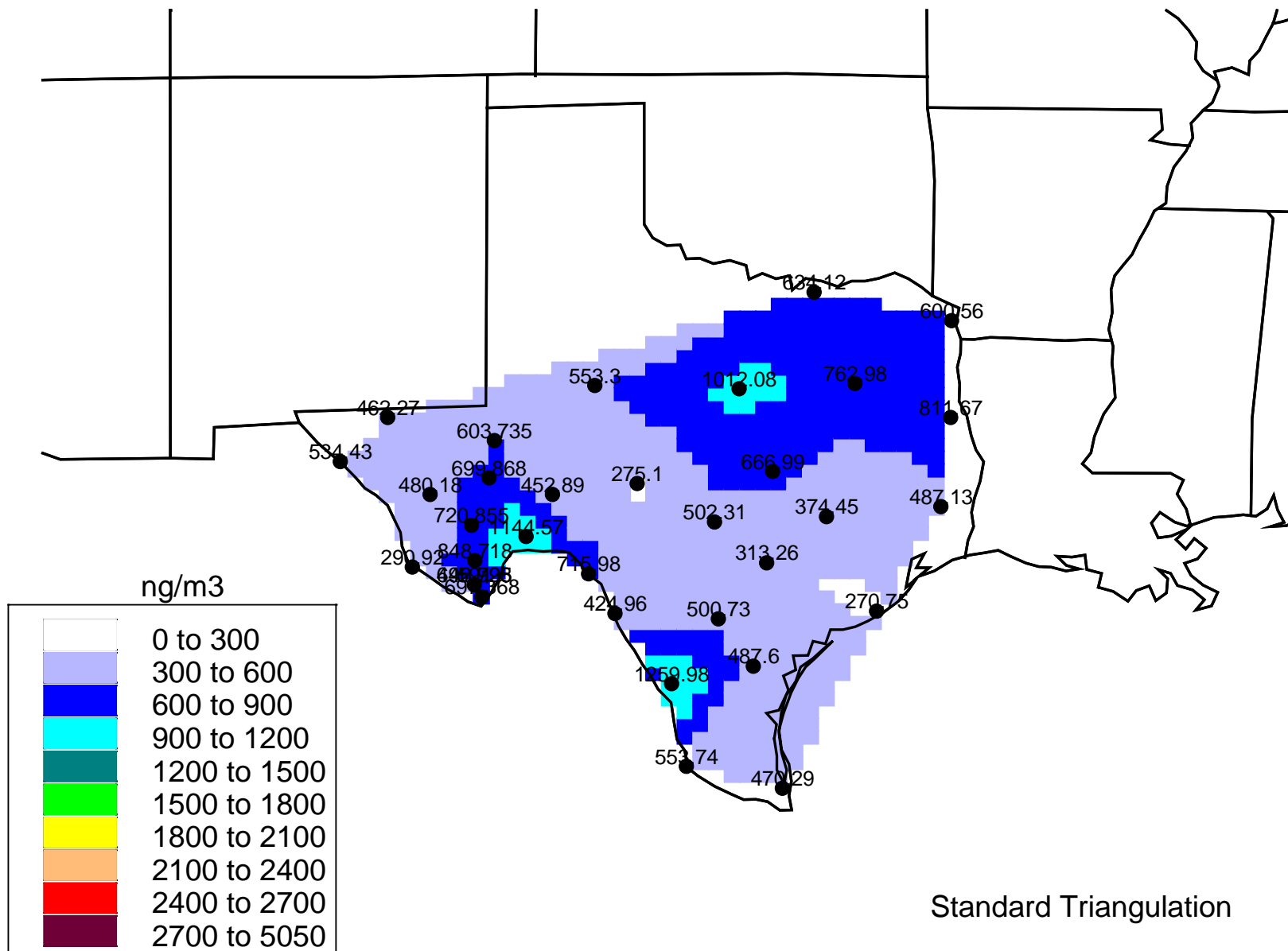
PIXE S on 8/23/1999 (jday 235)



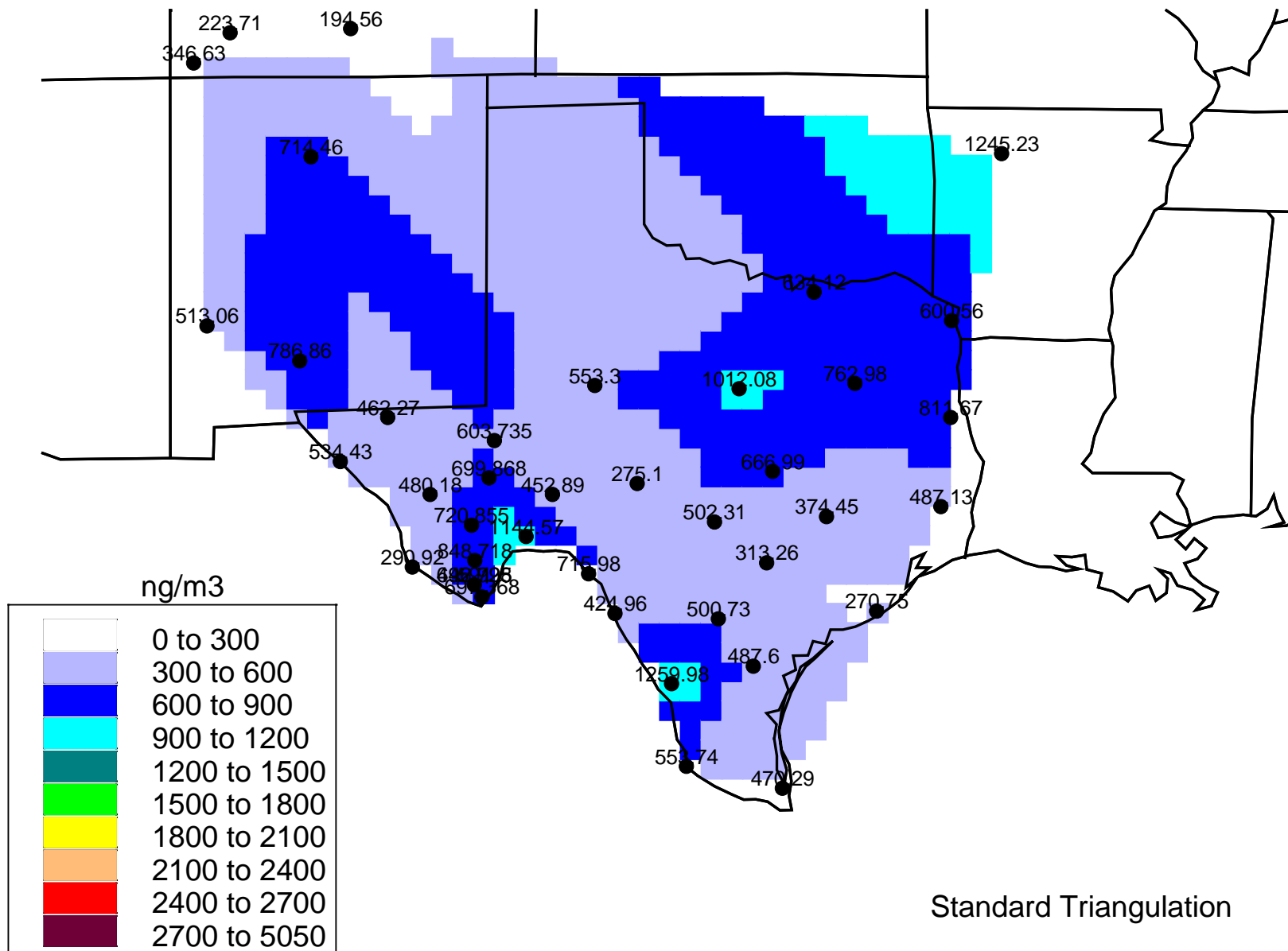
PIXE S on 8/24/1999 (jday 236)



PIXE S on 8/25/1999 (jday 237)



PIXE S on 8/25/1999 (jday 237)



223.71

194.56

346.63

714.46

1245.23

513.06

786.86

824.12

600.56

462.27

553.3

1012.08

762.98

811.67

534.43

603.735

275.1

666.99

452.89

480.18

502.31

374.45

487.13

290.92

848.718

715.98

313.26

ng/m³

699.868

720.855

424.96

500.73

270.75

693.925

659.768

424.96

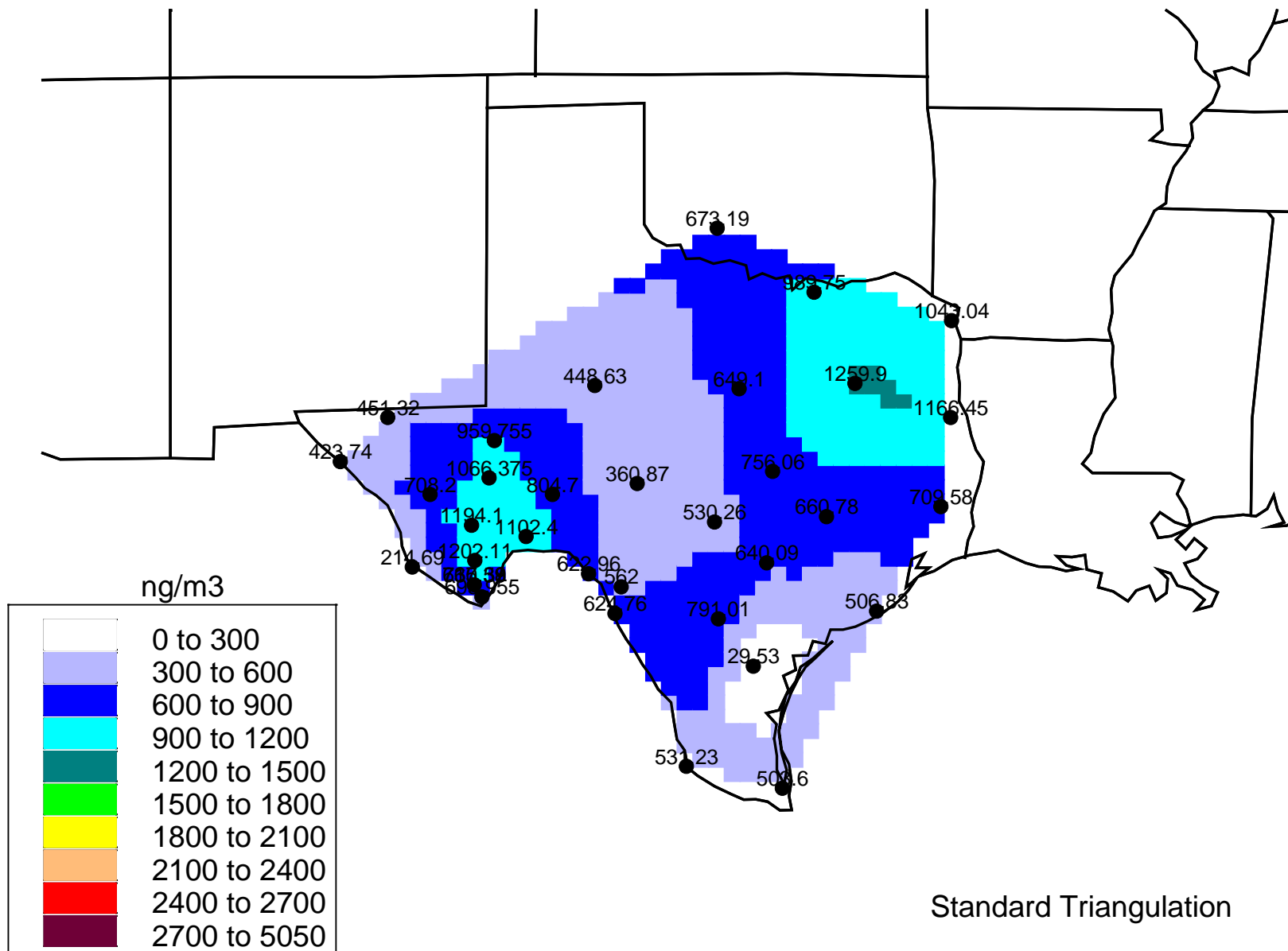
1259.98

487.6

553.74

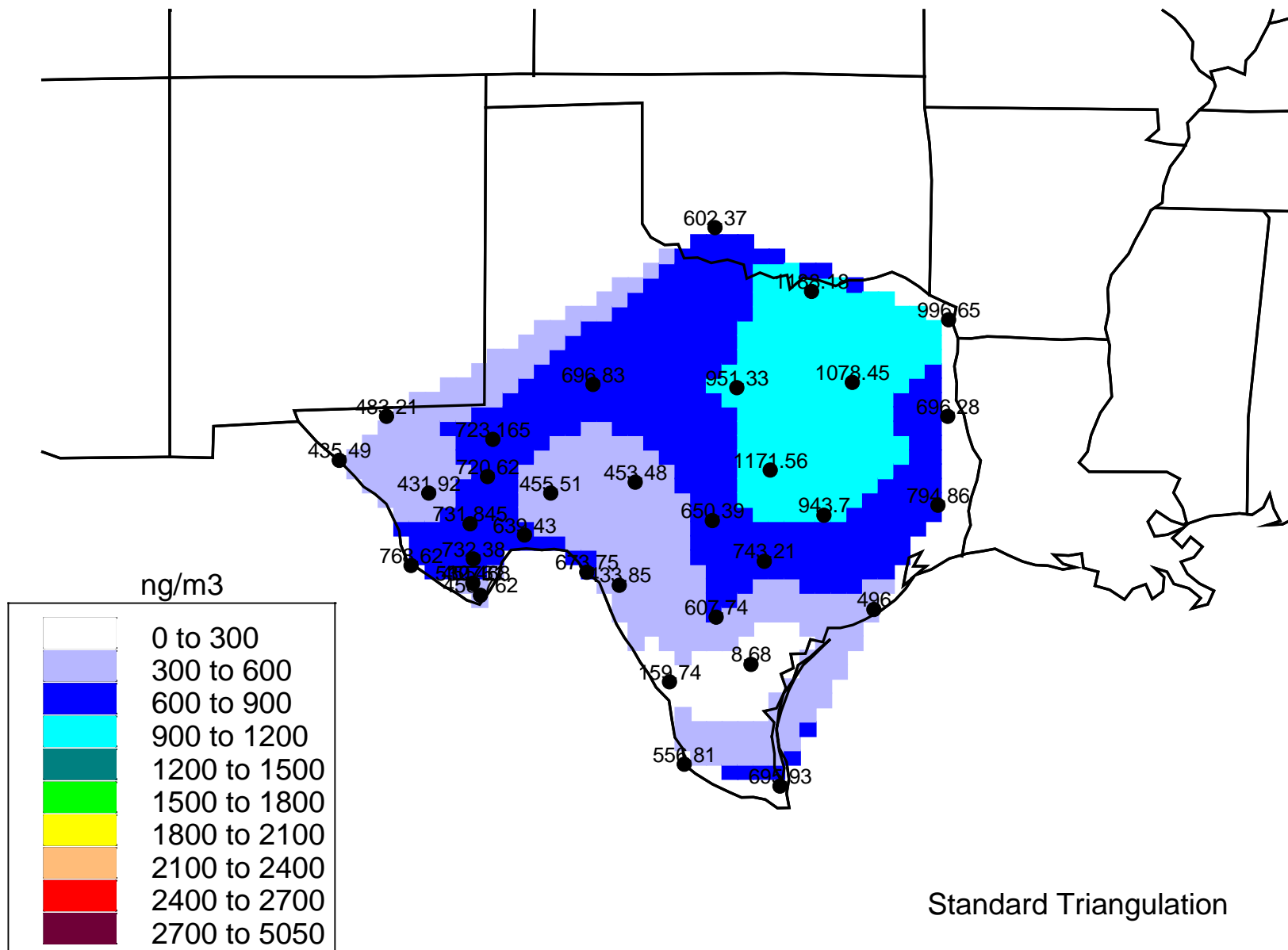
478.29

PIXE S on 8/26/1999 (jday 238)

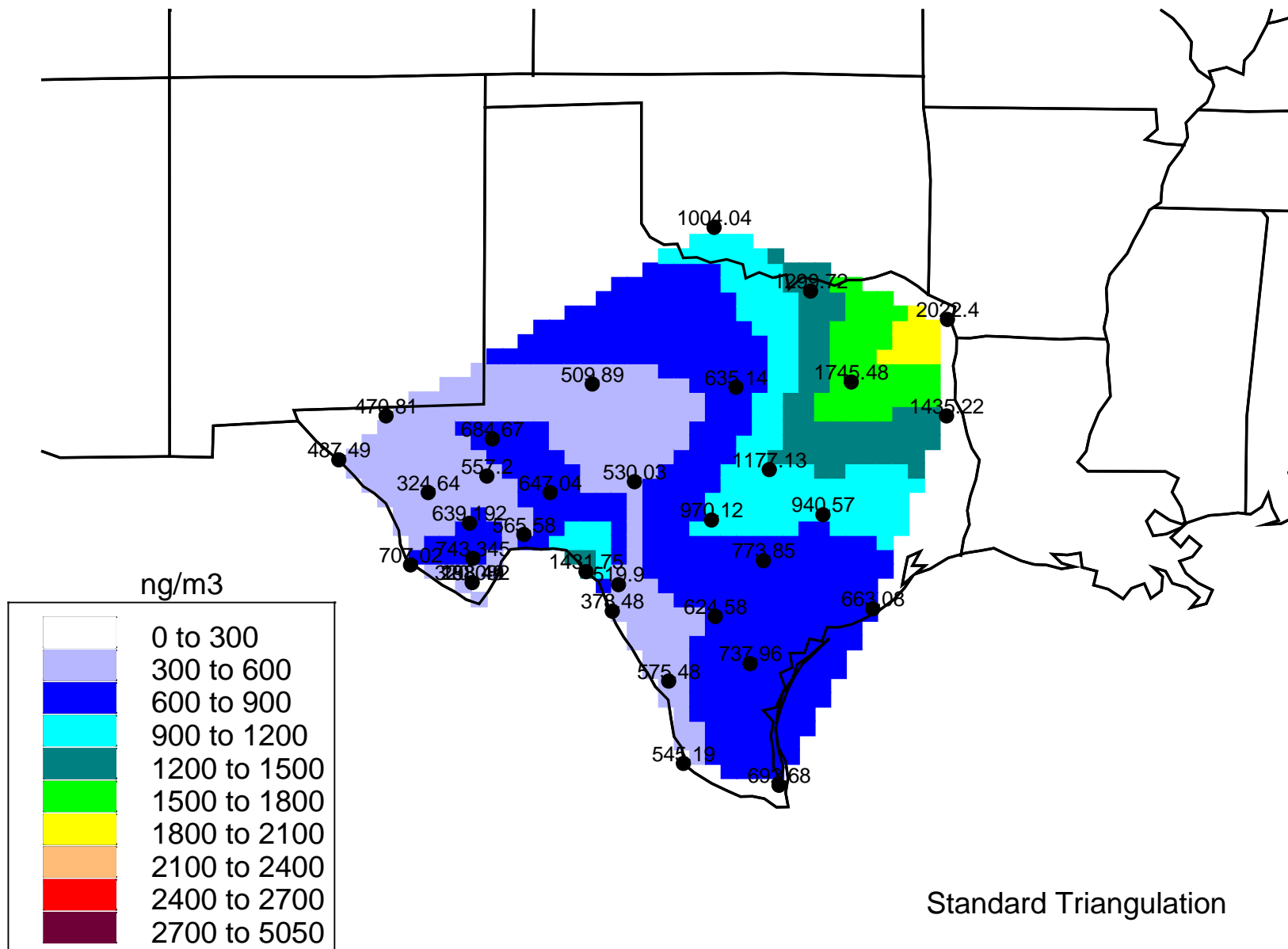


673.19
989.75
1043.04
448.63
649.1
1259.9
1166.45
451.32
959.755
423.74
708.2
1066.375
804.7
360.87
756.06
1194.1
1102.4
211.69
1202.11
622.96
562
624.76
530.26
660.78
709.58
640.09
640.09
506.83
531.23
29.53
508.6

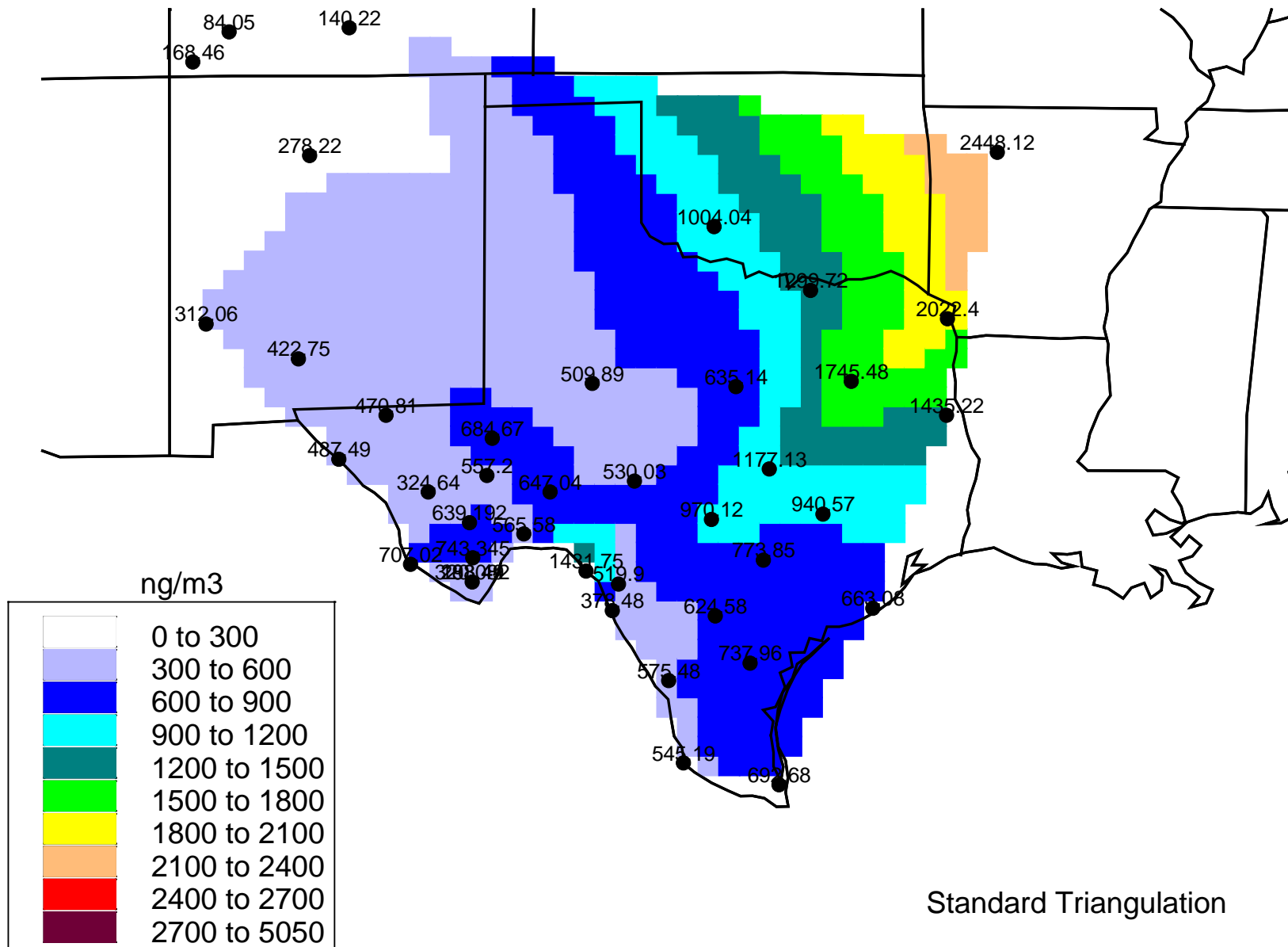
PIXE S on 8/27/1999 (jday 239)



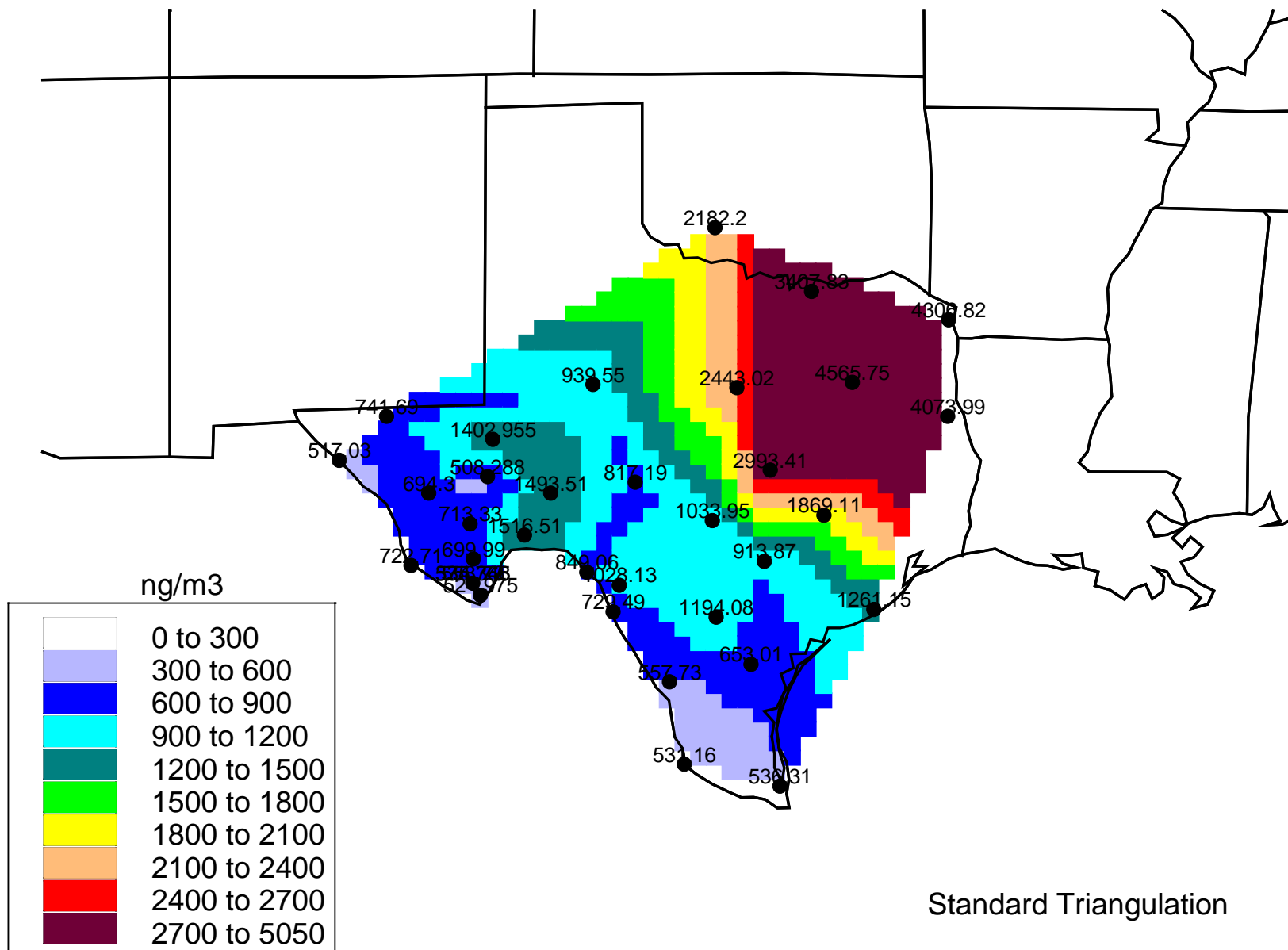
PIXE S on 8/28/1999 (jday 240)



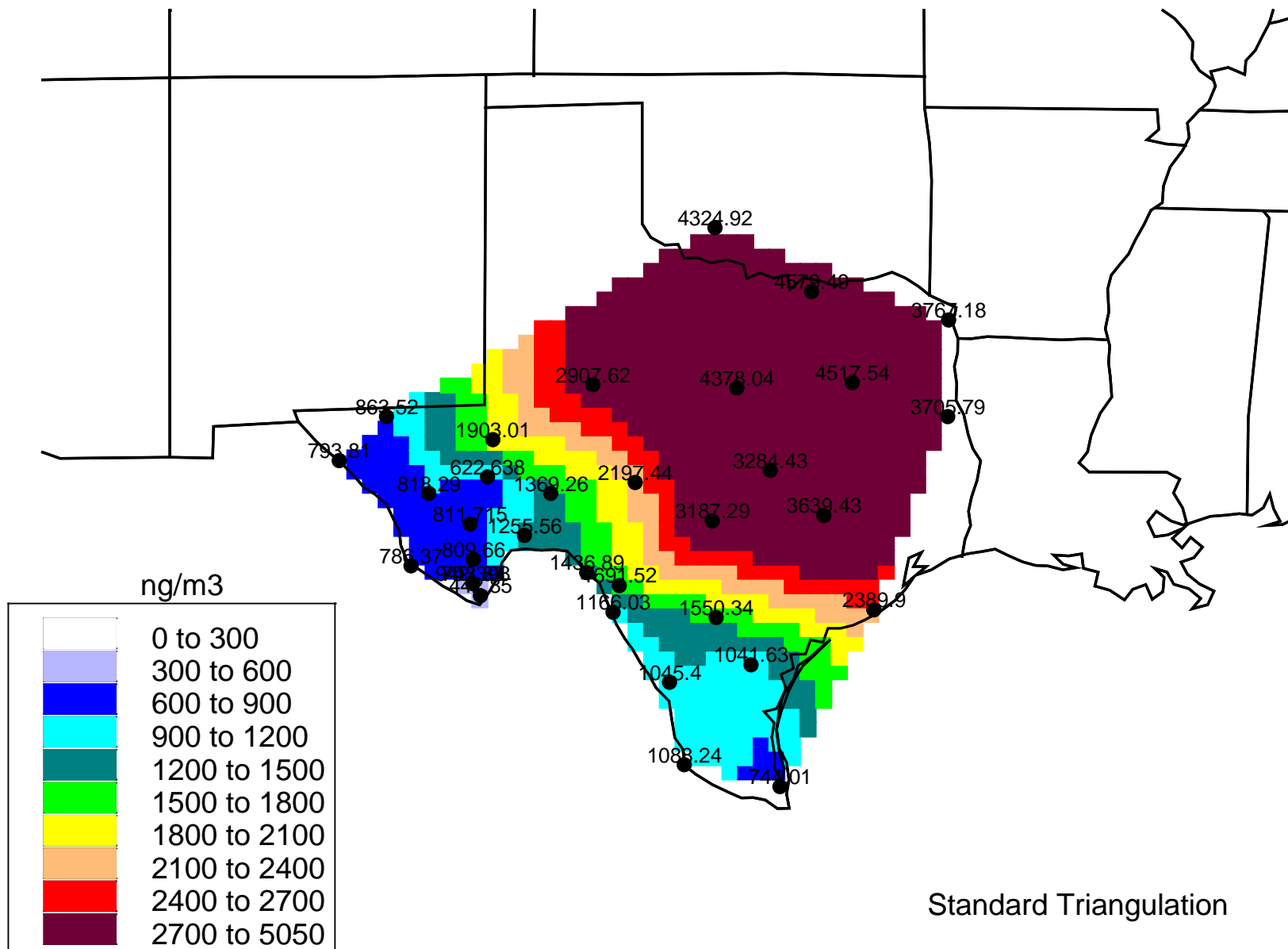
PIXE S on 8/28/1999 (jday 240)



PIXE S on 8/29/1999 (jday 241)

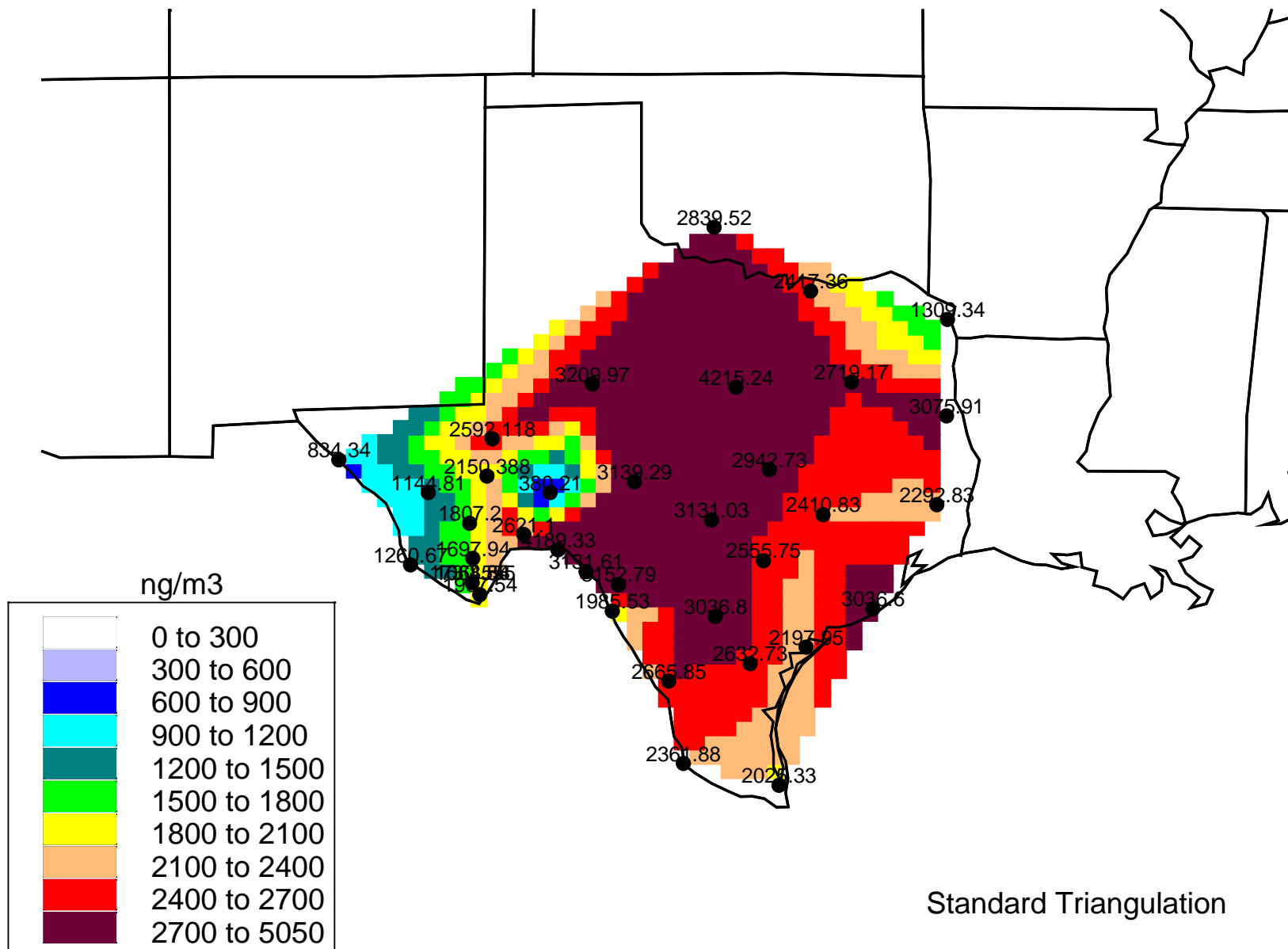


PIXE S on 8/30/1999 (jday 242)

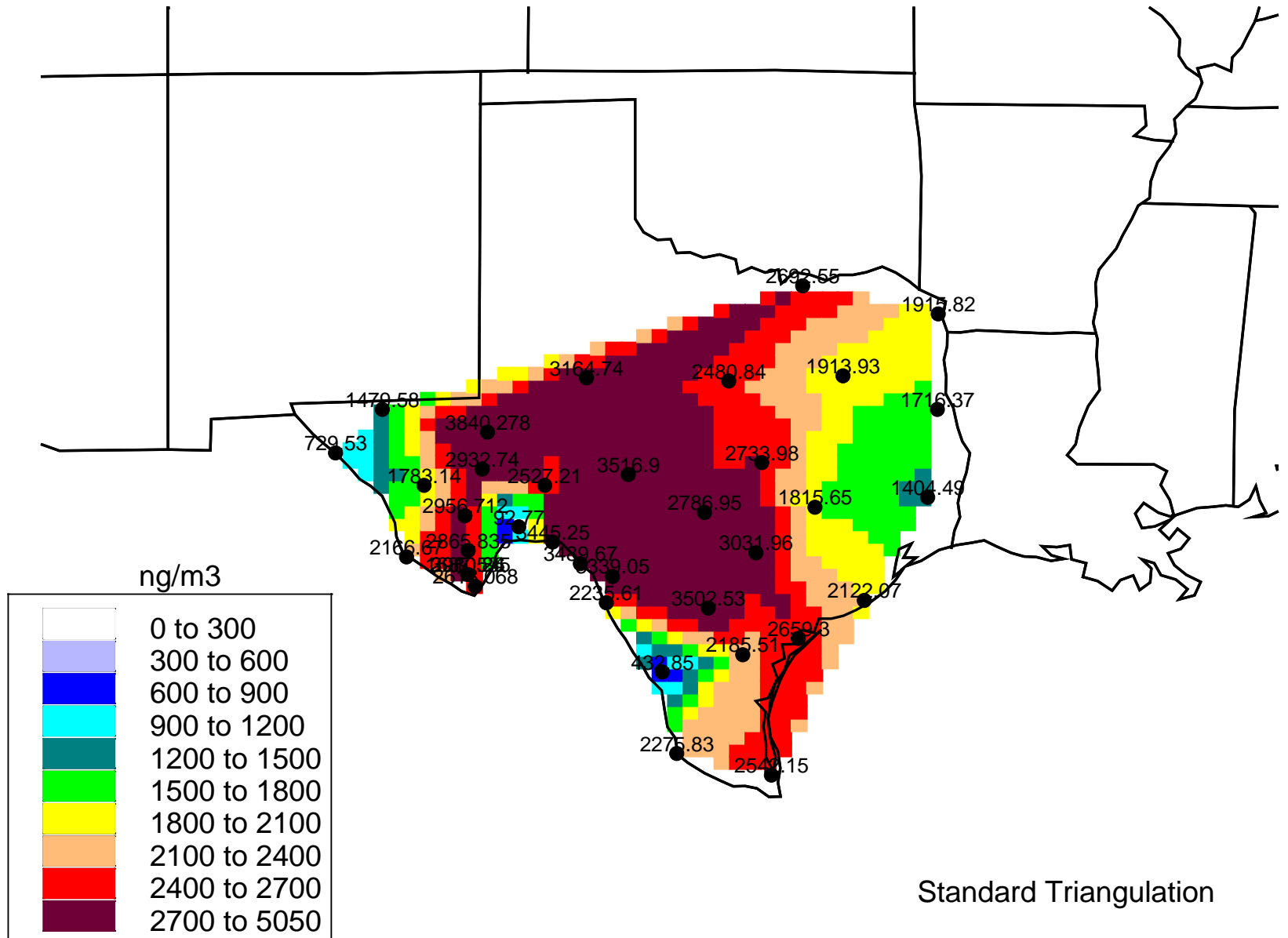


Standard Triangulation

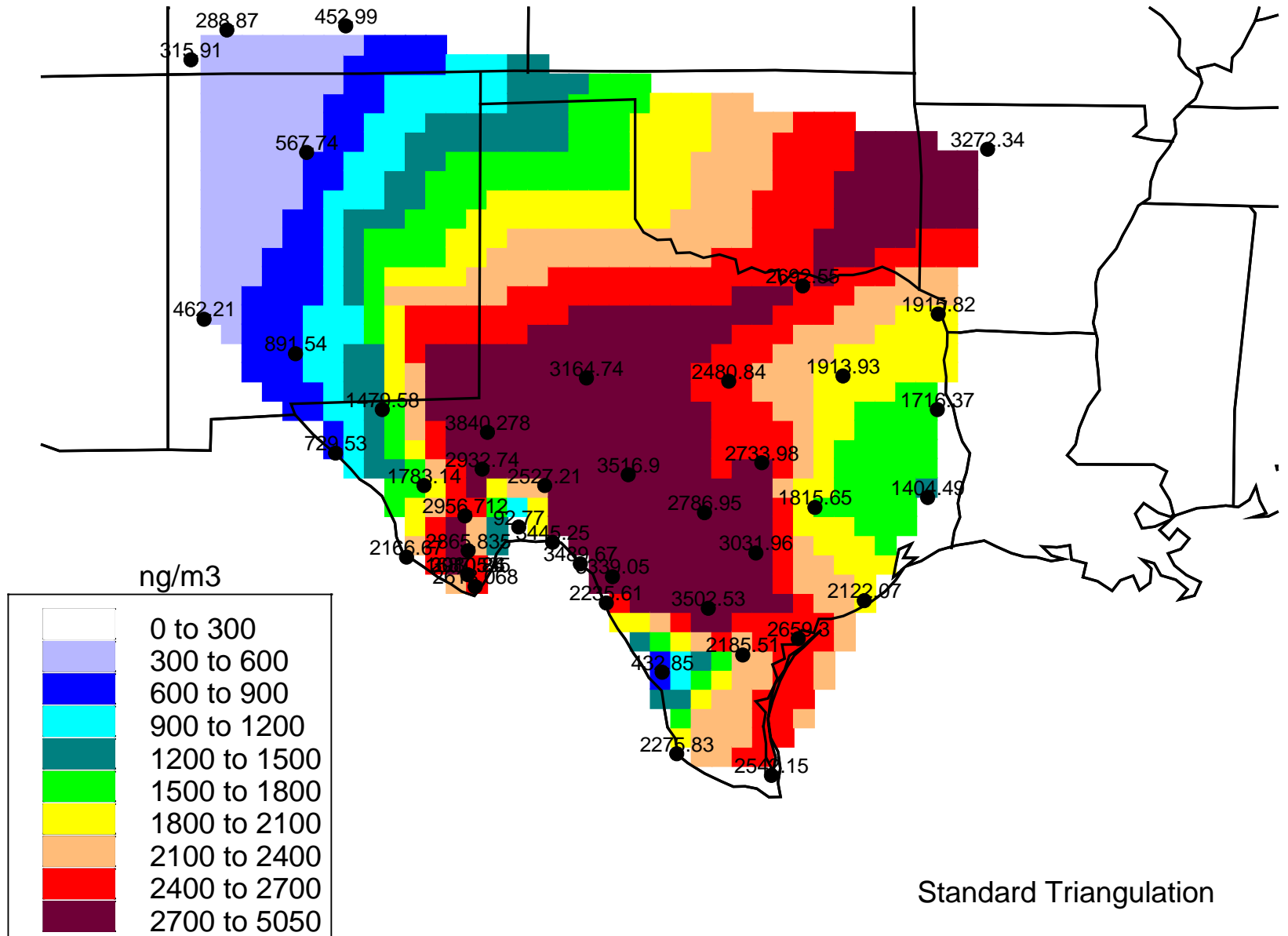
PIXE S on 8/31/1999 (jday 243)



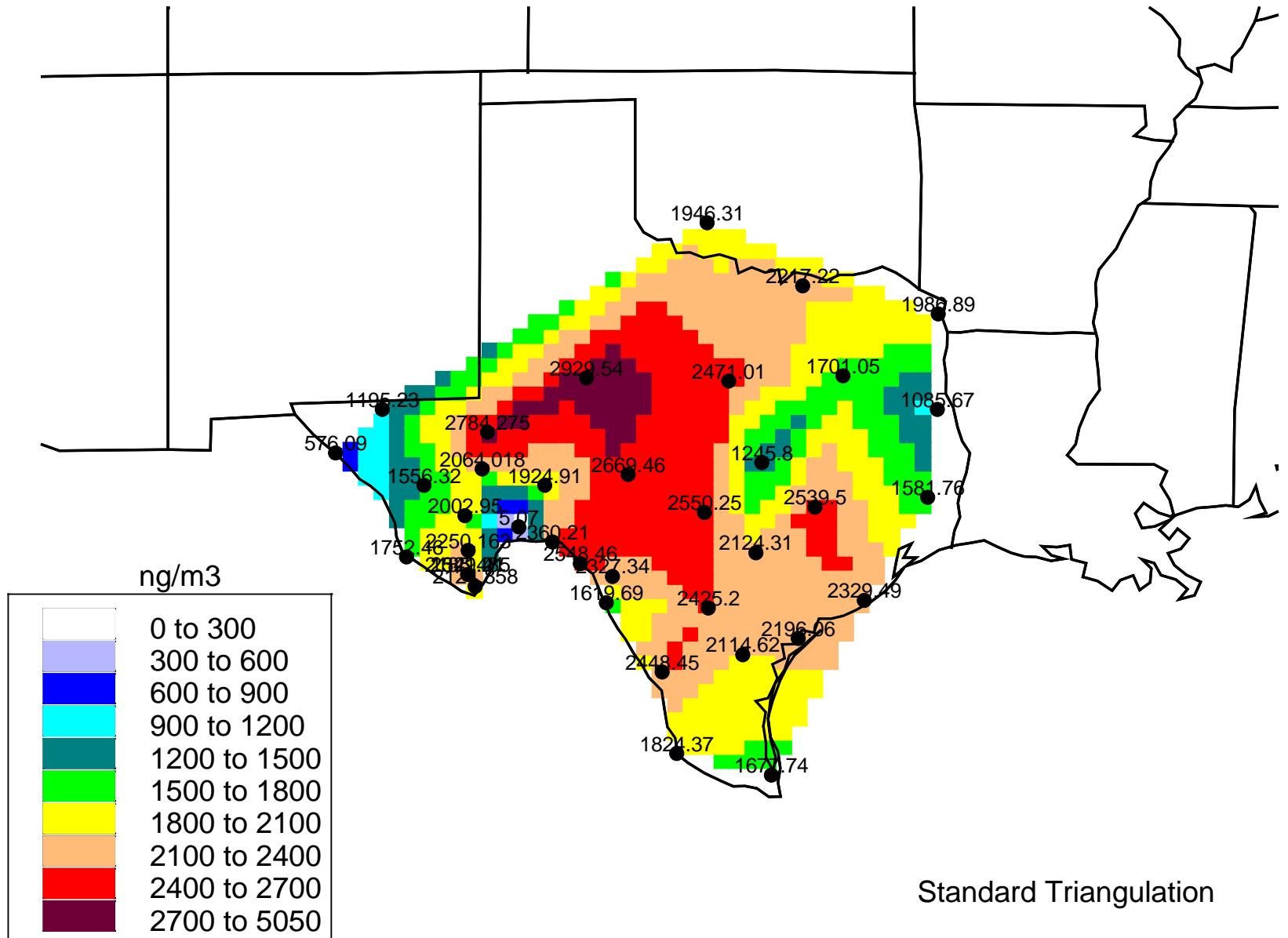
PIXE S on 9/1/1999 (jday 244)



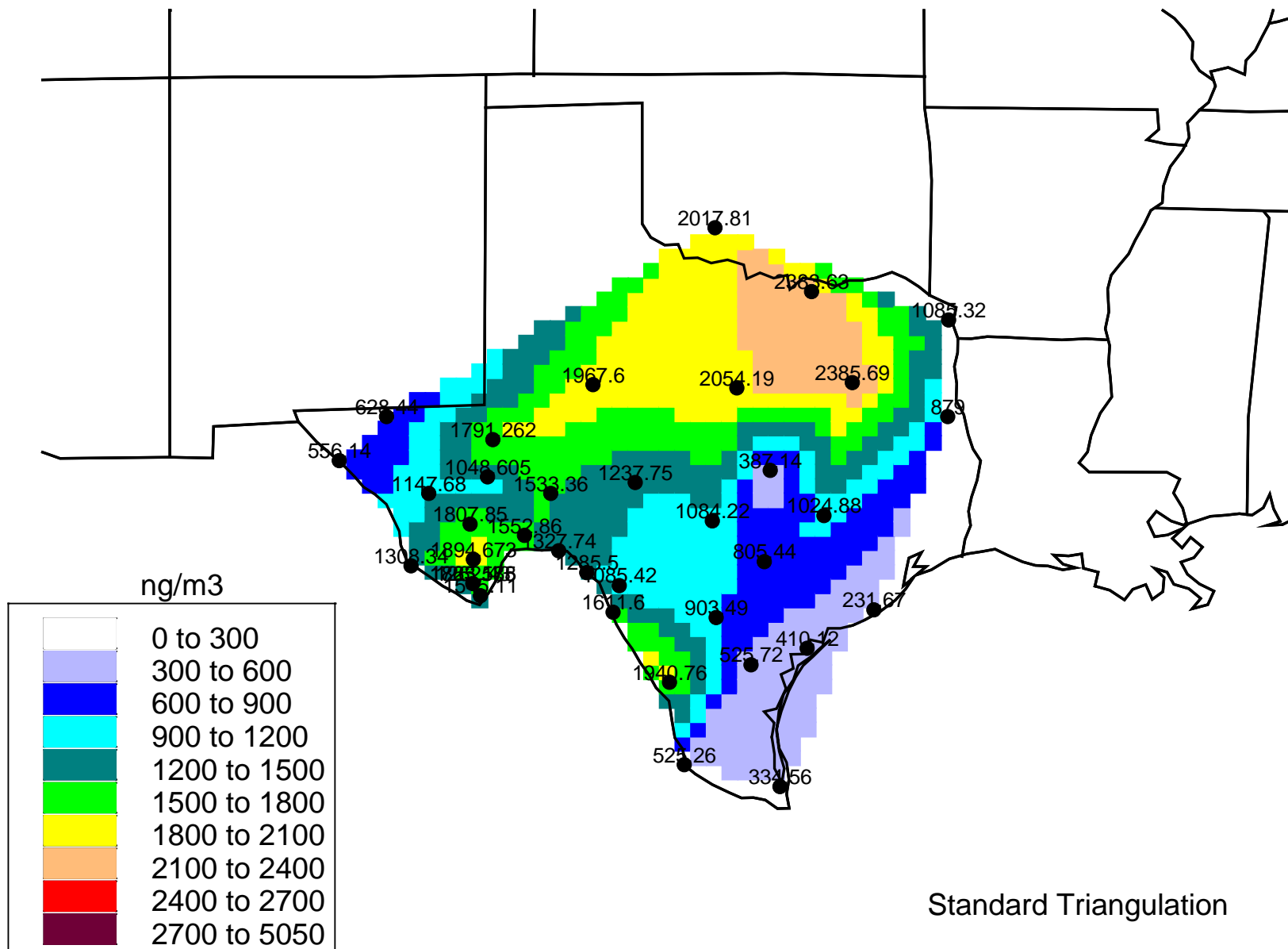
PIXE S on 9/1/1999 (jday 244)



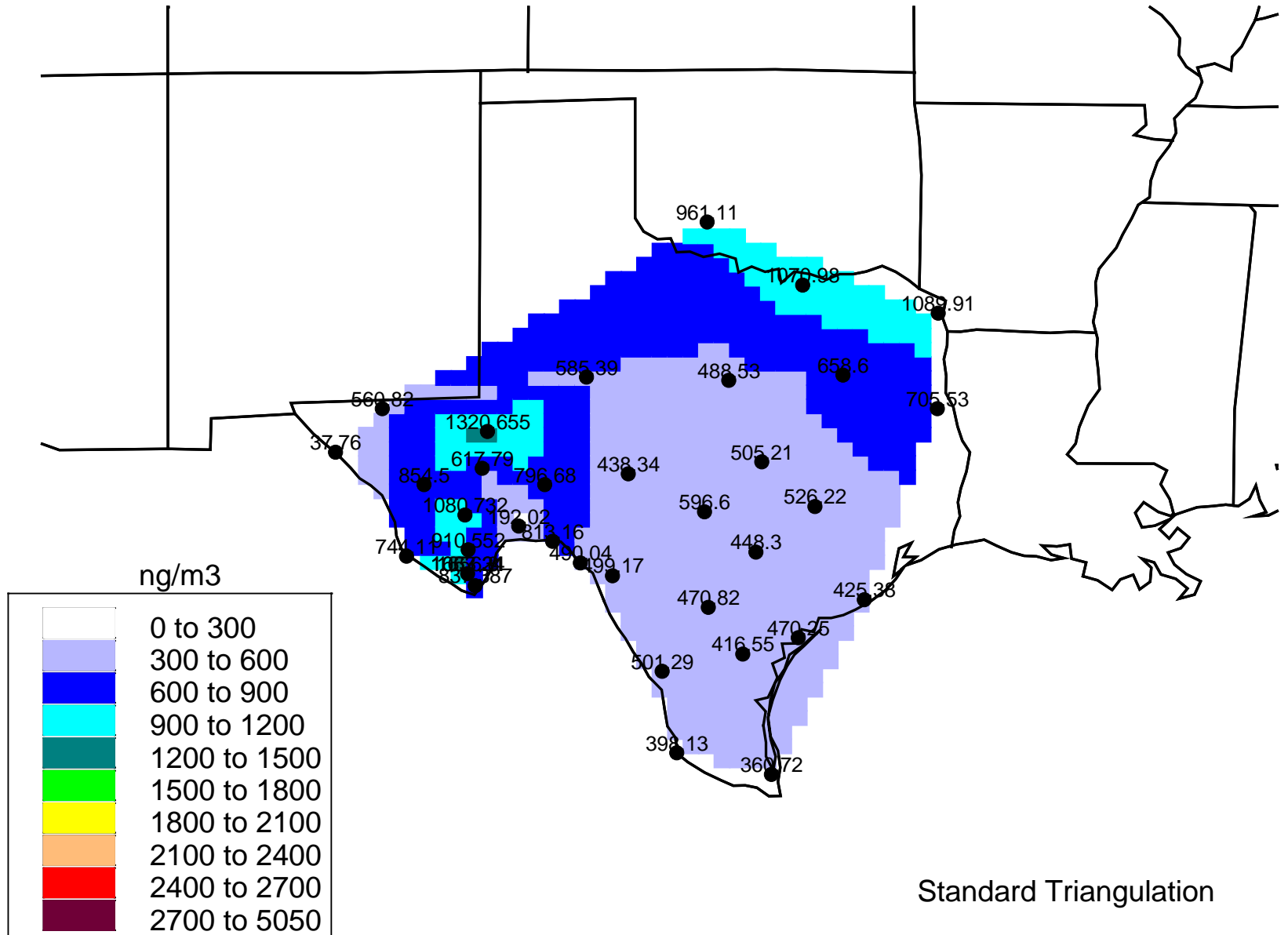
PIXE S on 9/2/1999 (jday 245)



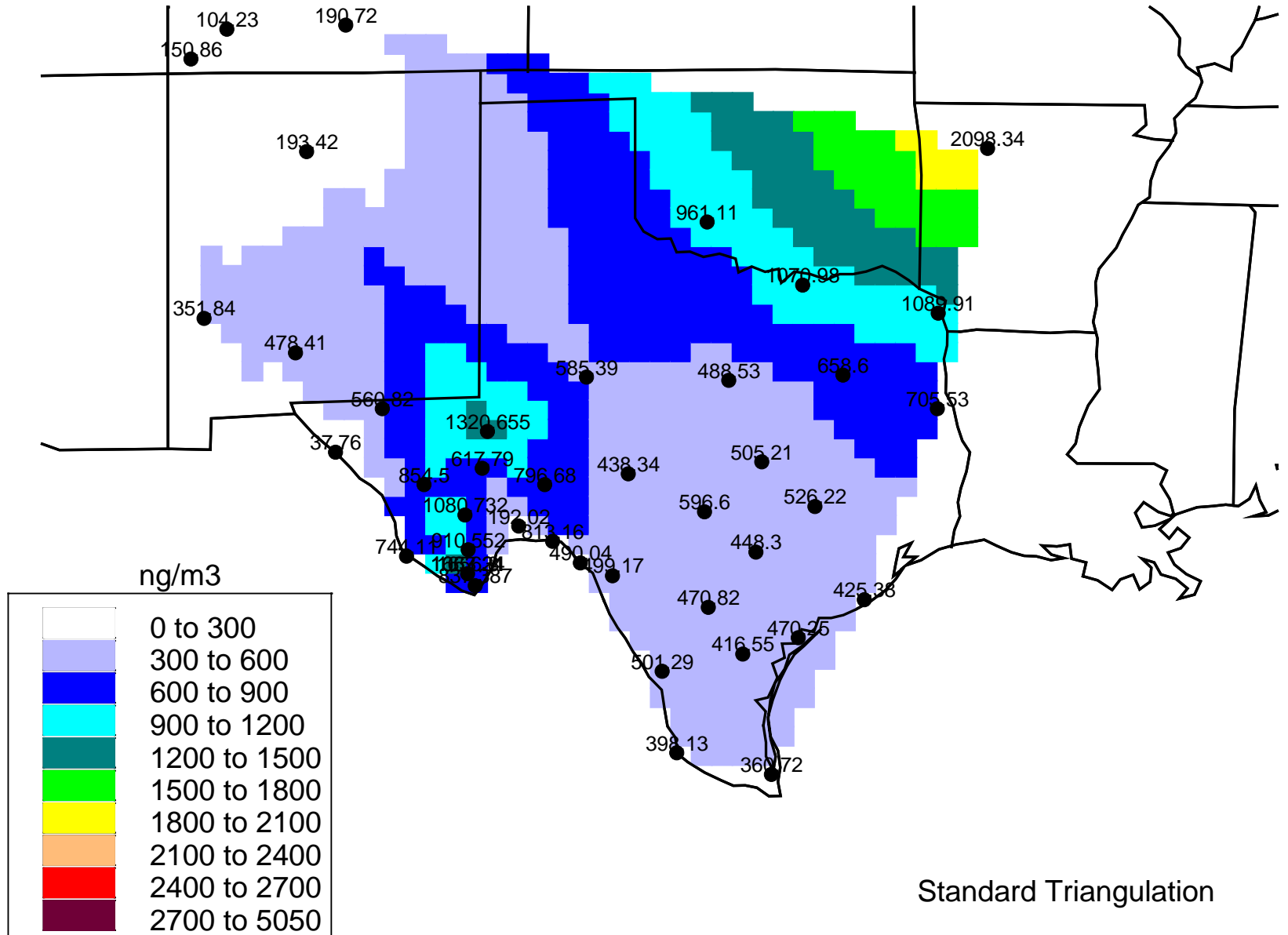
PIXE S on 9/3/1999 (jday 246)



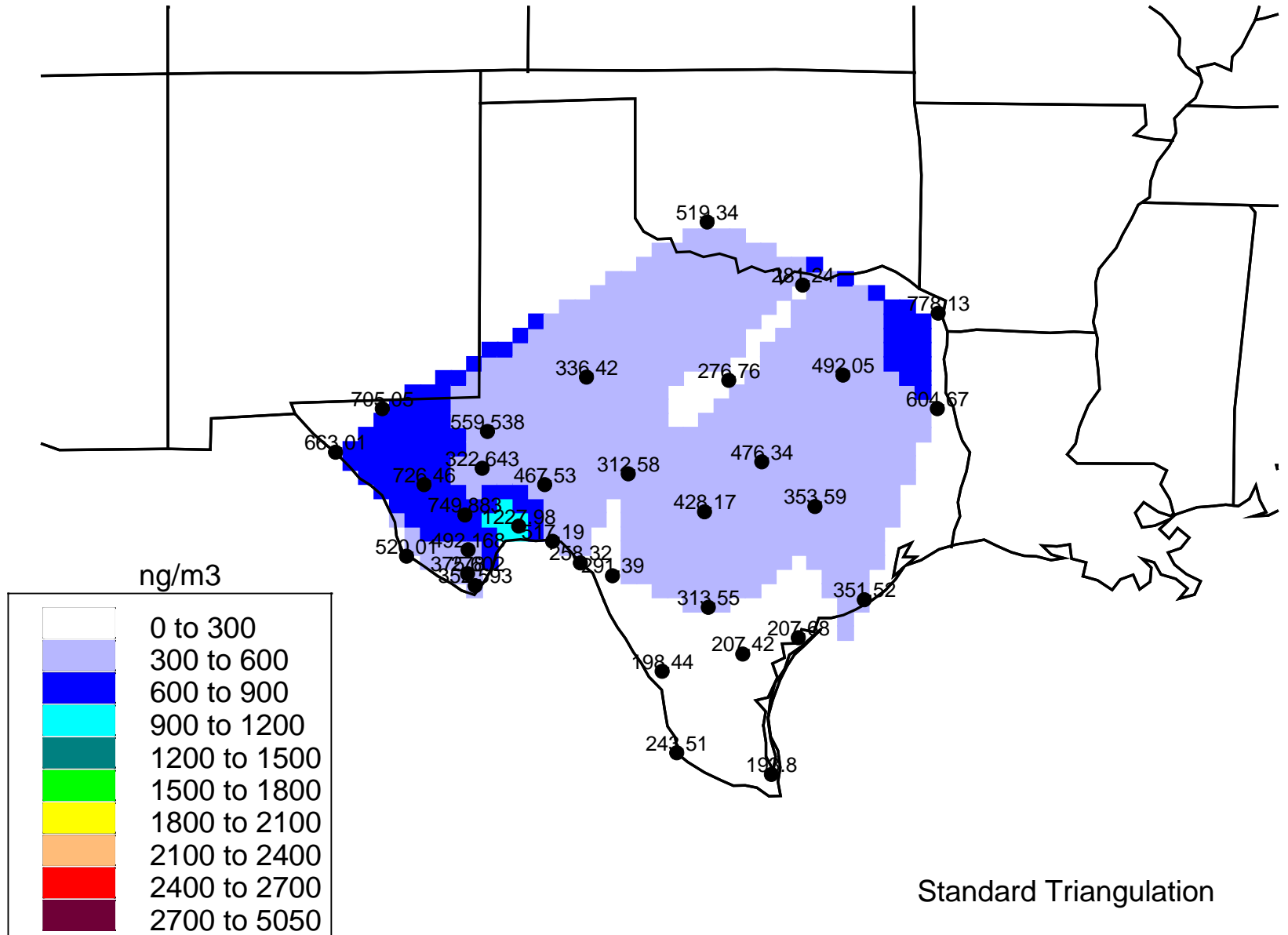
PIXE S on 9/4/1999 (jday 247)



PIXE S on 9/4/1999 (jday 247)

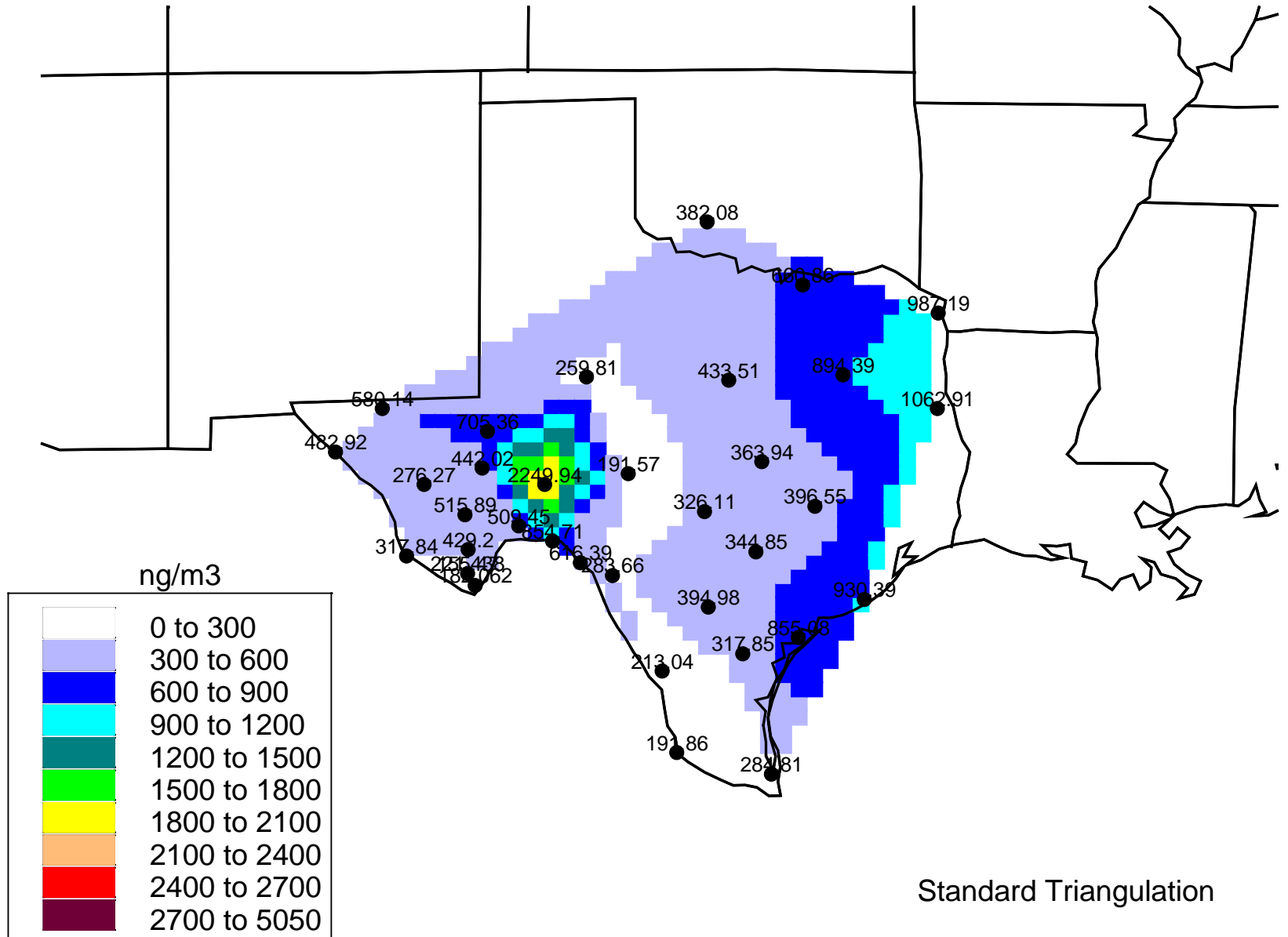


PIXE S on 9/5/1999 (jday 248)

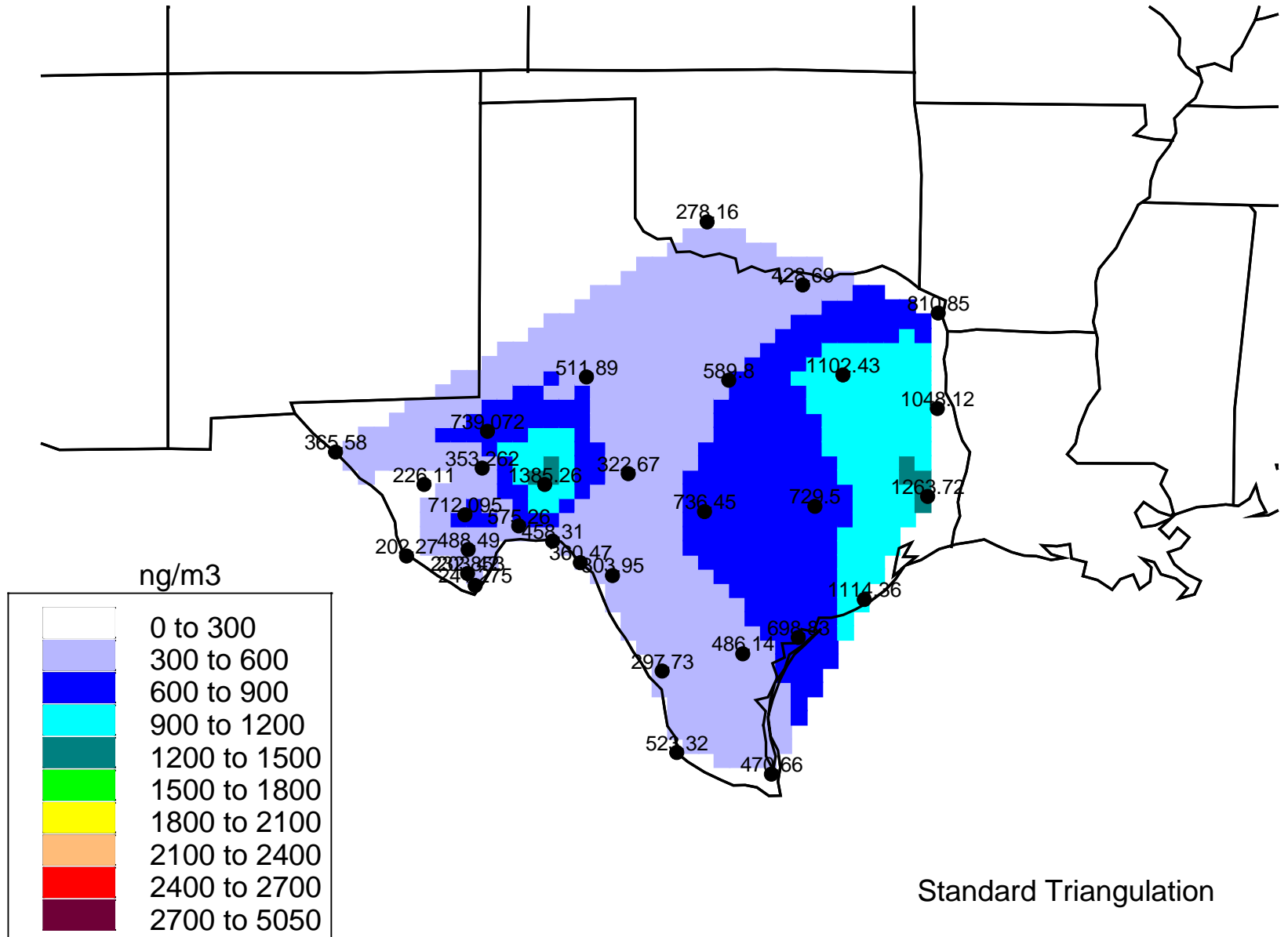


Standard Triangulation

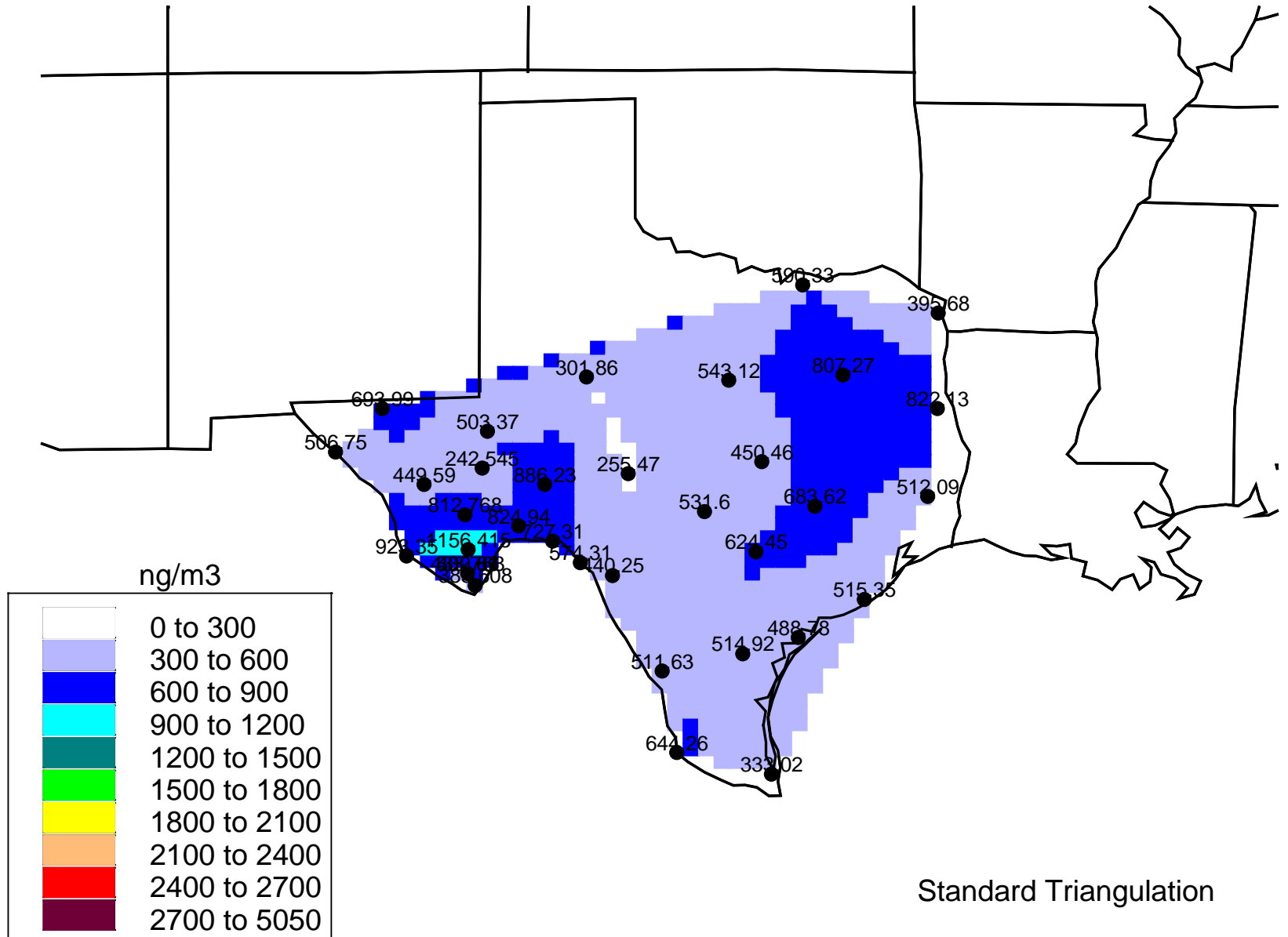
PIXE S on 9/6/1999 (jday 249)



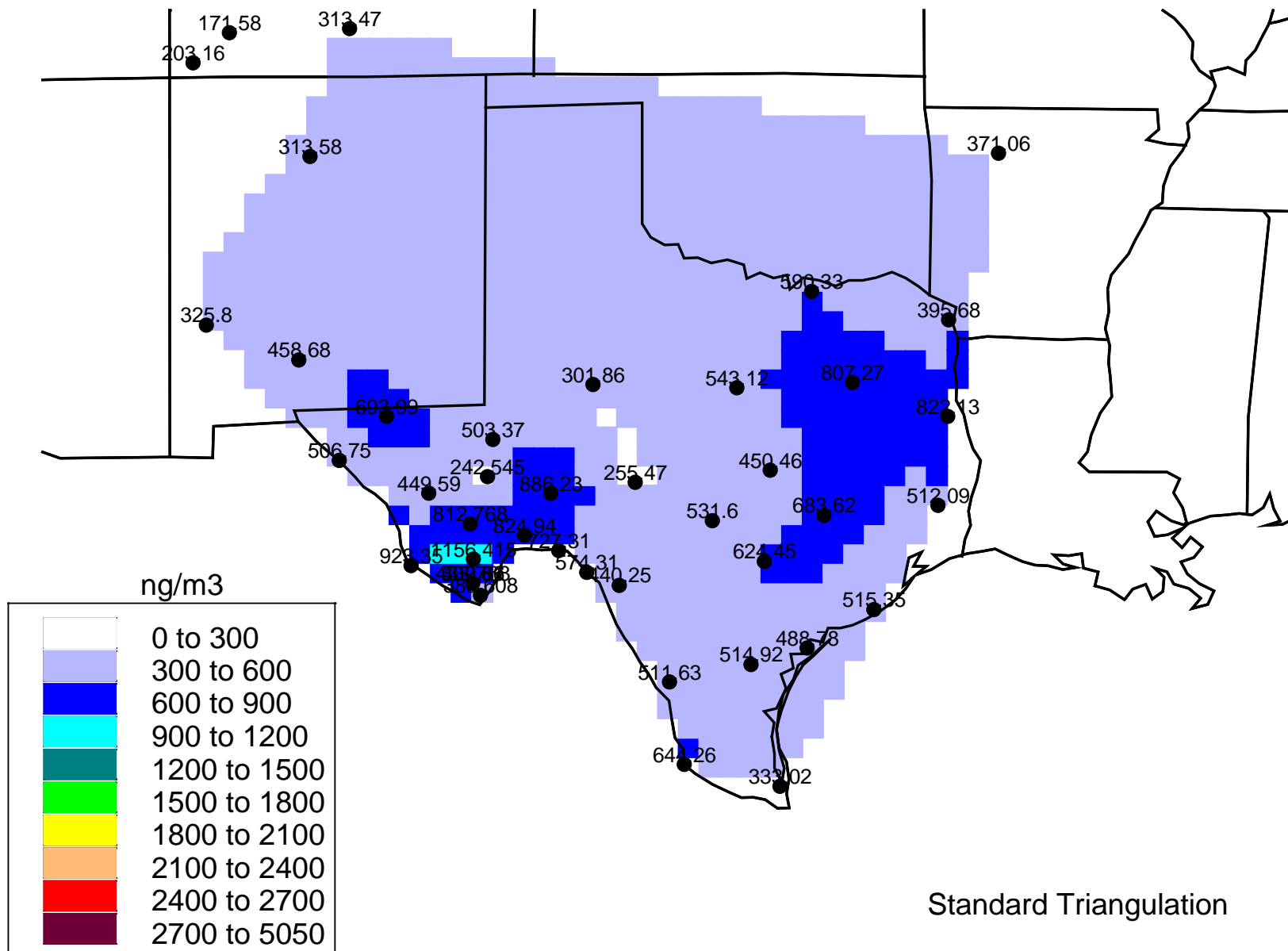
PIXE S on 9/7/1999 (jday 250)



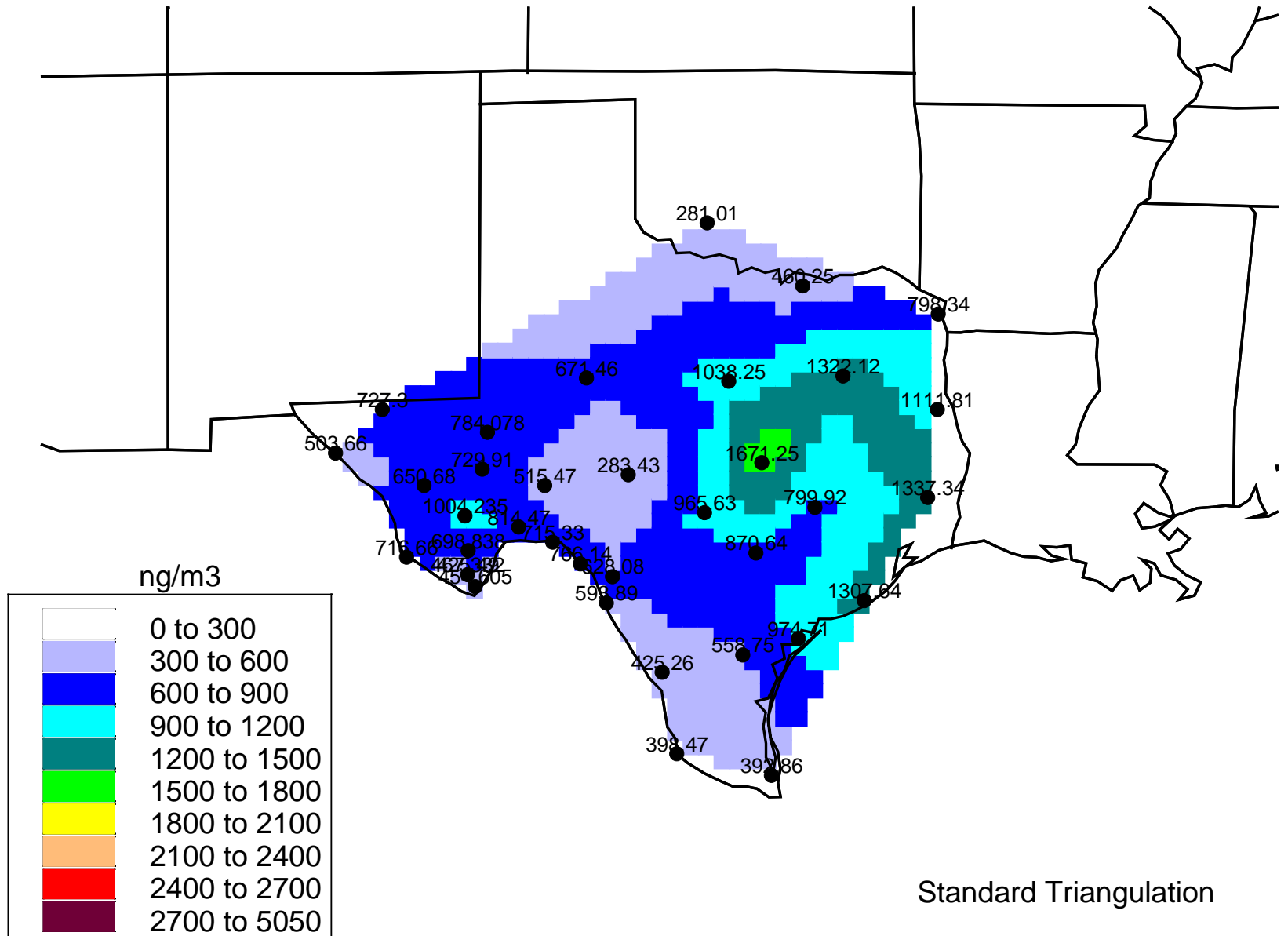
PIXE S on 9/8/1999 (jday 251)



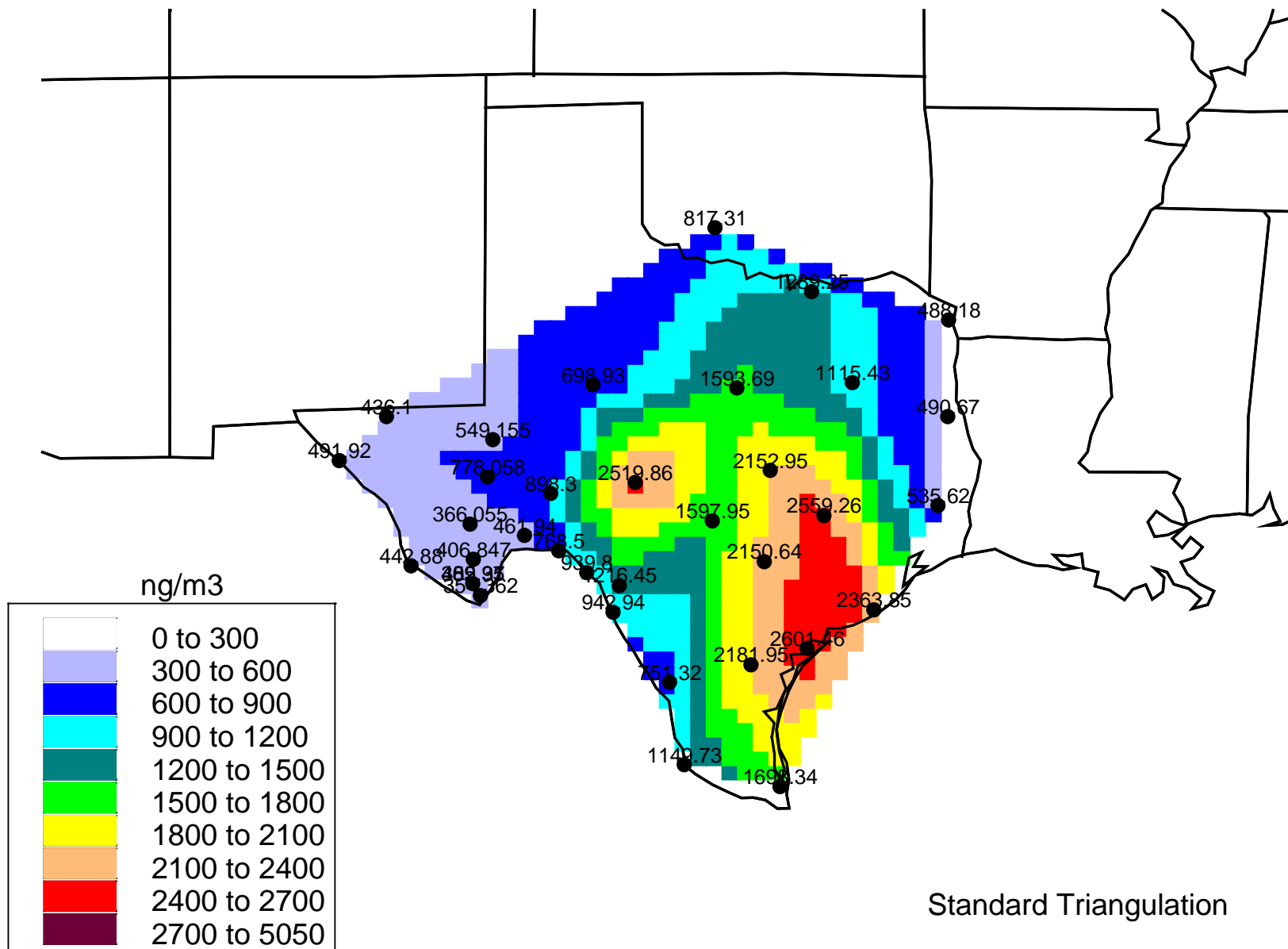
PIXE S on 9/8/1999 (jday 251)



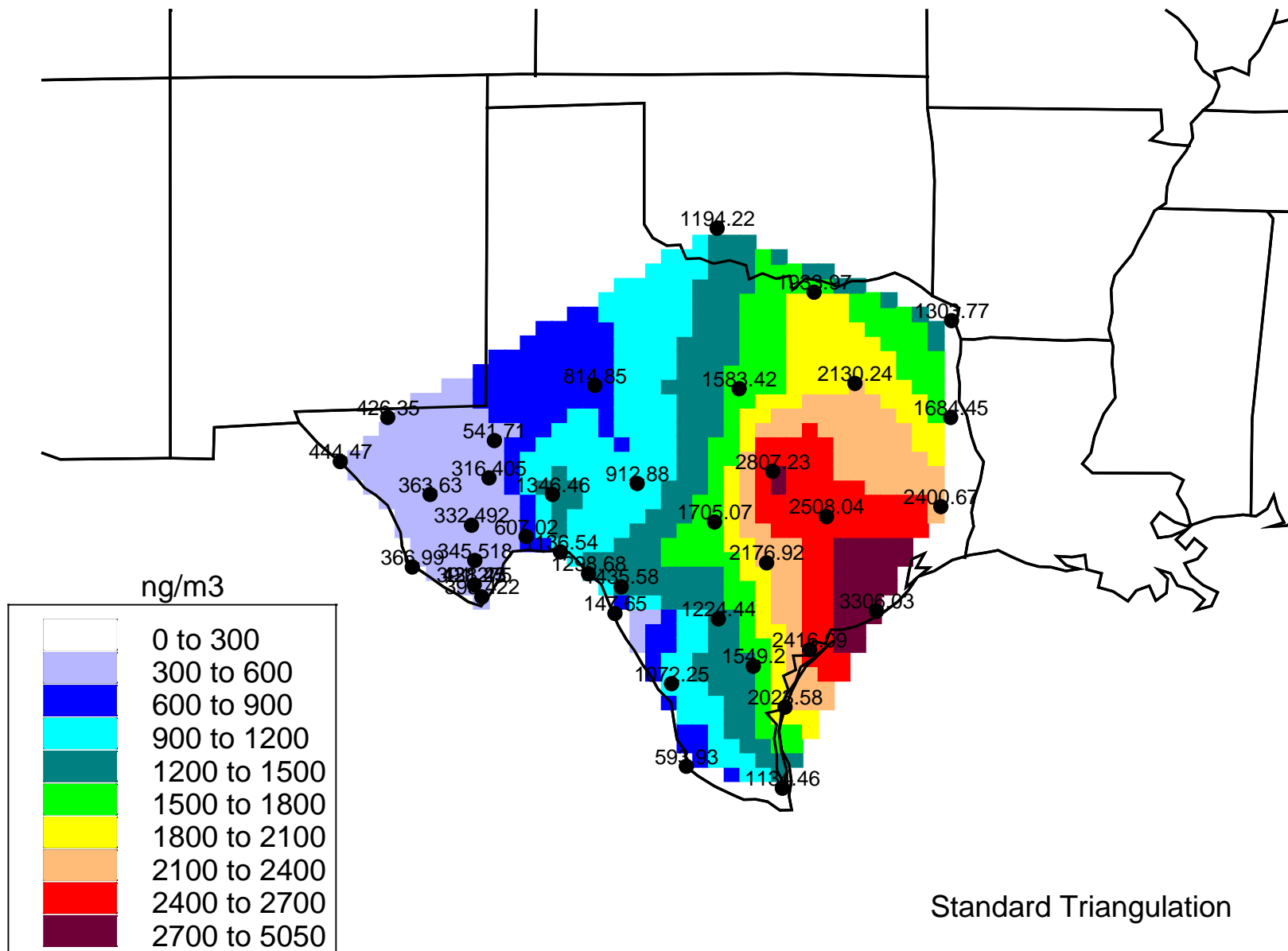
PIXE S on 9/9/1999 (jday 252)



PIXE S on 9/10/1999 (jday 253)

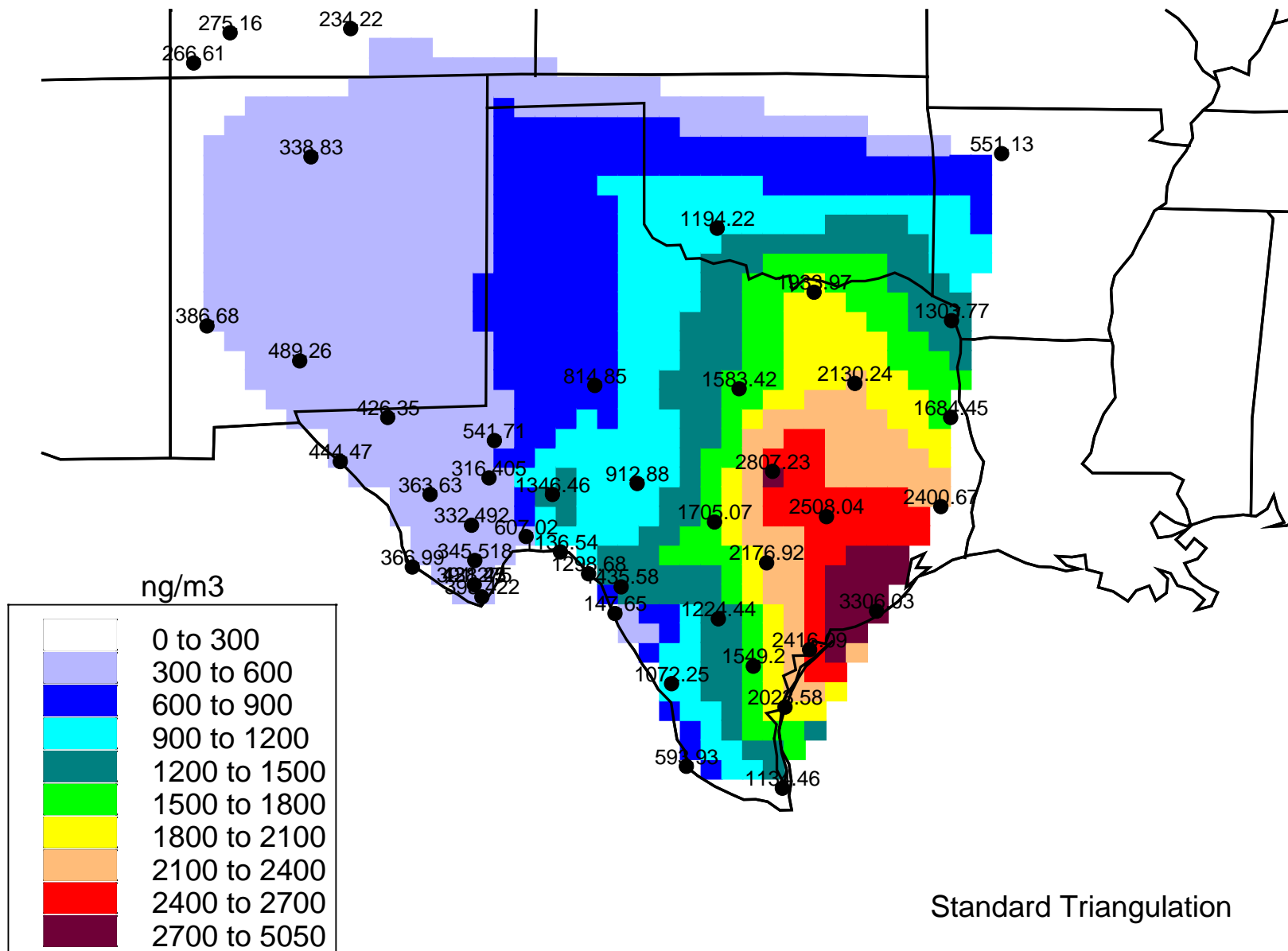


PIXE S on 9/11/1999 (jday 254)

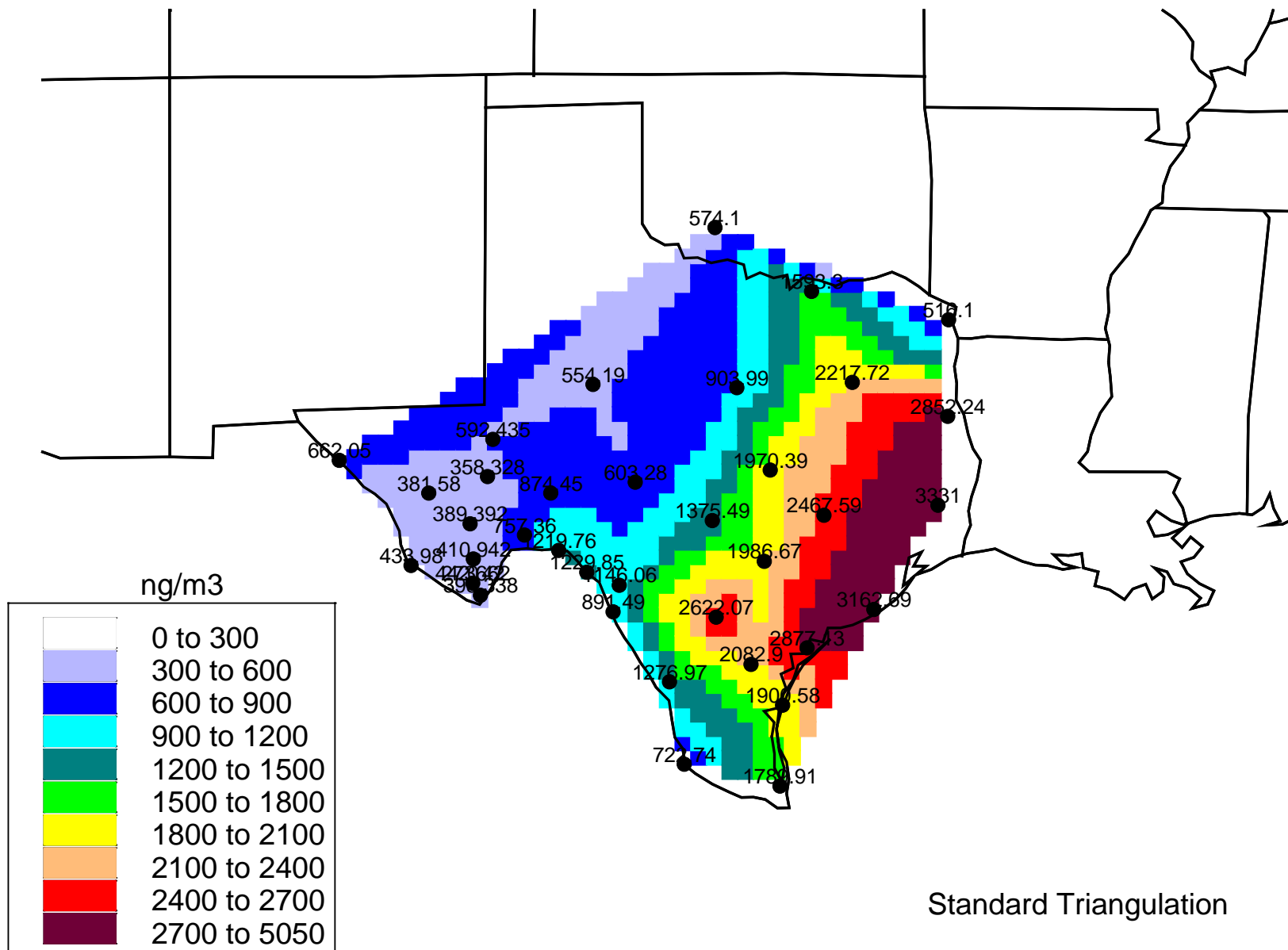


Standard Triangulation

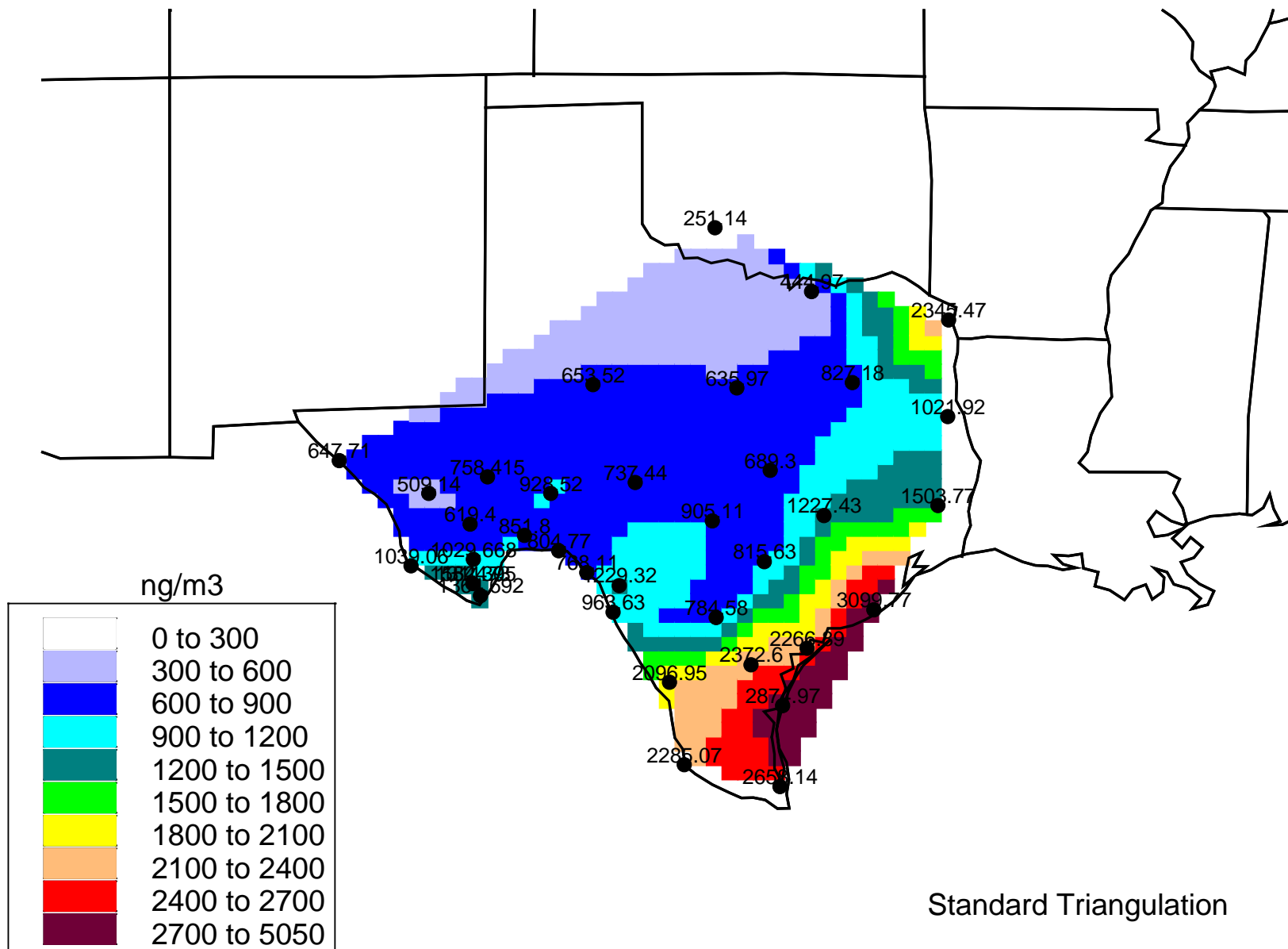
PIXE S on 9/11/1999 (jday 254)



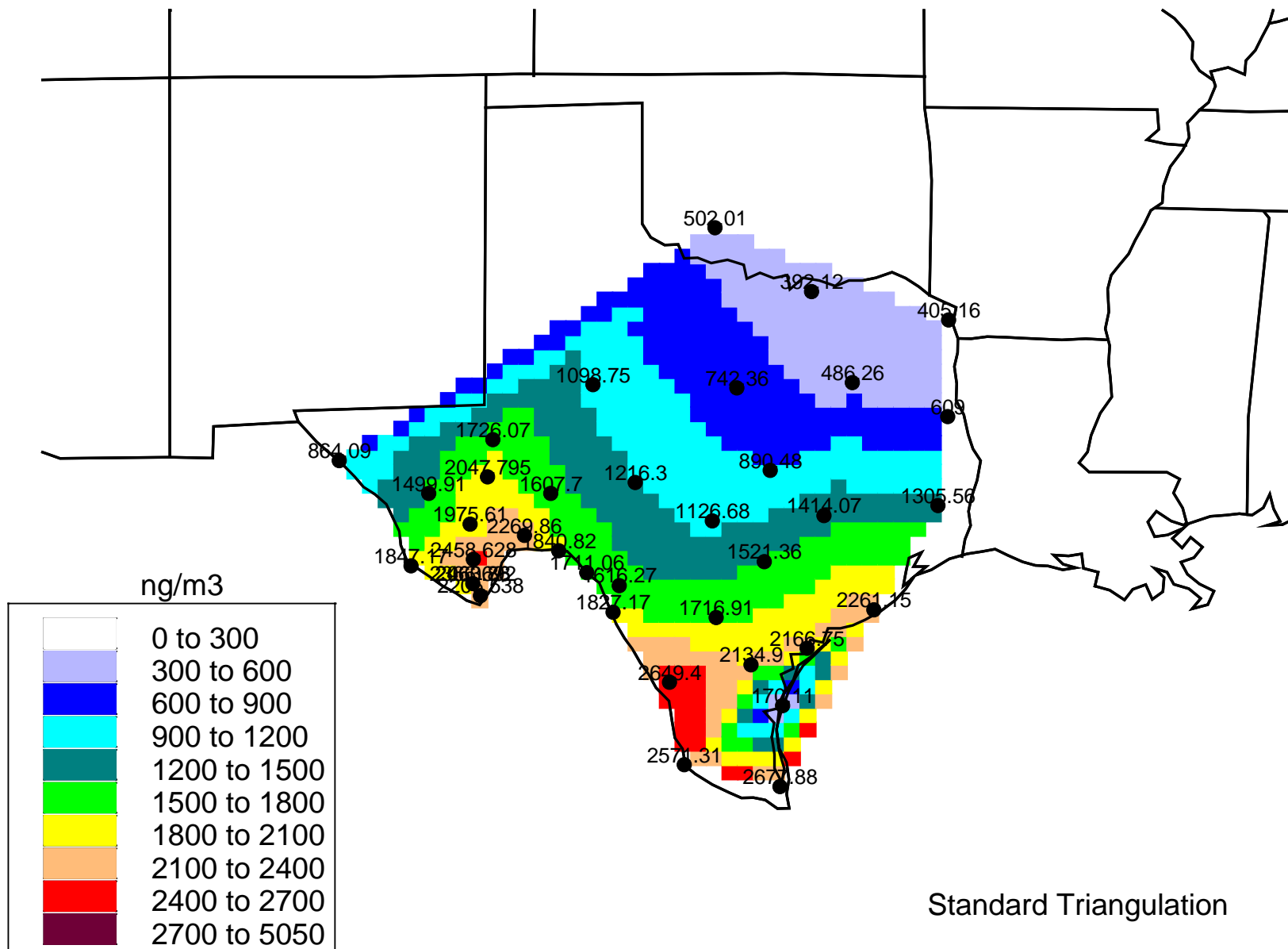
PIXE S on 9/12/1999 (jday 255)



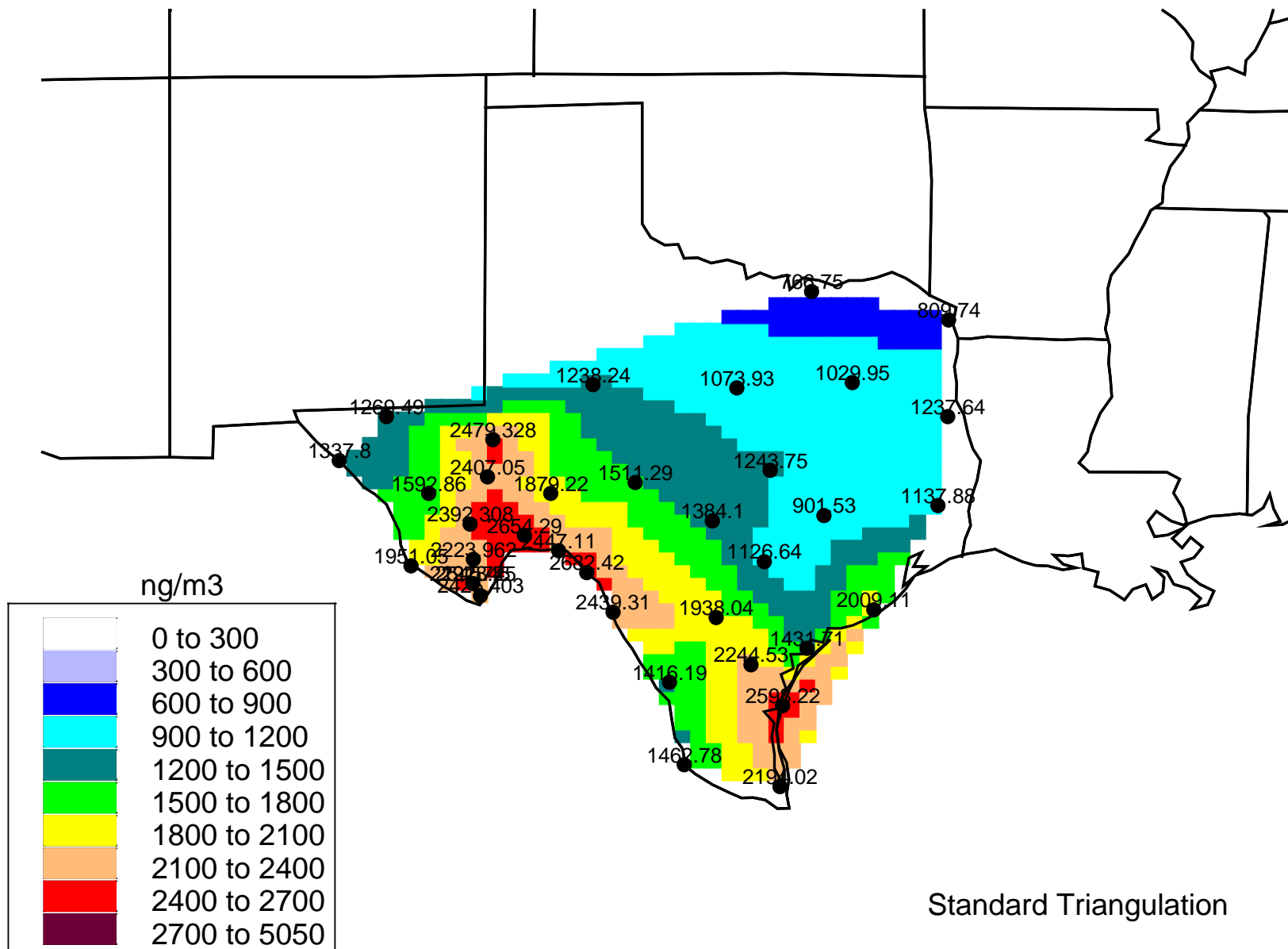
PIXE S on 9/13/1999 (jday 256)



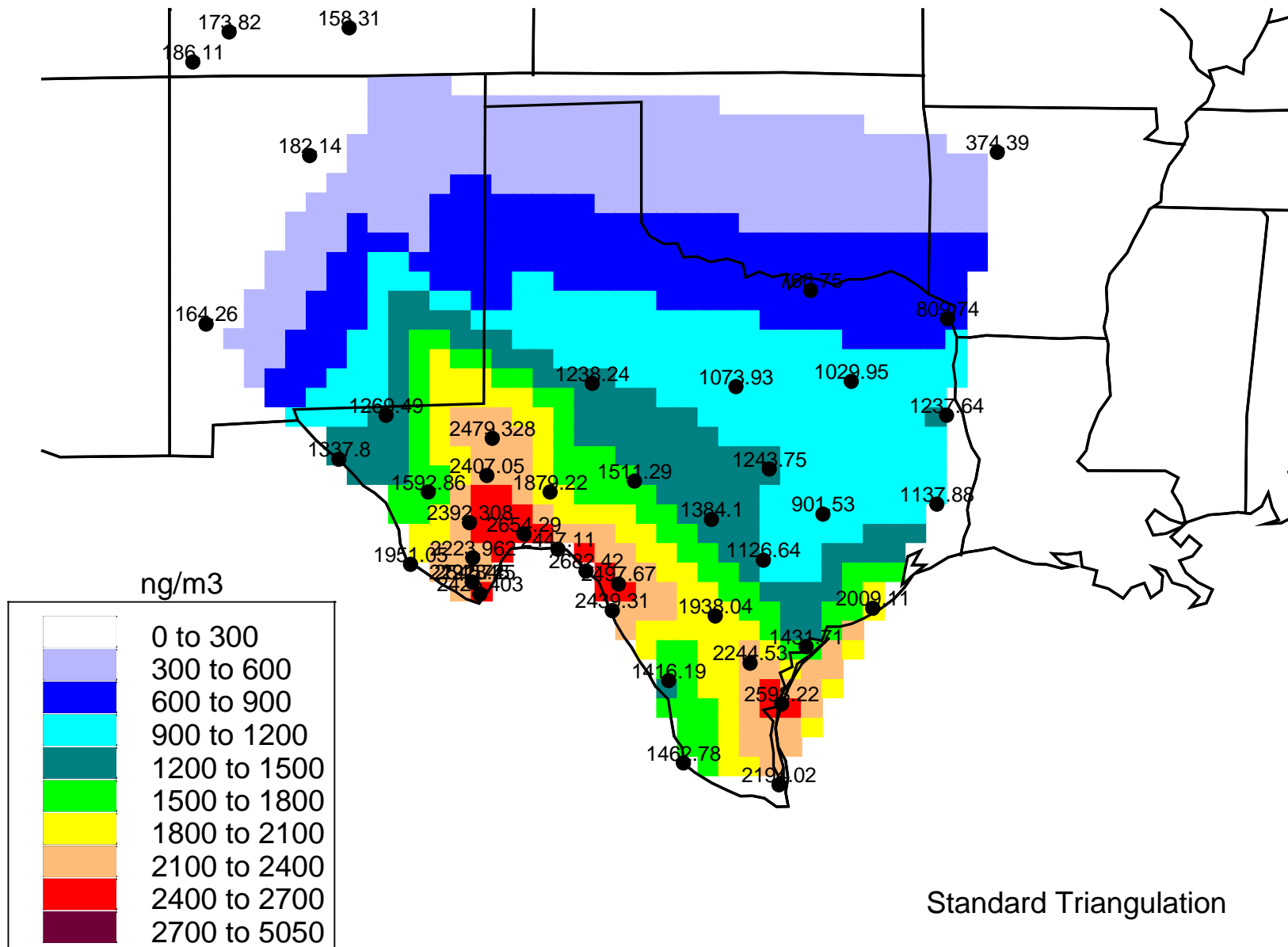
PIXE S on 9/14/1999 (jday 257)



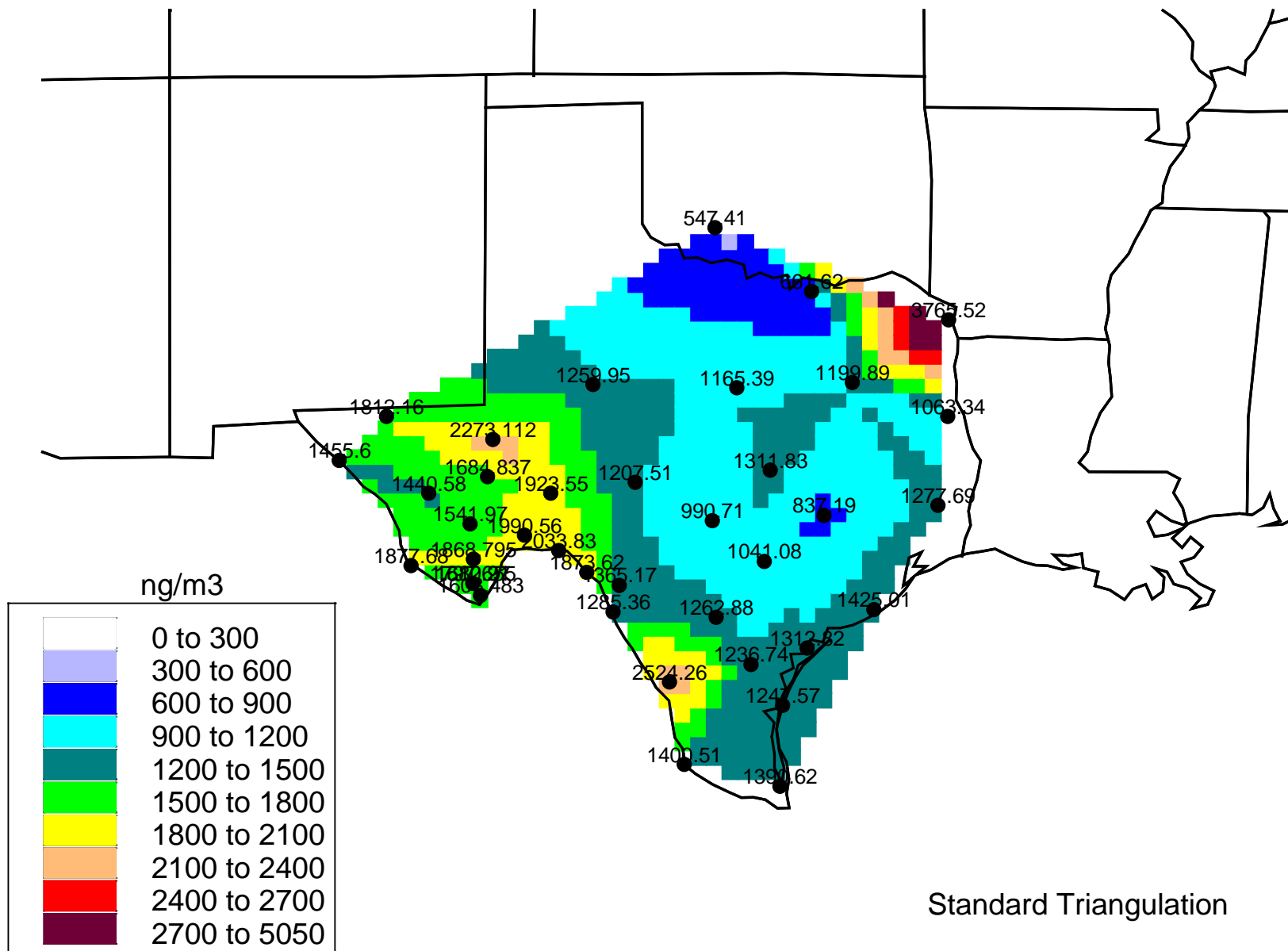
PIXE S on 9/15/1999 (jday 258)



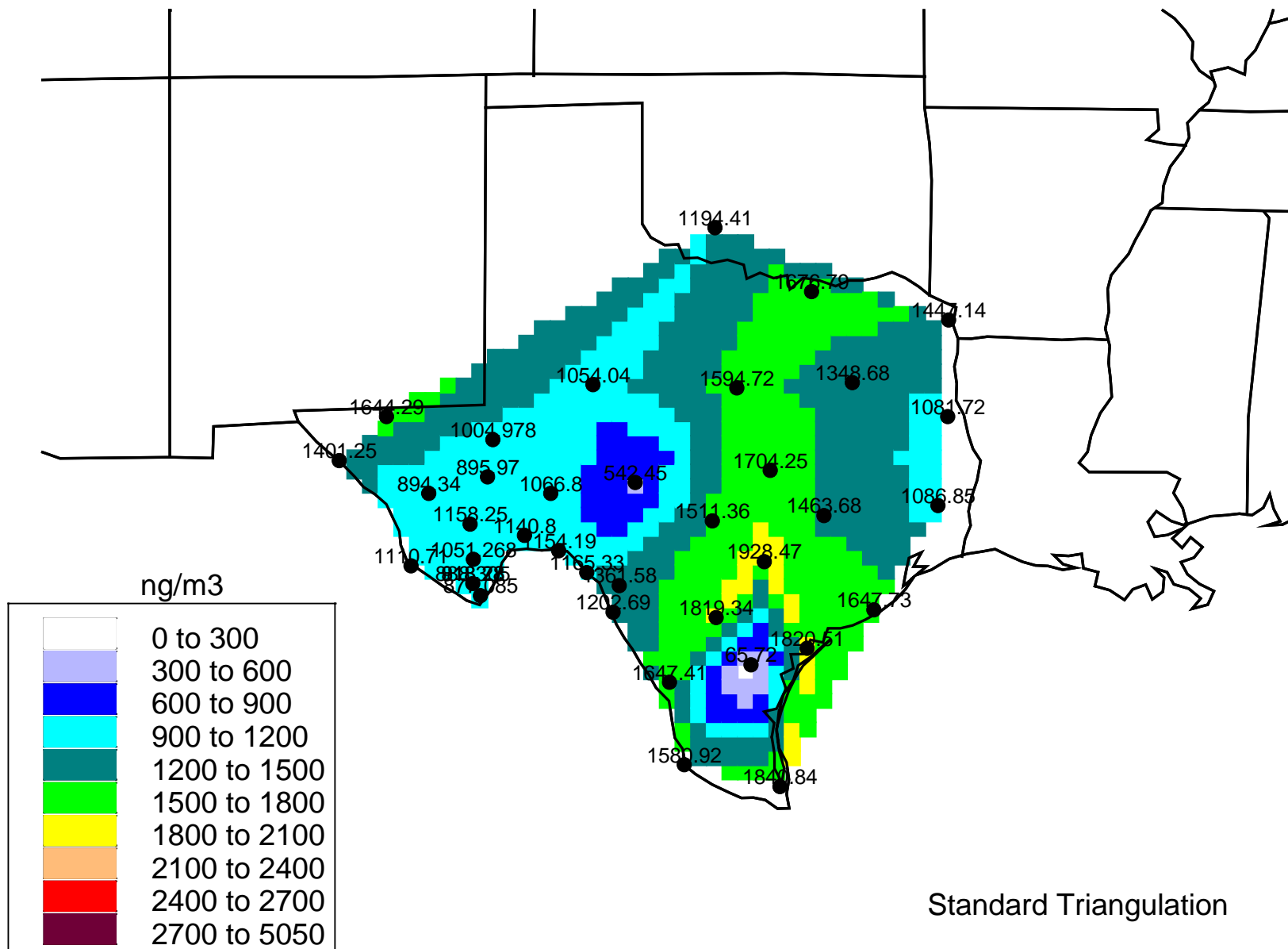
PIXE S on 9/15/1999 (jday 258)



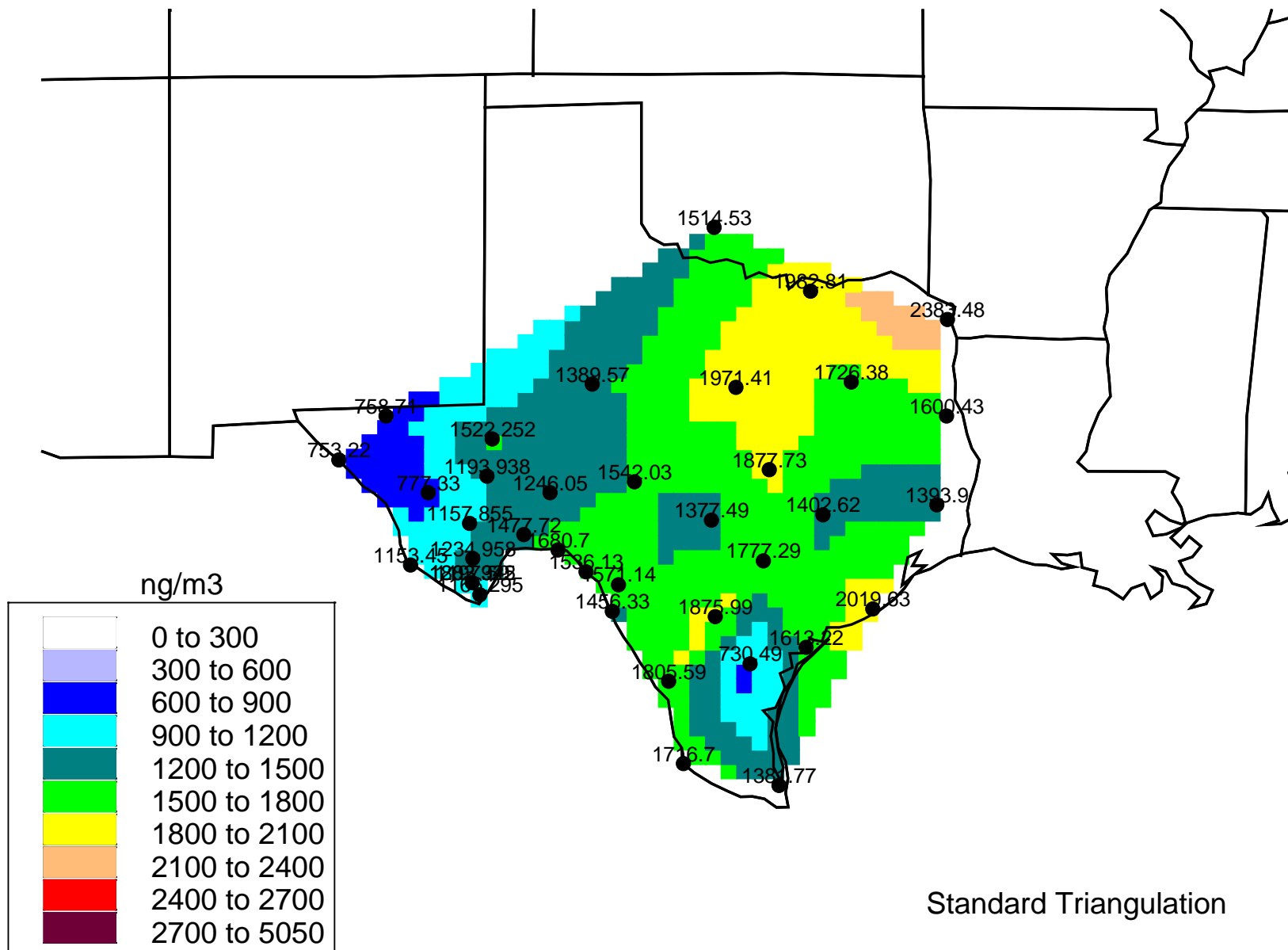
PIXE S on 9/16/1999 (jday 259)



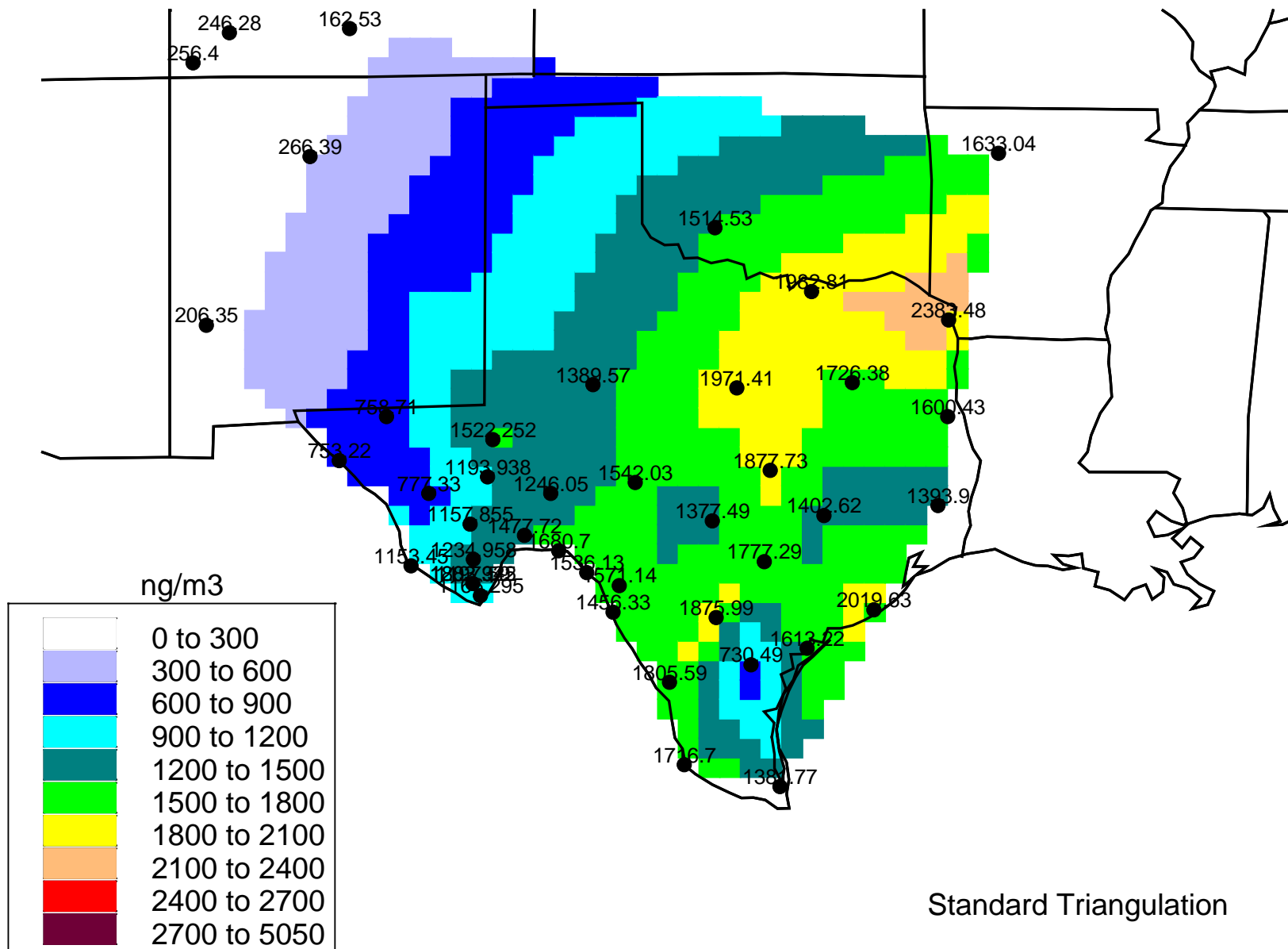
PIXE S on 9/17/1999 (jday 260)



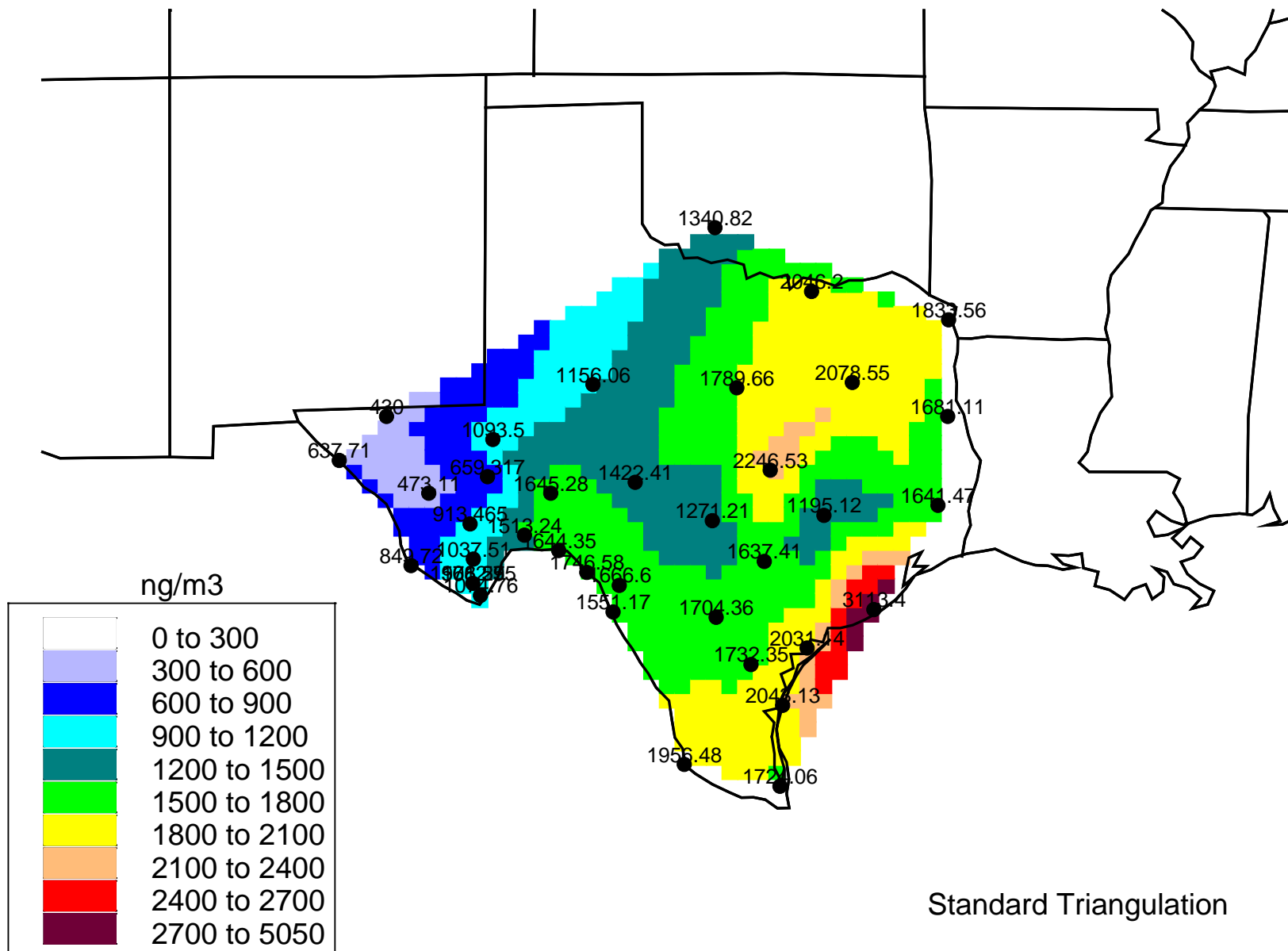
PIXE S on 9/18/1999 (jday 261)



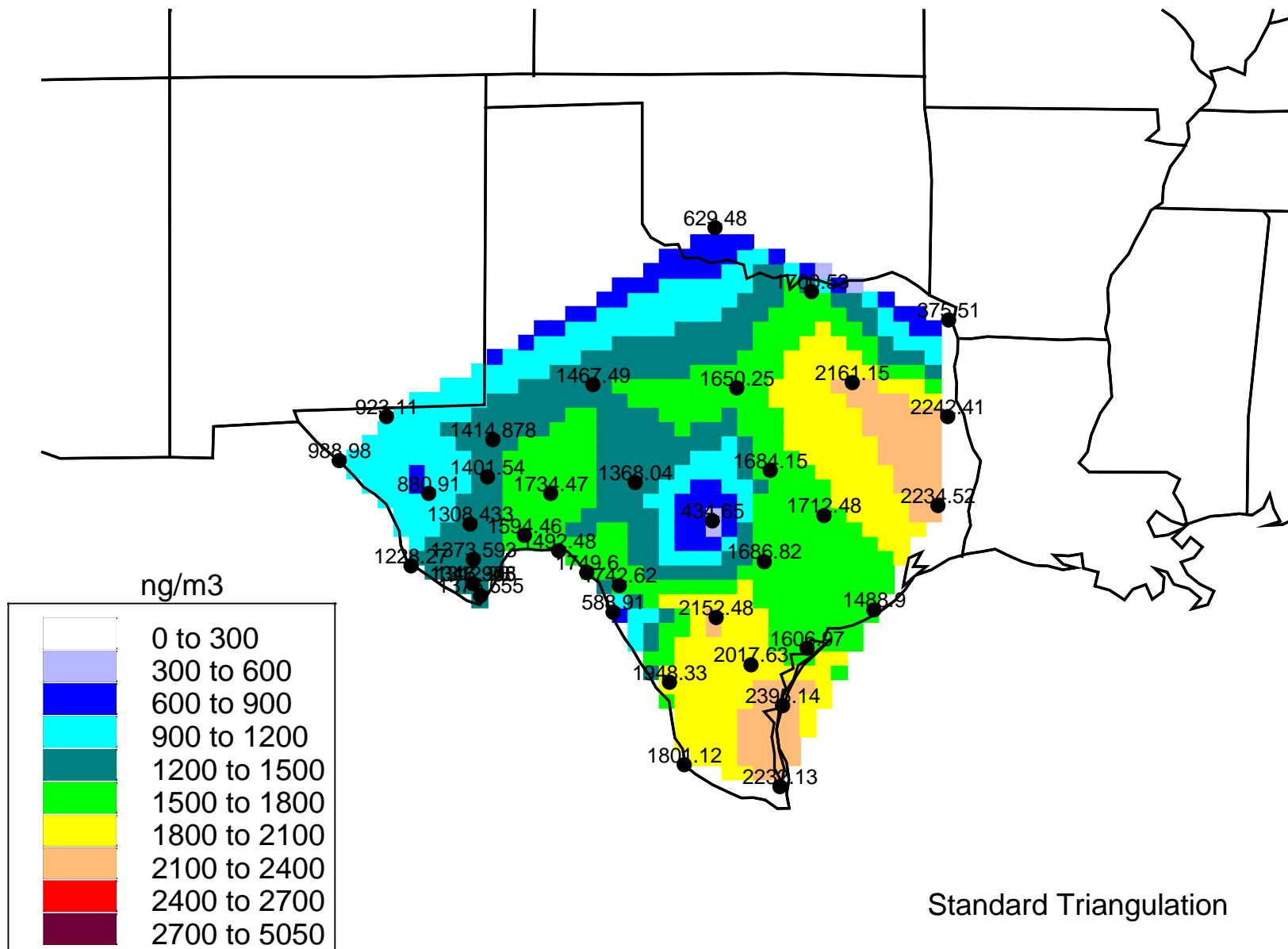
PIXE S on 9/18/1999 (jday 261)



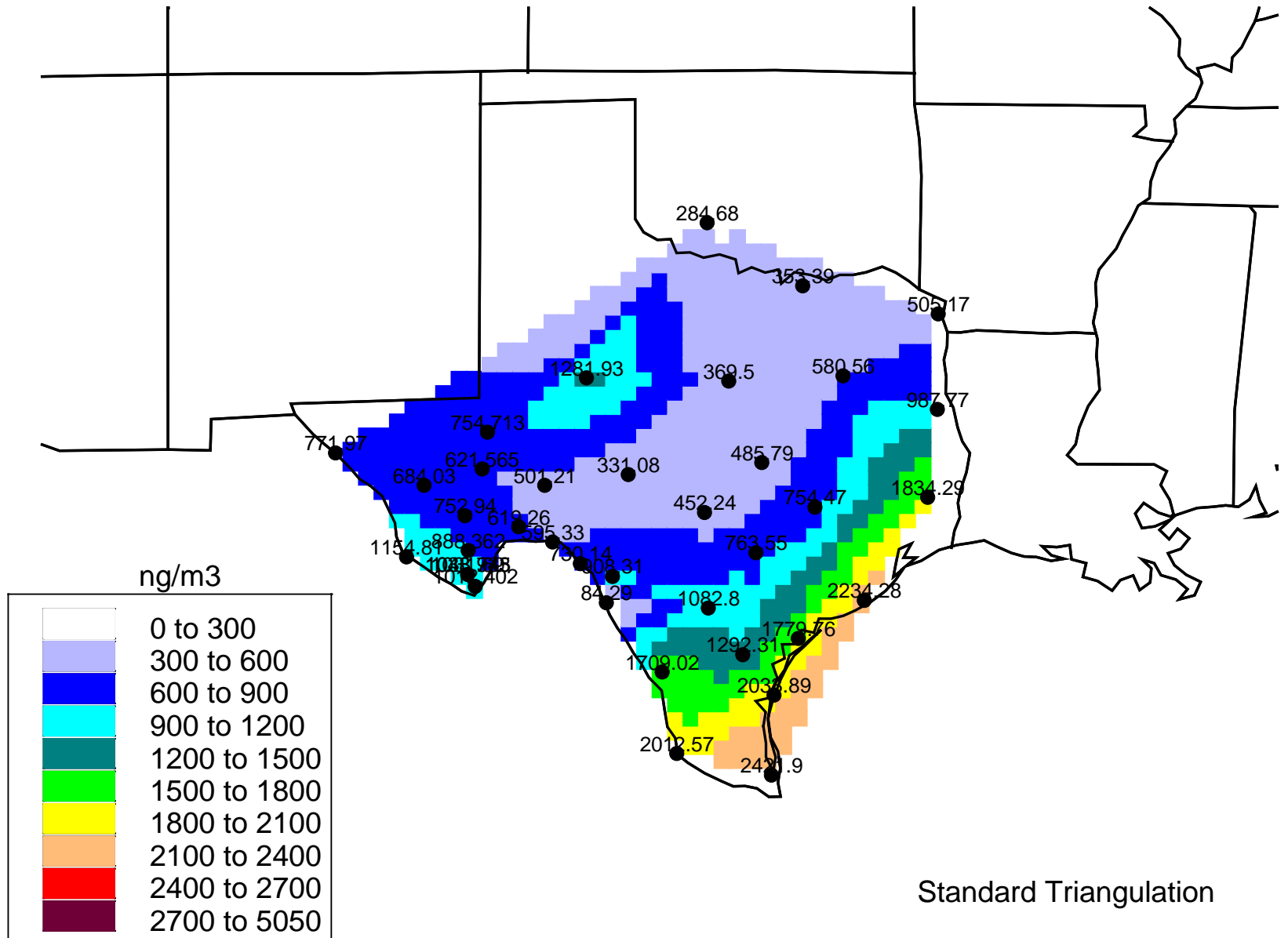
PIXE S on 9/19/1999 (jday 262)



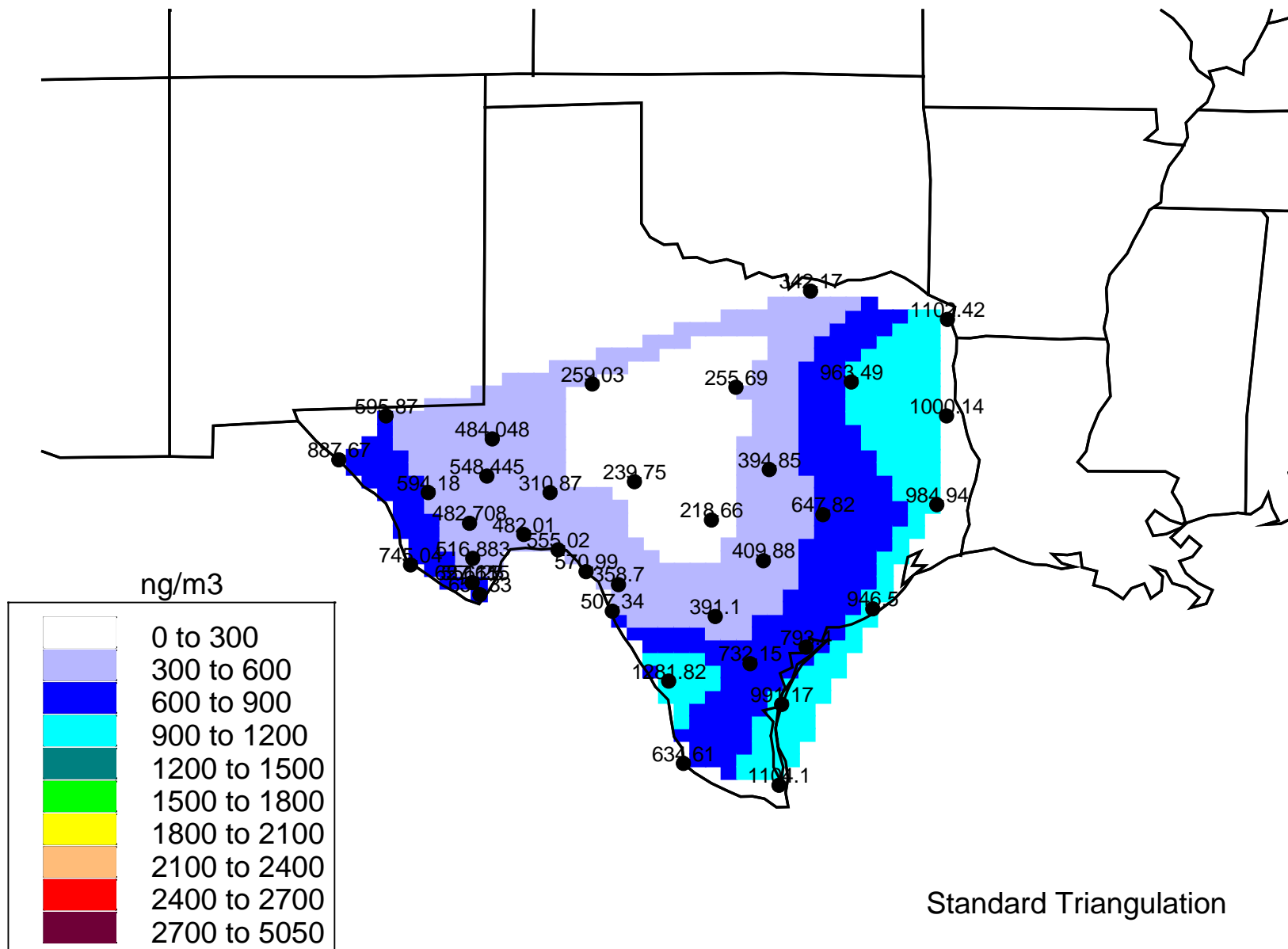
PIXE S on 9/20/1999 (jday 263)



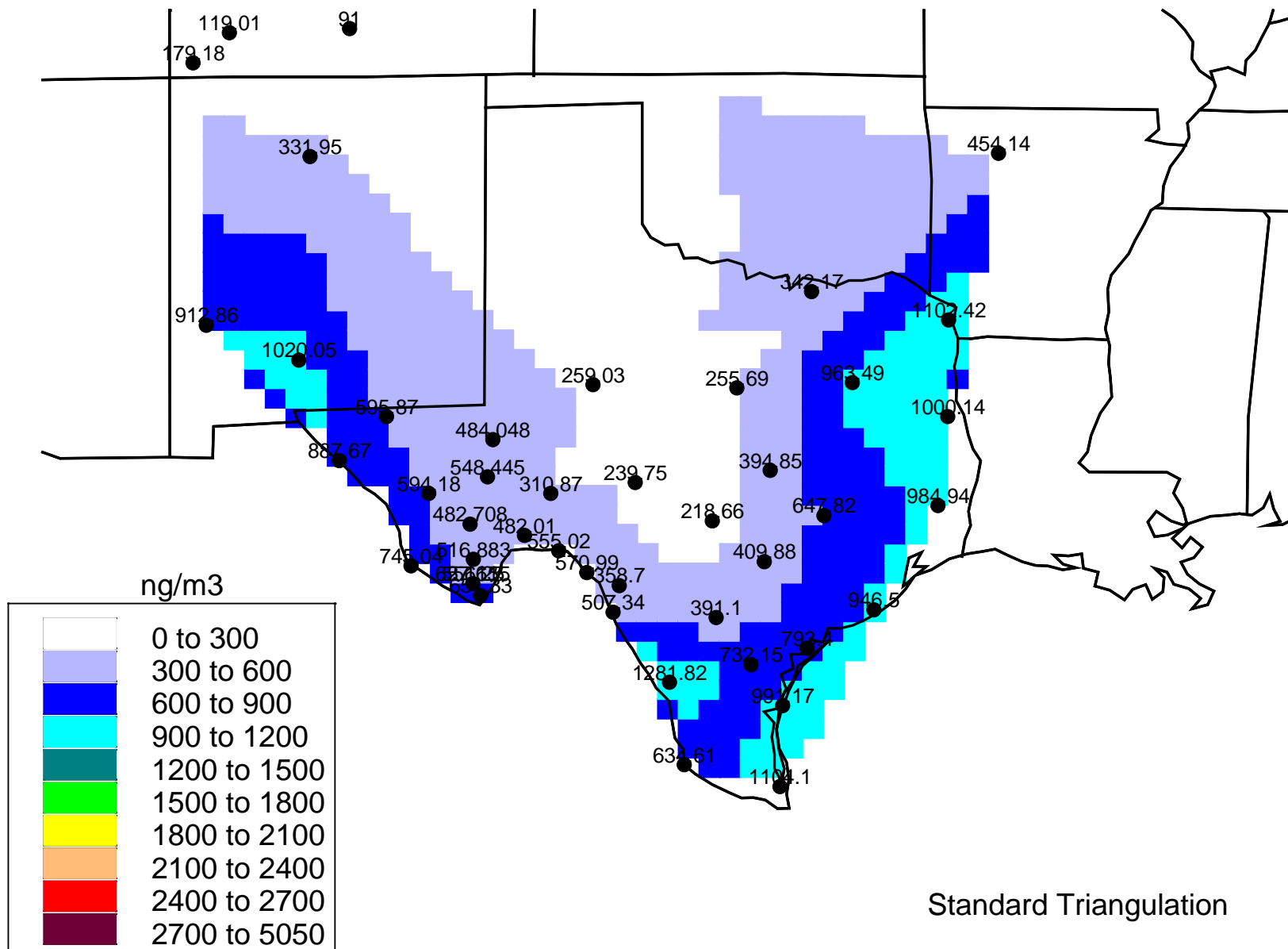
PIXE S on 9/21/1999 (jday 264)



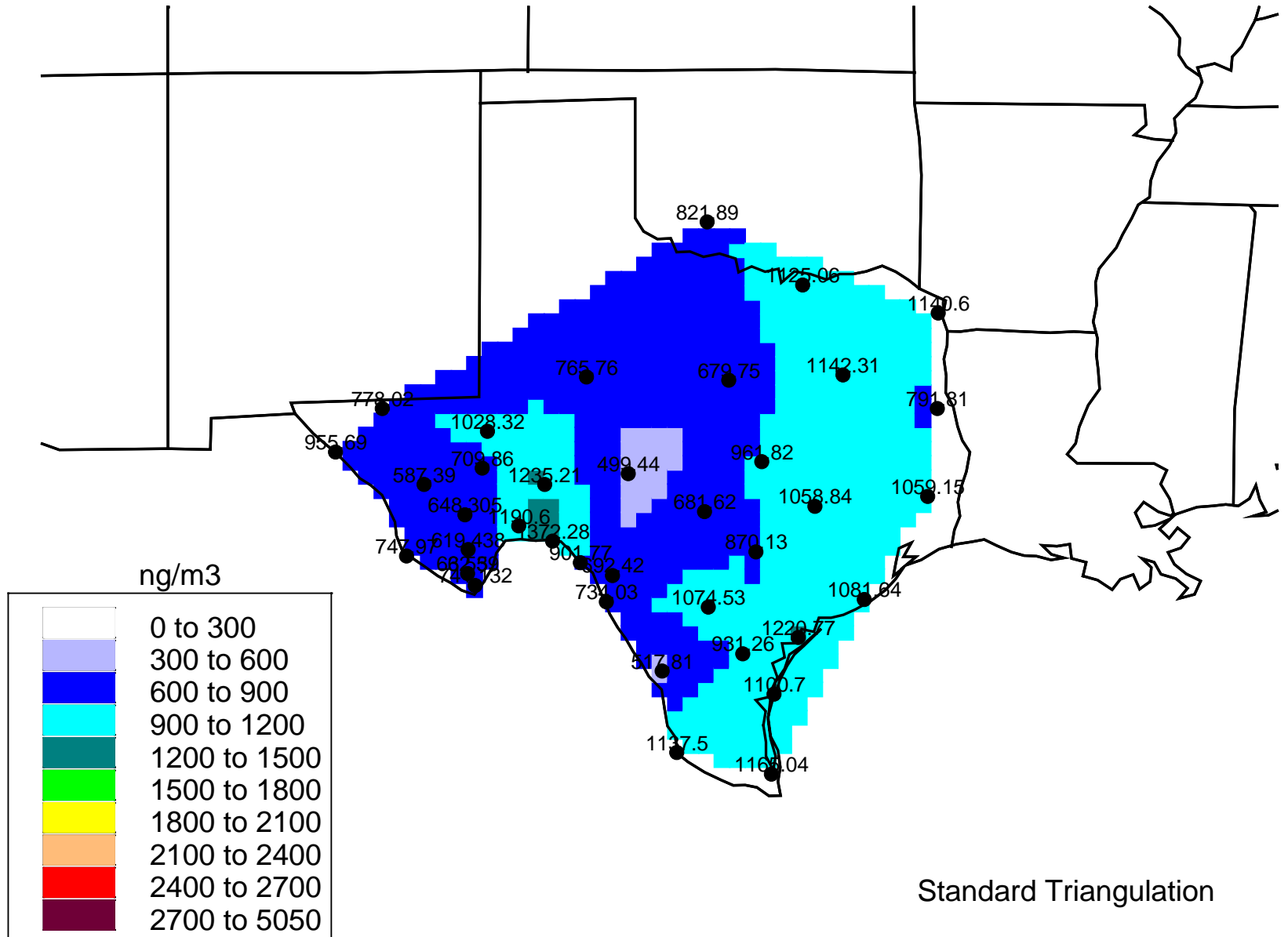
PIXE S on 9/22/1999 (jday 265)



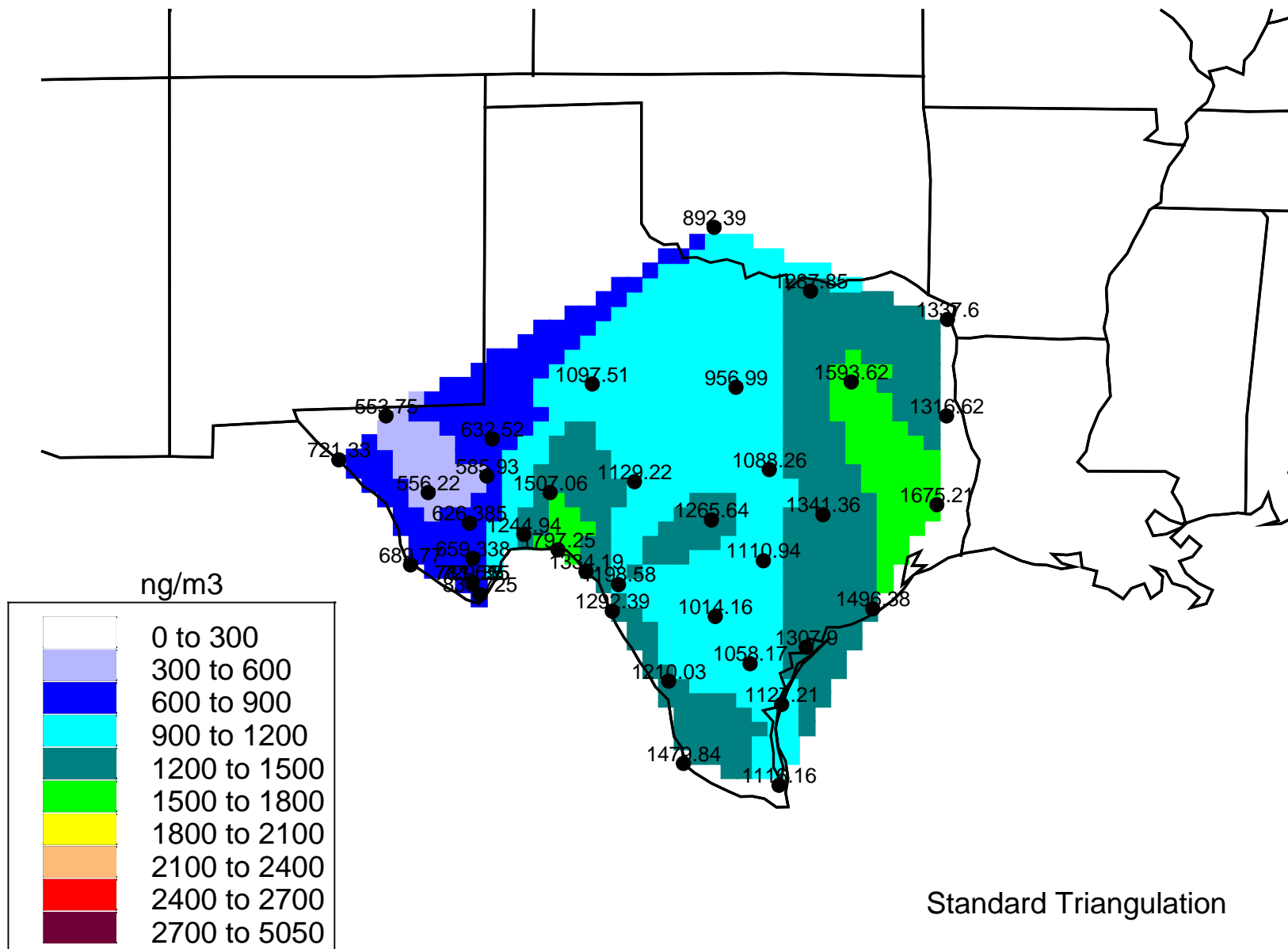
PIXE S on 9/22/1999 (jday 265)



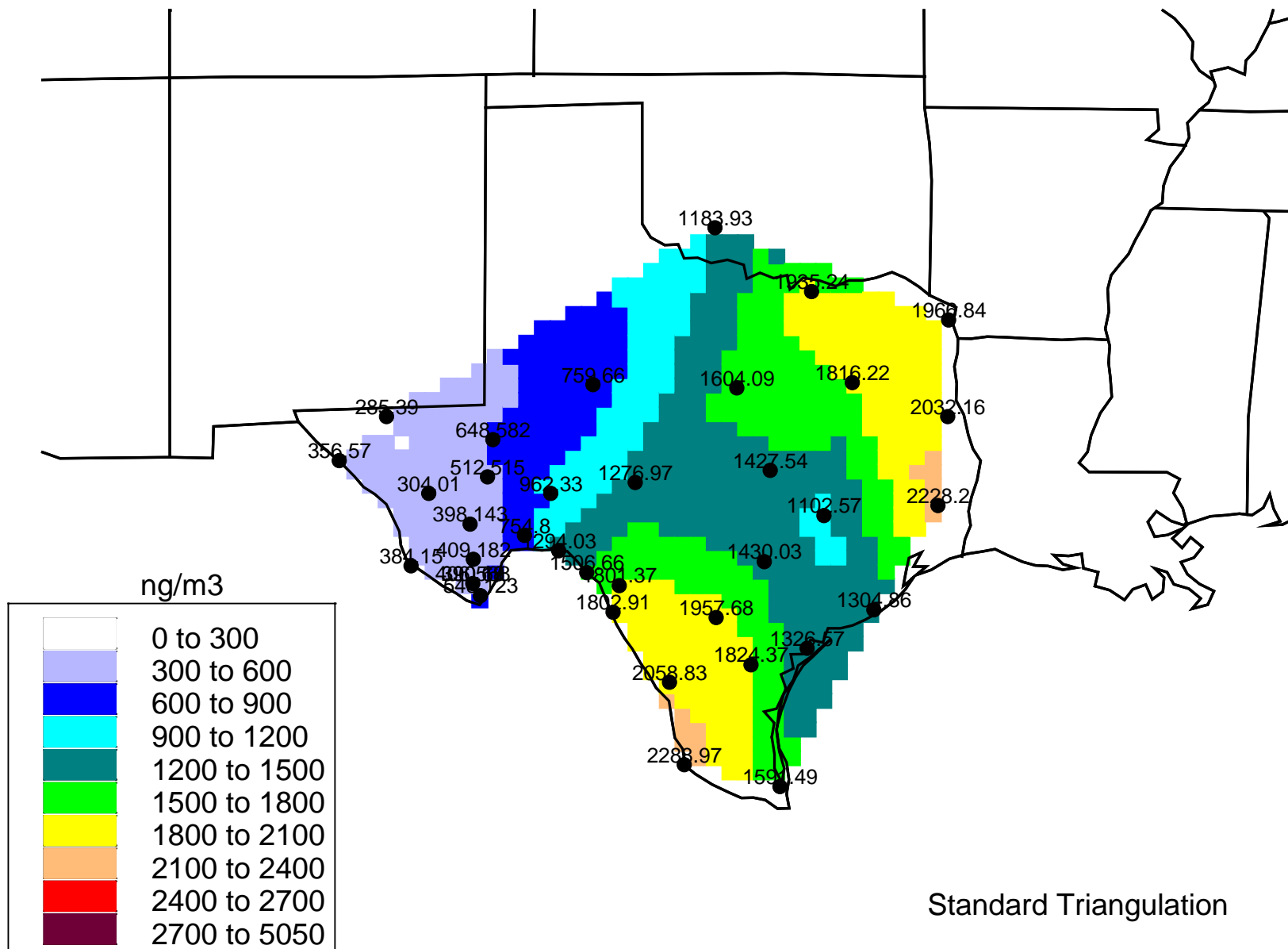
PIXE S on 9/23/1999 (jday 266)



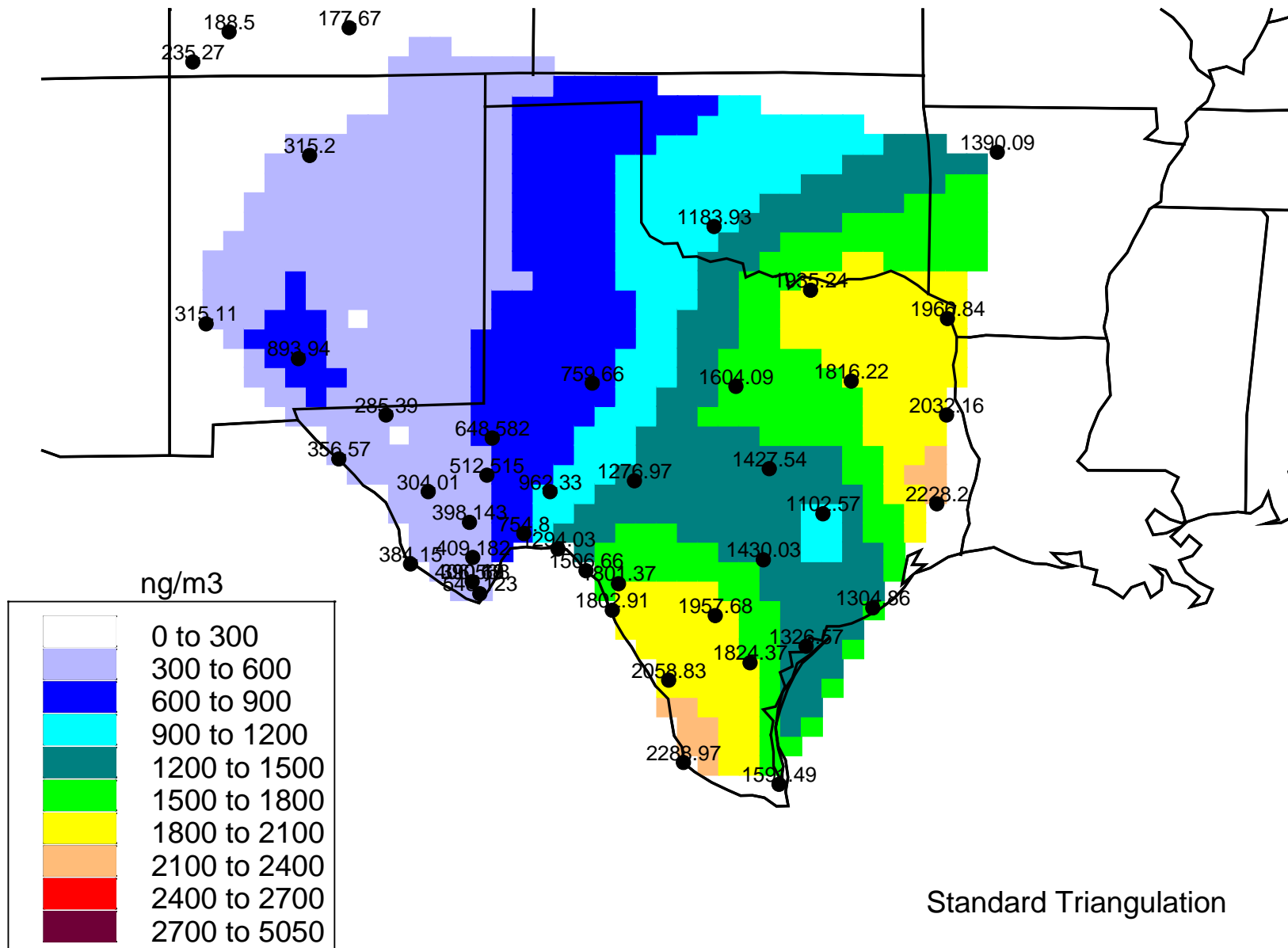
PIXE S on 9/24/1999 (jday 267)



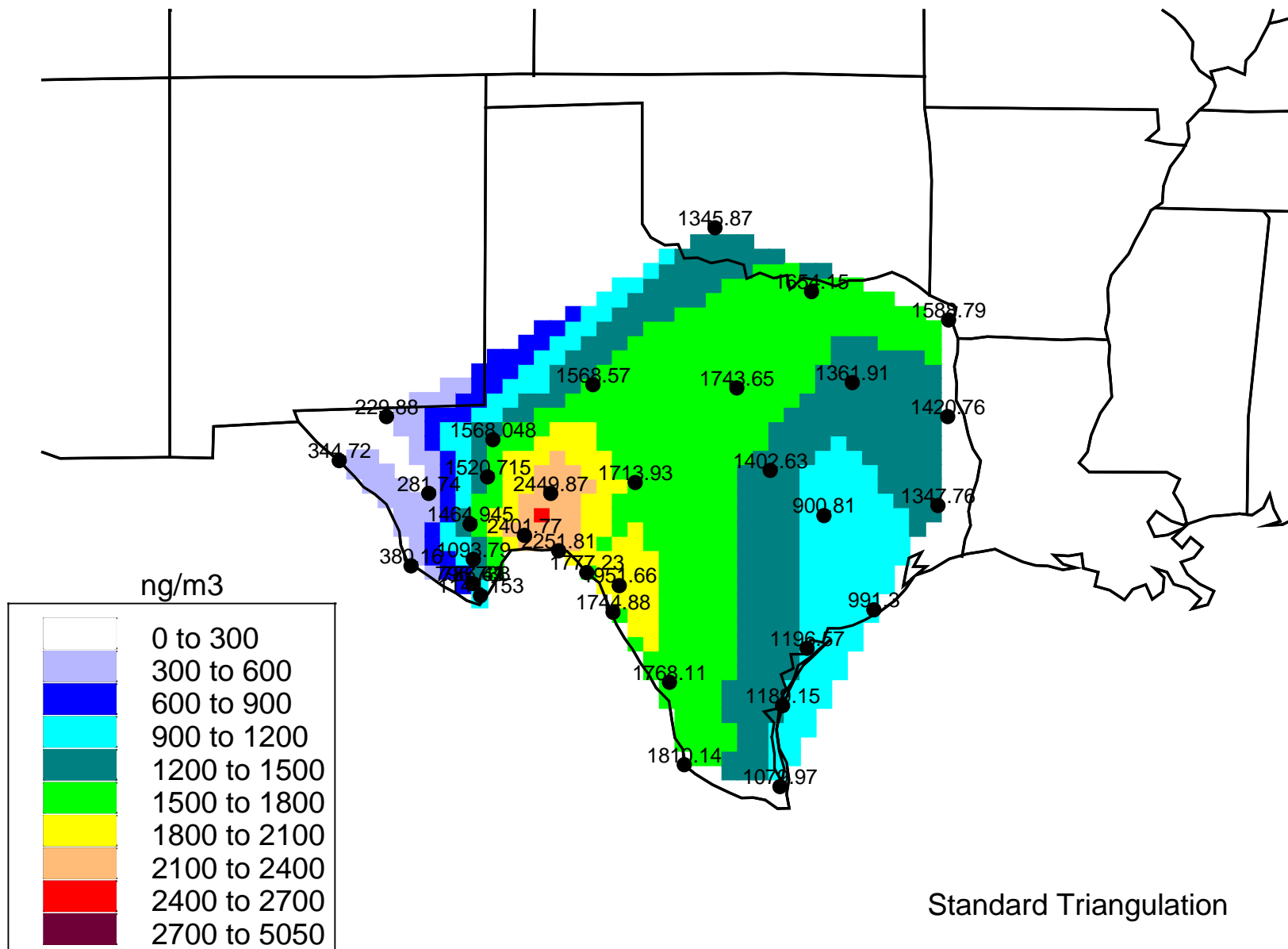
PIXE S on 9/25/1999 (jday 268)



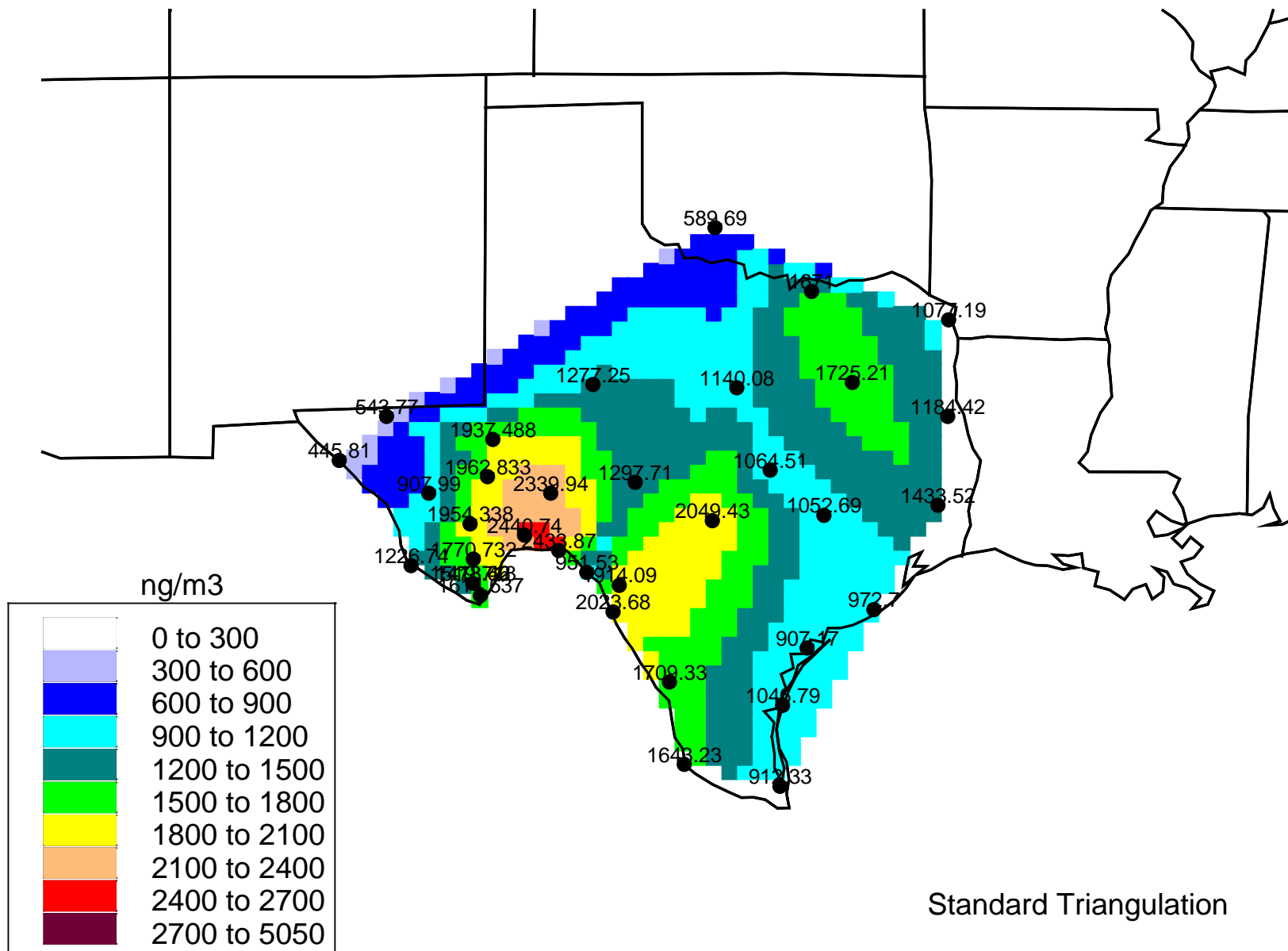
PIXE S on 9/25/1999 (jday 268)



PIXE S on 9/26/1999 (jday 269)

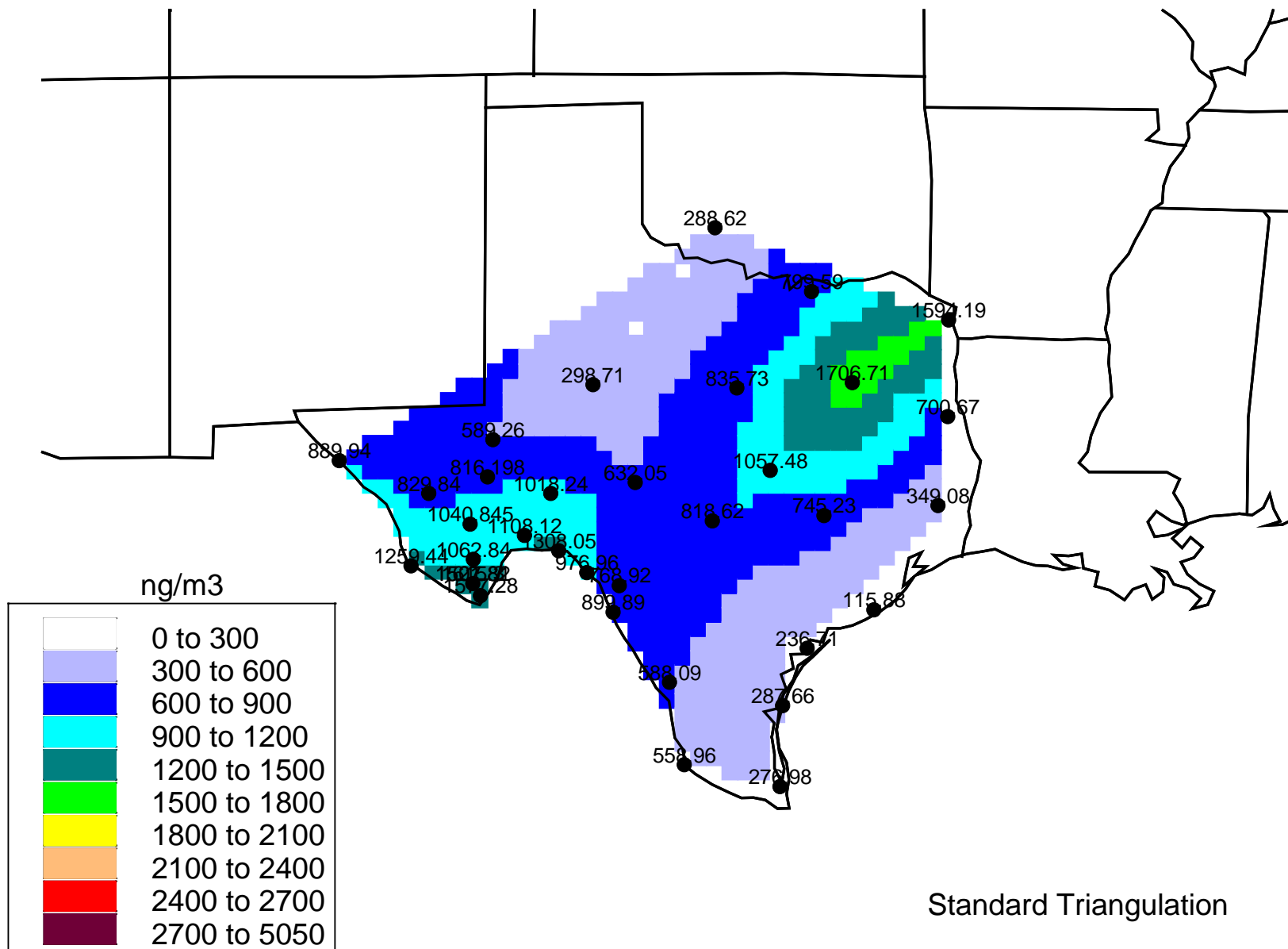


PIXE S on 9/27/1999 (jday 270)



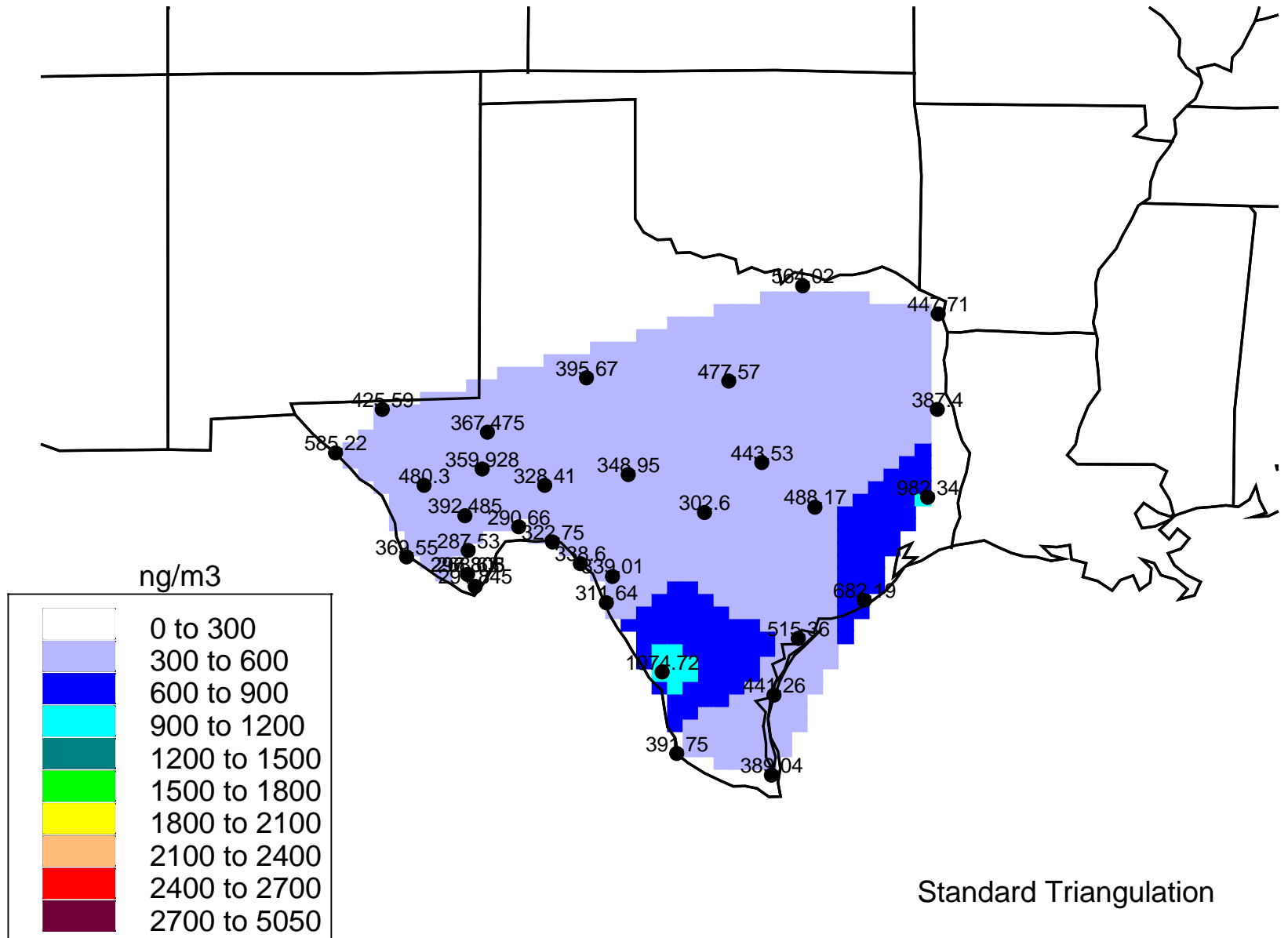
589.69
1077.19
1184.42
1725.21
1140.08
1277.25
1064.51
542.77
445.81
1937.488
1962.833
2339.94
1297.71
1052.69
1433.52
907.99
1954.338
2440.74
433.87
1226.74
1770.732
1547.348
1611.637
951.53
2023.68
2049.43
1052.69
972.17
1709.33
1648.23
917.33
907.17
1046.79

PIXE S on 9/28/1999 (jday 271)



288.62
799.59
1597.19
298.71
835.73
1706.71
700.67
889.94
589.26
816.198
1018.24
632.05
1057.48
745.23
349.08
1259.44
1040.845
1108.12
808.05
976.96
68.92
899.89
115.86
236.71
287.66
558.96
278.98

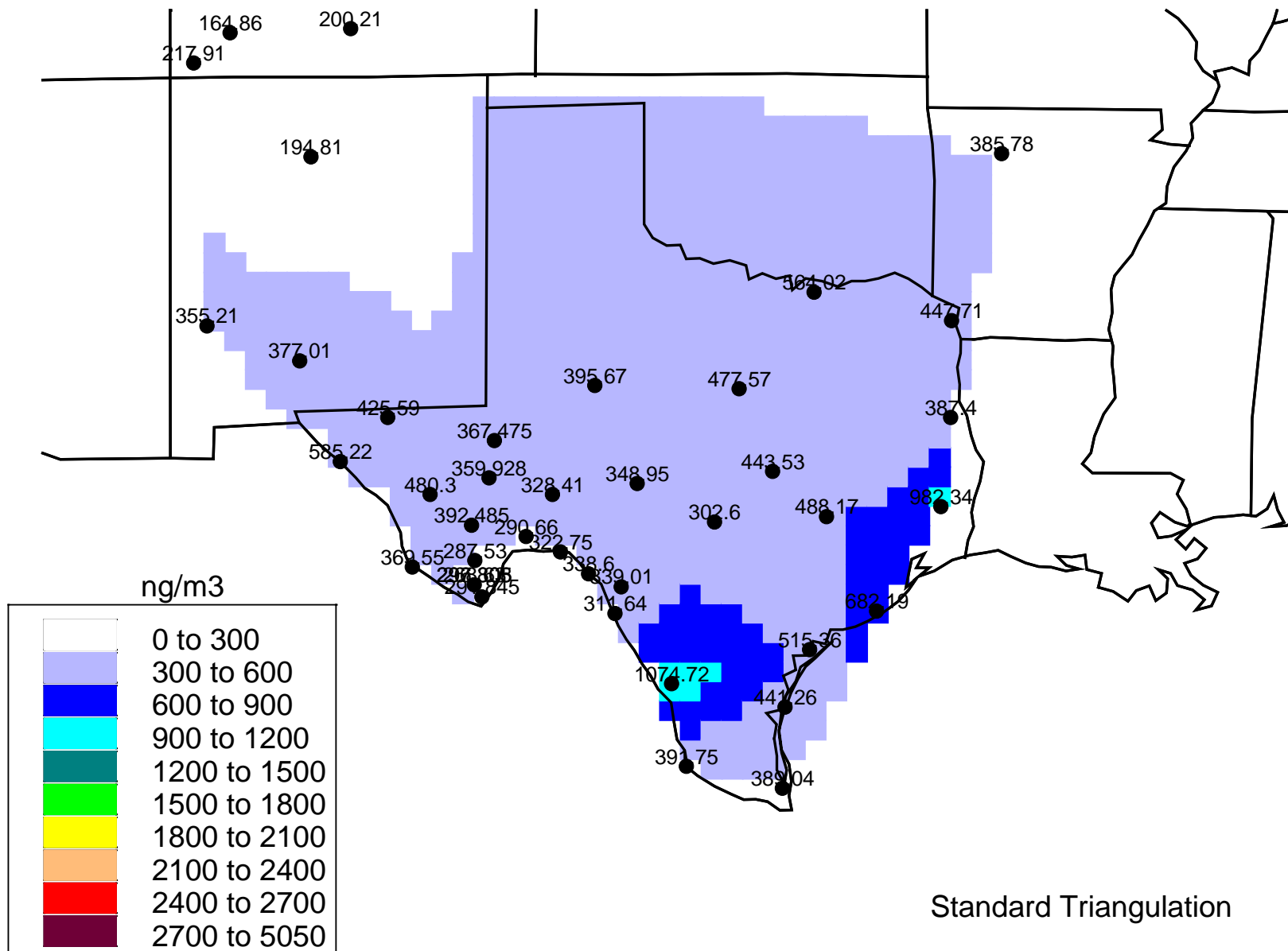
PIXE S on 9/29/1999 (jday 272)



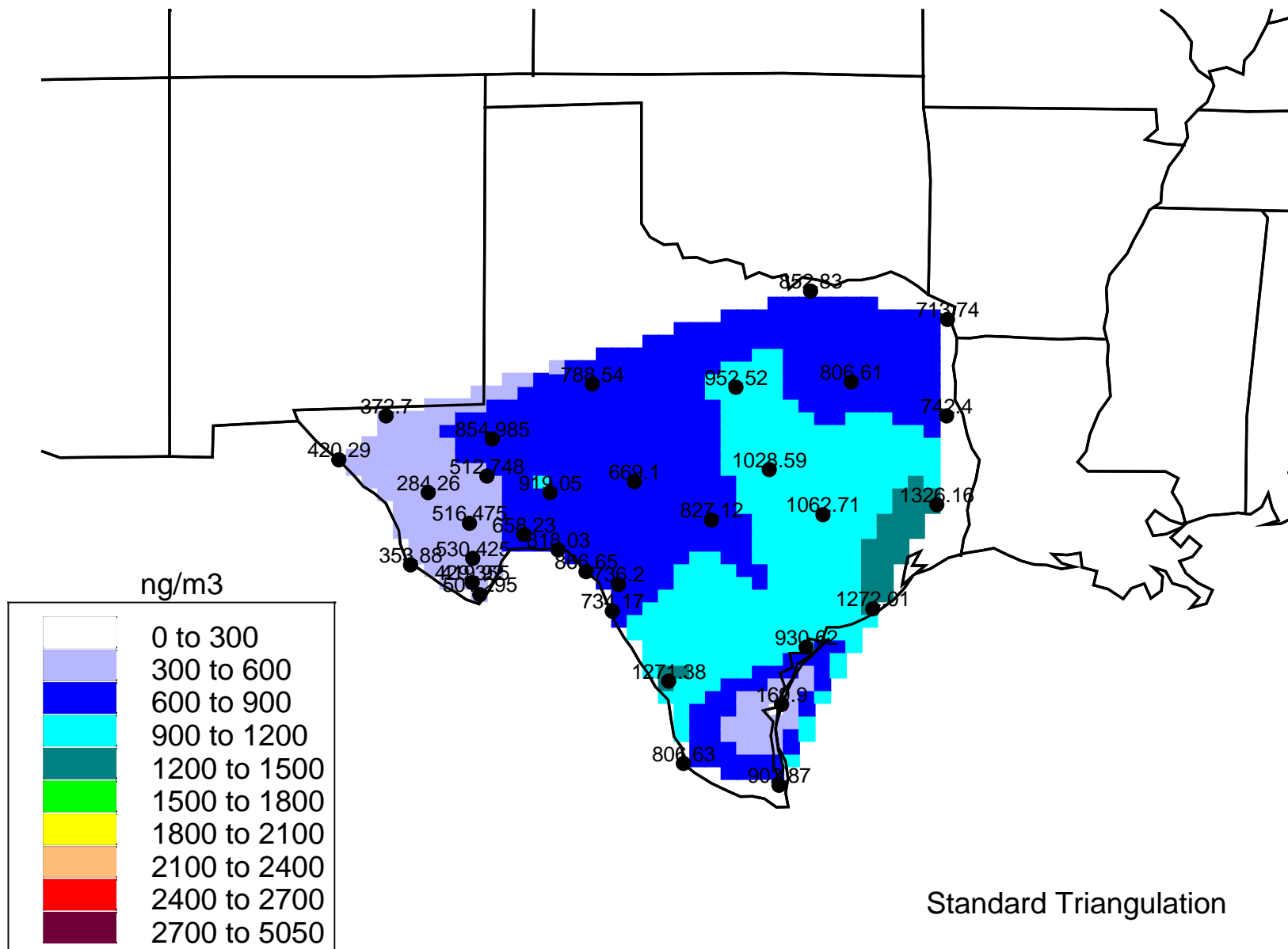
ng/m³

585.22
425.59
367.475
395.67
477.57
307.82
447.71
387.4
443.53
480.3
359.928
328.41
348.95
302.6
488.17
982.34
392.485
290.66
322.75
338.6
39.01
682.19
360.55
287.53
296.305
296.375
311.64
515.36
1074.72
441.26
391.75
389.04

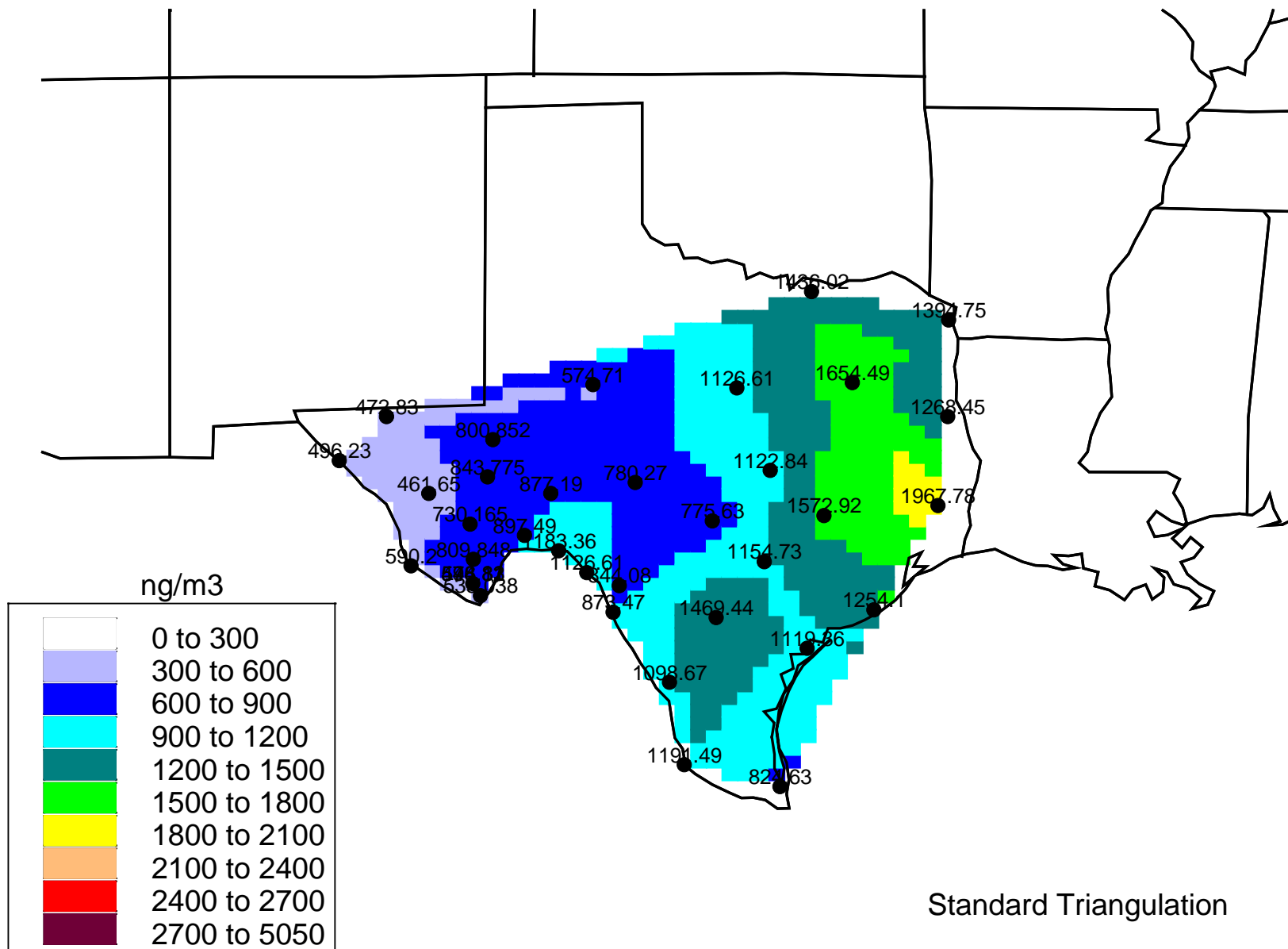
PIXE S on 9/29/1999 (jday 272)



PIXE S on 10/1/1999 (jday 274)



PIXE S on 10/2/1999 (jday 275)



496.23

472.83

461.65

800.852

843.775

730.165

590.2

809.848

530.738

897.49

183.36

1126.61

878.47

841.08

1098.67

1191.49

821.63

1469.44

775.63

1154.73

1119.86

1572.92

1254.1

1967.78

1122.84

1126.61

1654.49

1136.02

1268.45

1391.75

574.71

1126.61

1654.49

1122.84

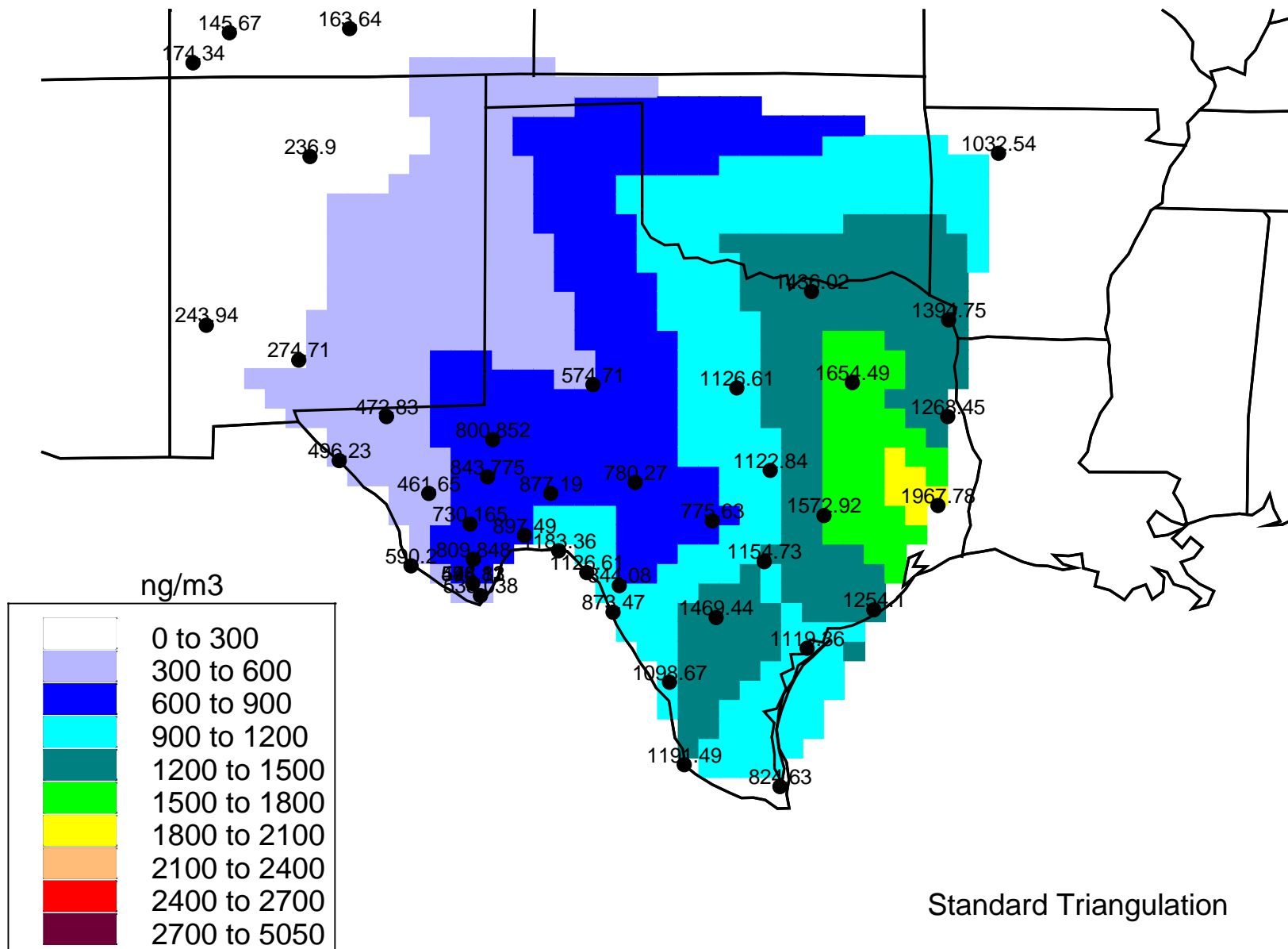
1572.92

1967.78

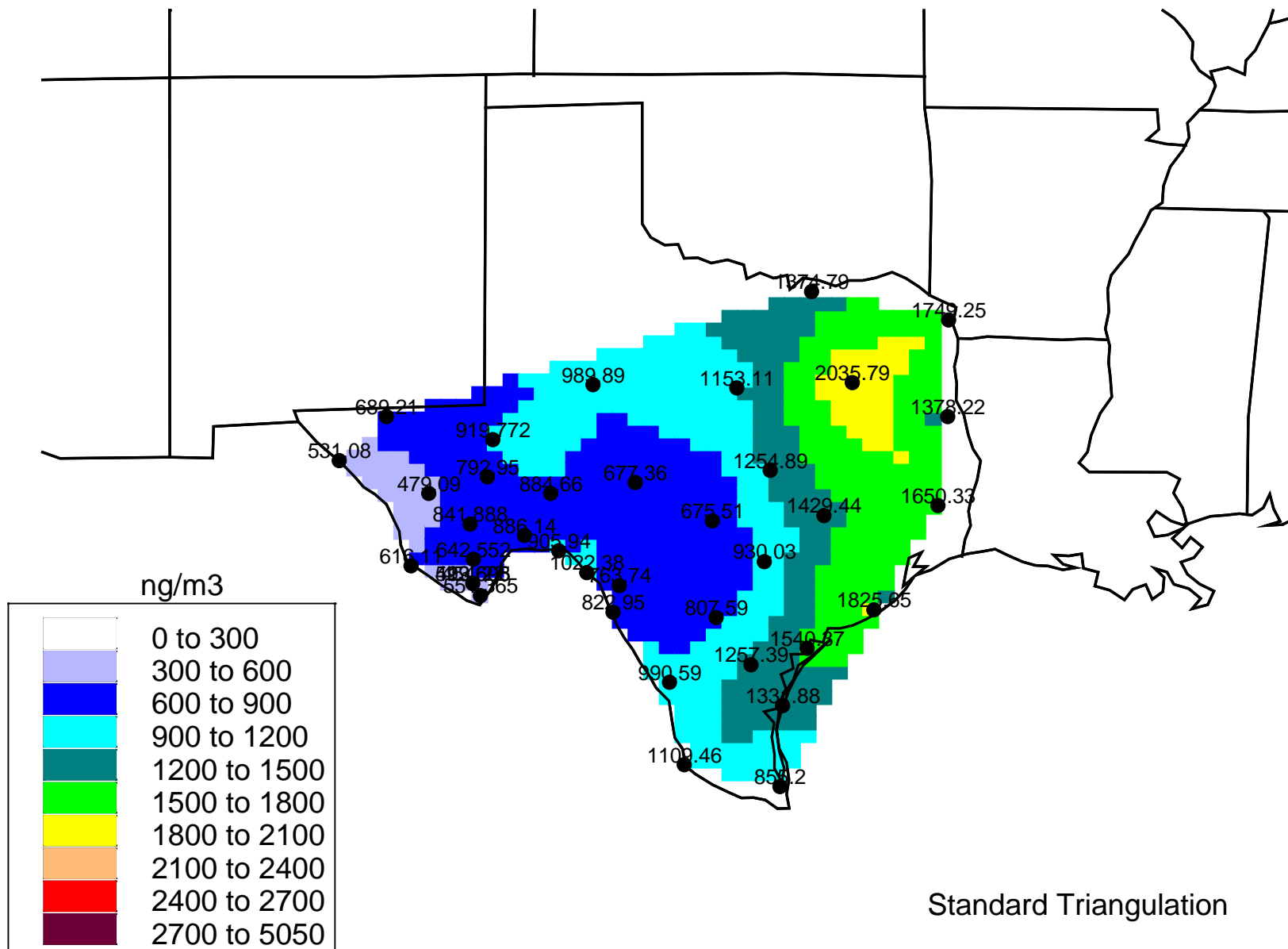
1268.45

1391.75

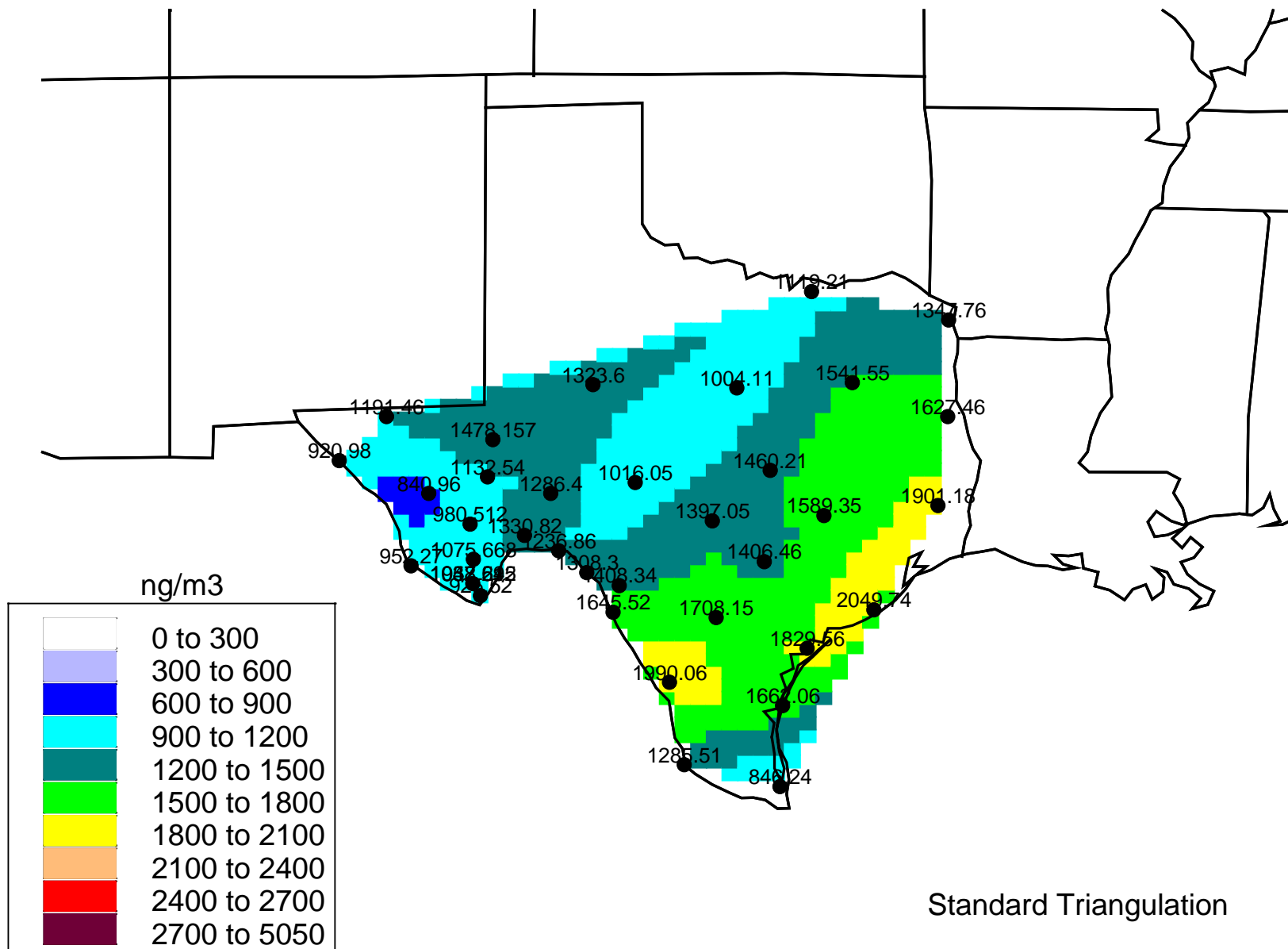
PIXE S on 10/2/1999 (jday 275)



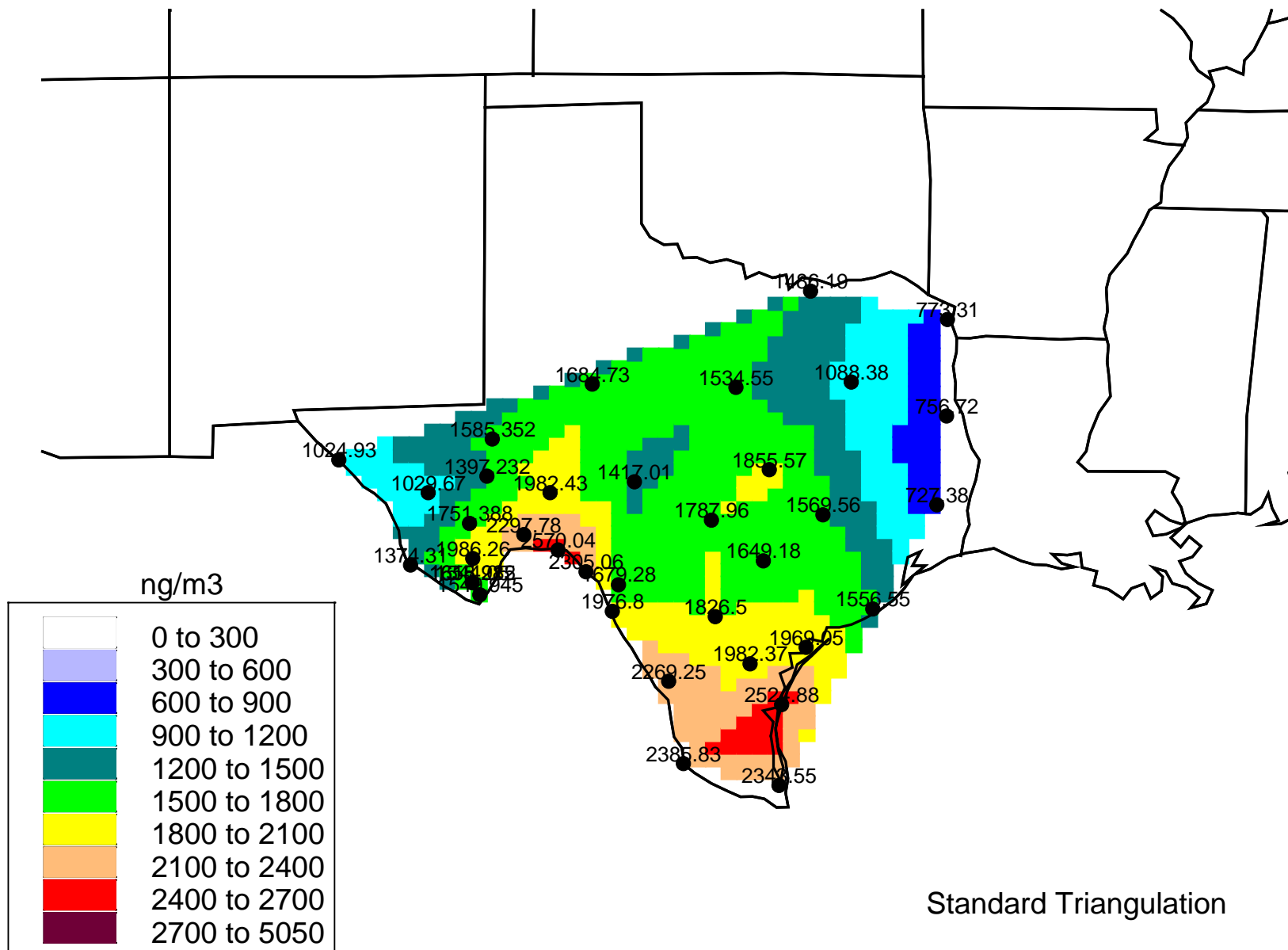
PIXE S on 10/3/1999 (jday 276)



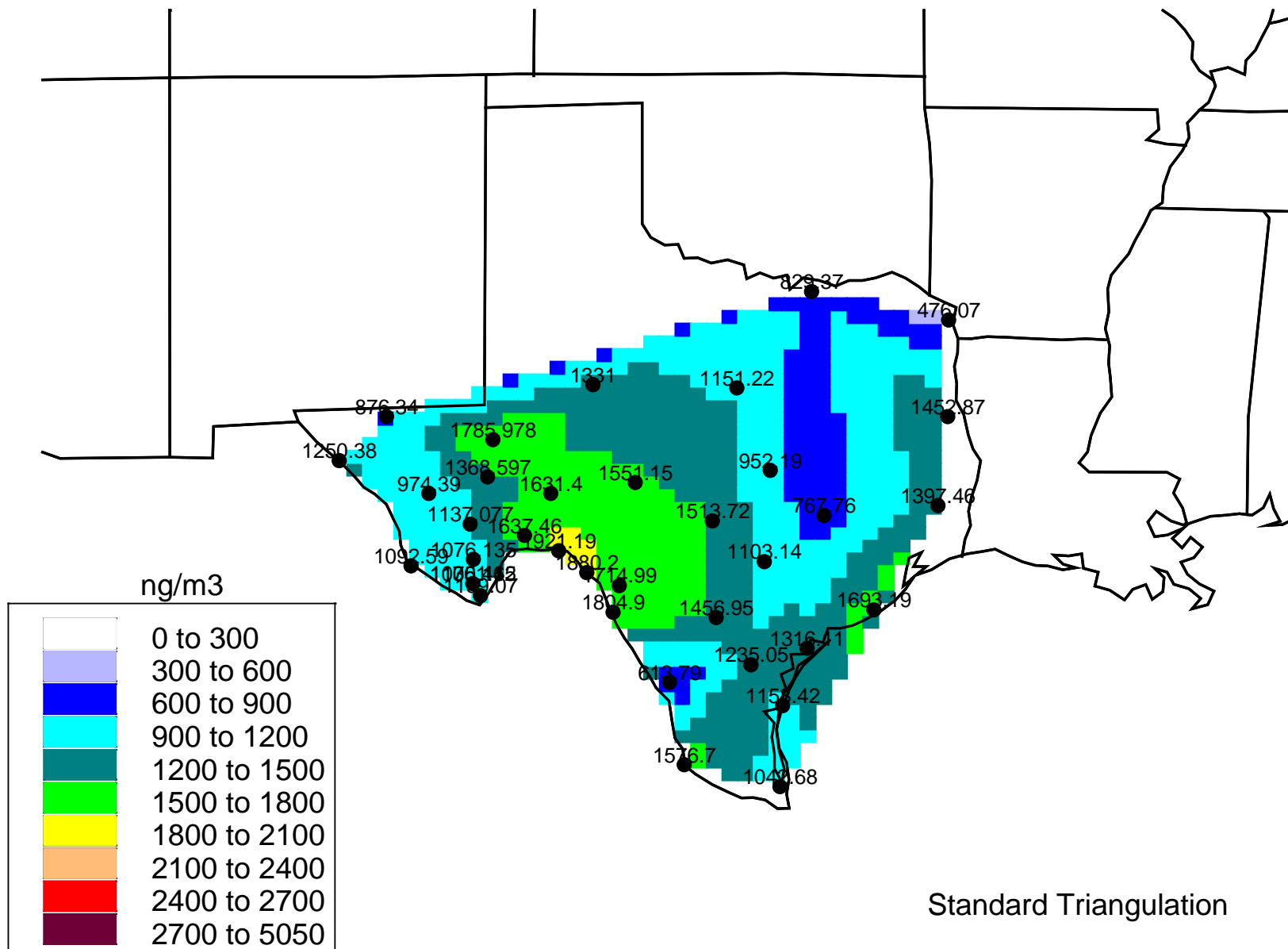
PIXE S on 10/4/1999 (jday 277)



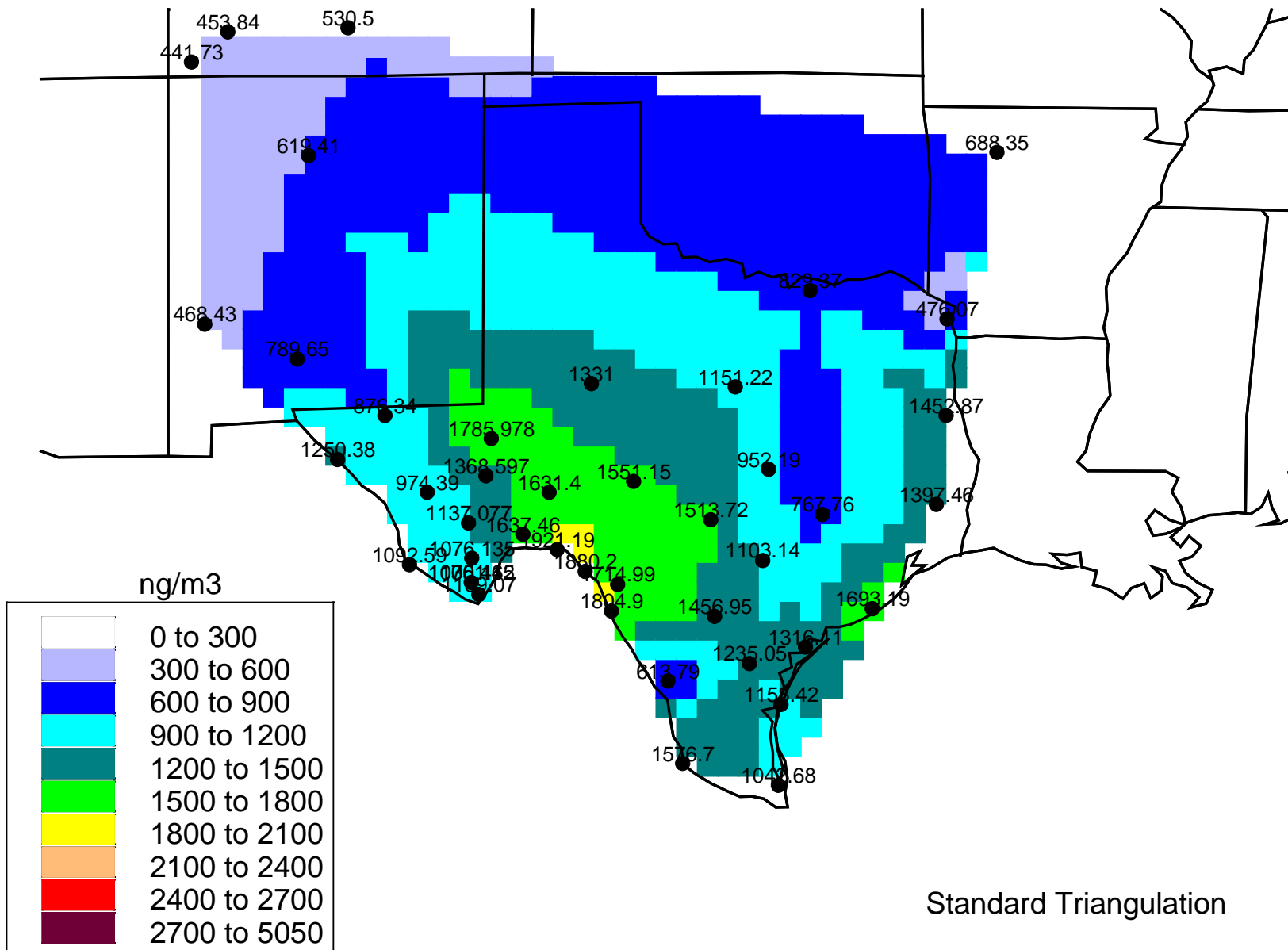
PIXE S on 10/5/1999 (jday 278)



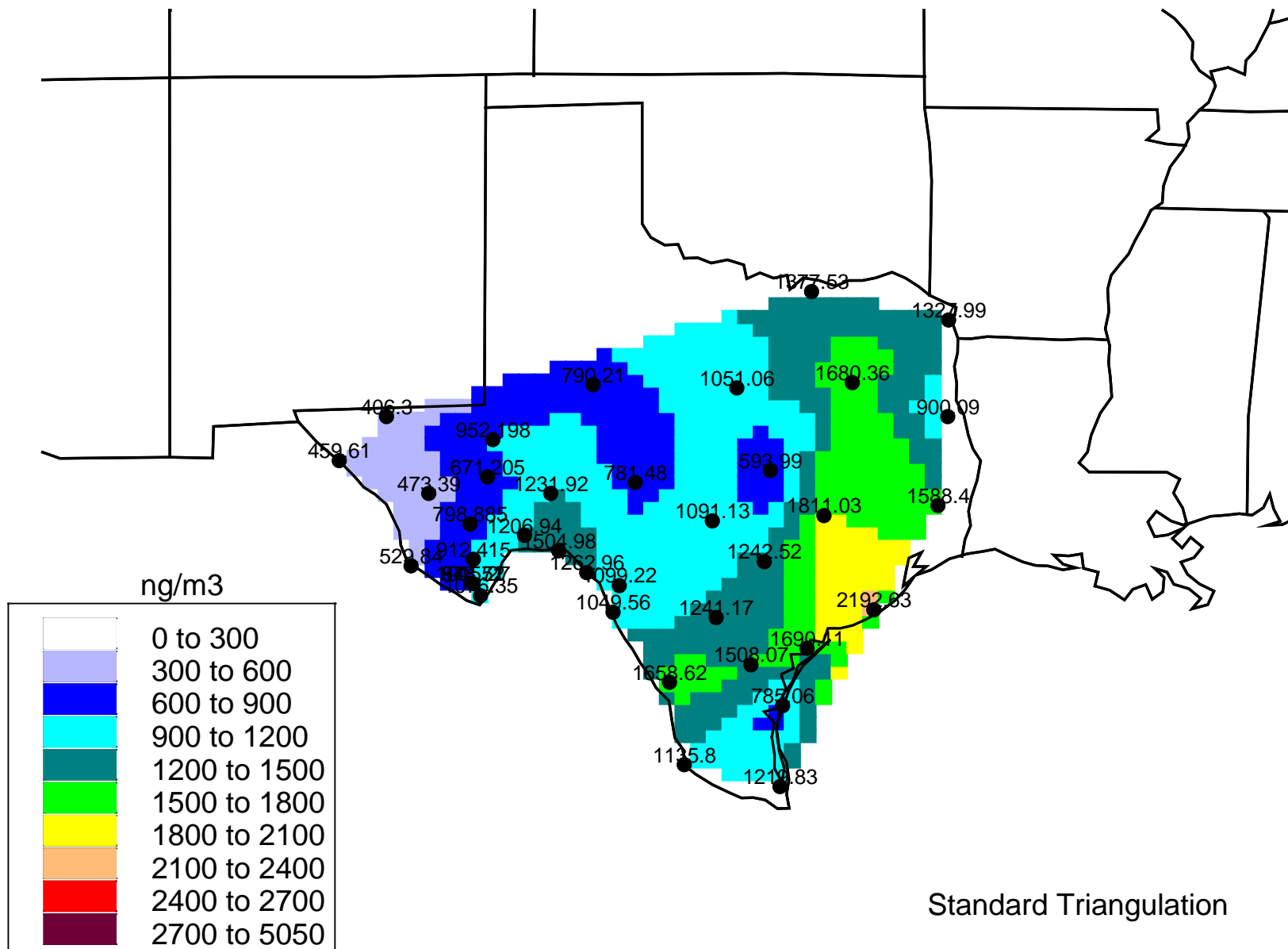
PIXE S on 10/6/1999 (jday 279)



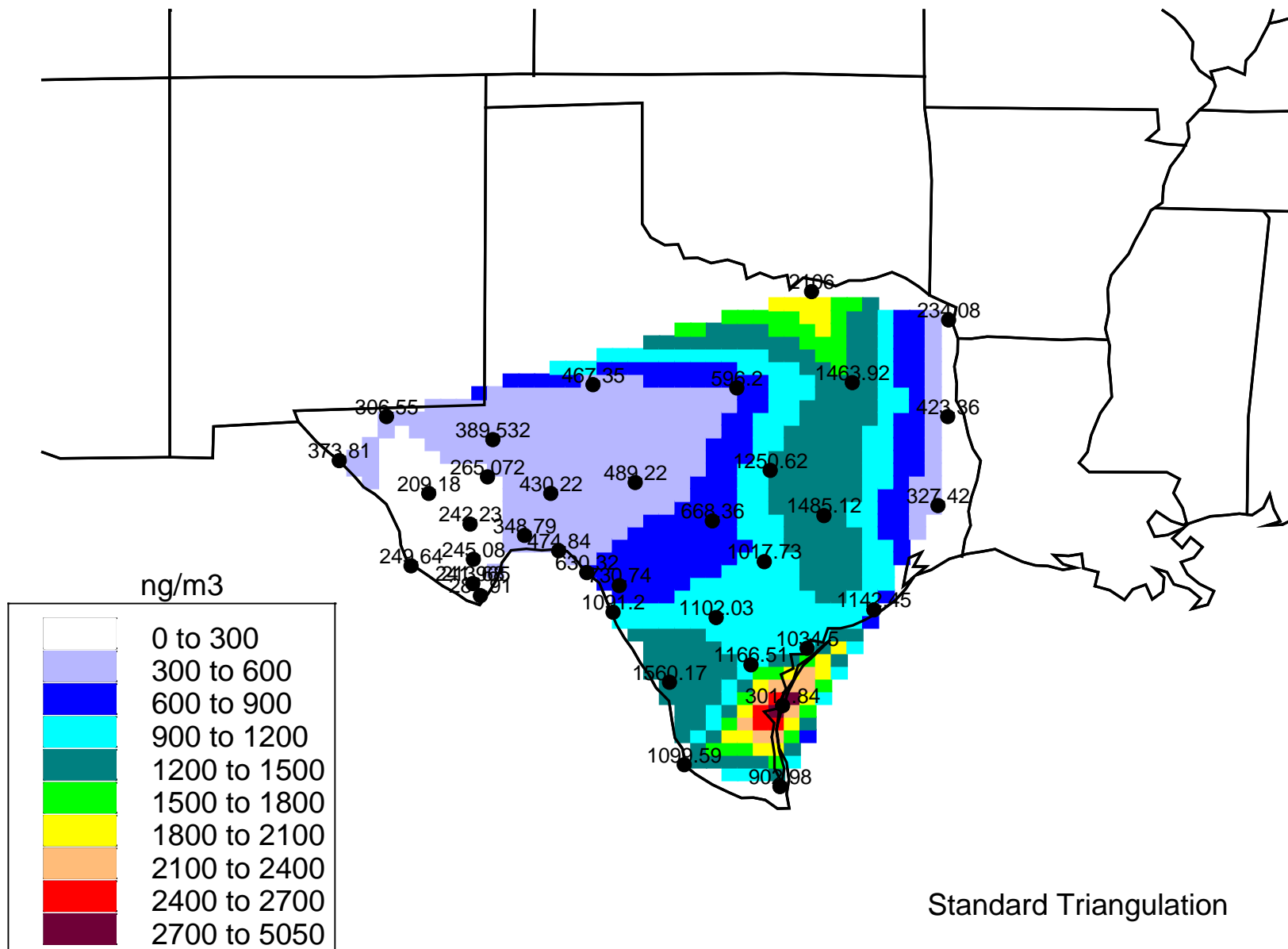
PIXE S on 10/6/1999 (jday 279)



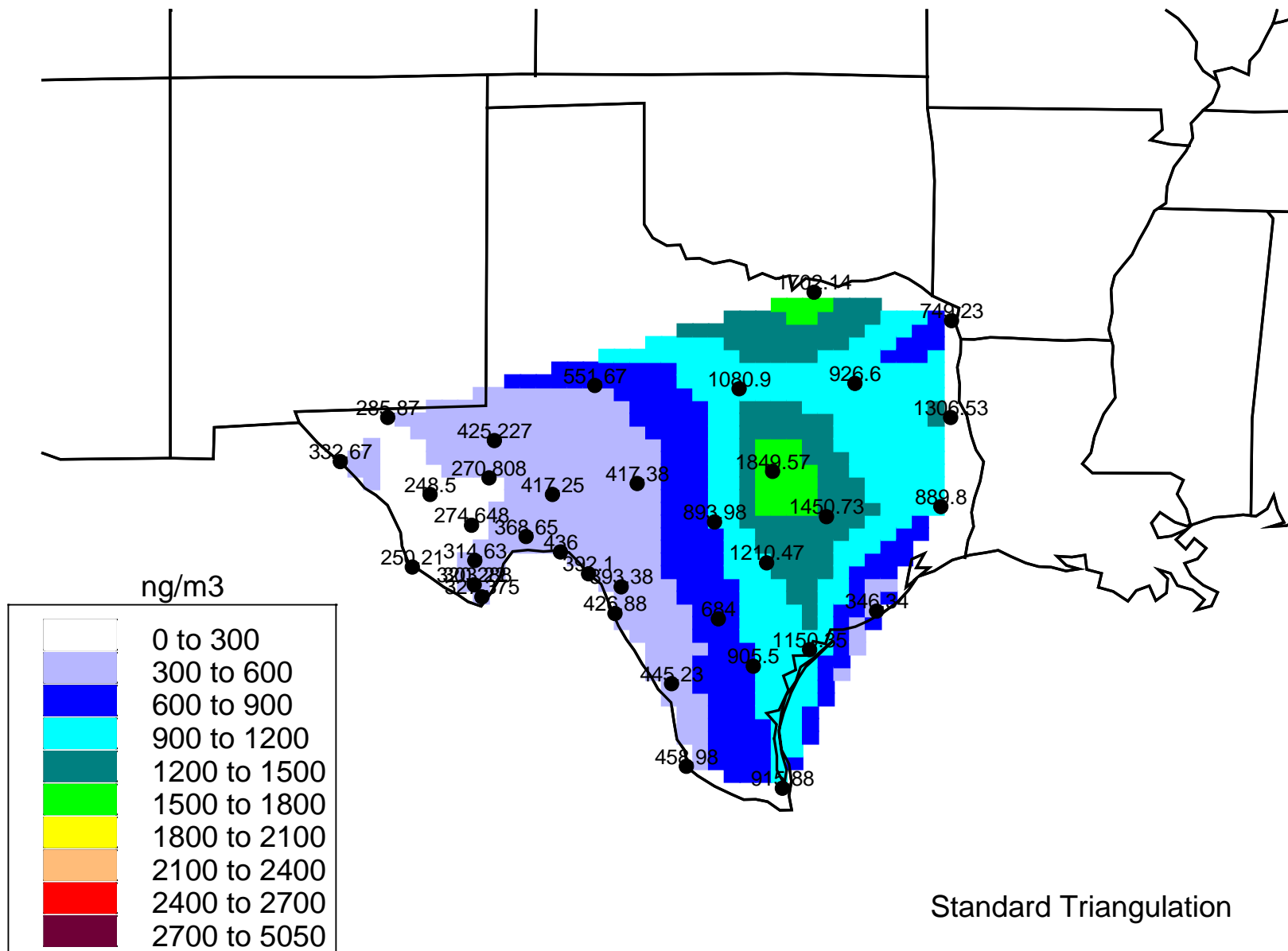
PIXE S on 10/7/1999 (jday 280)



PIXE S on 10/8/1999 (jday 281)

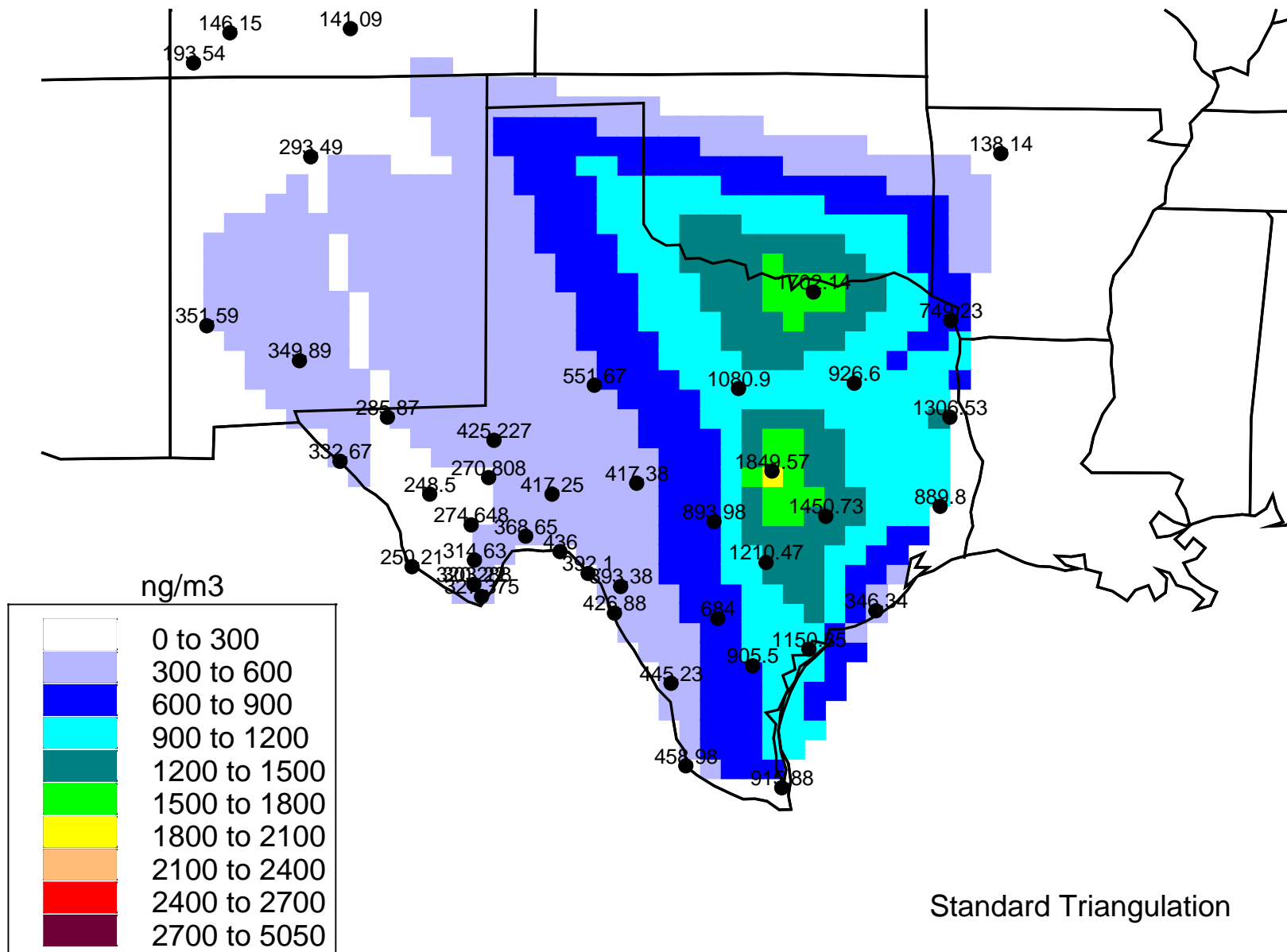


PIXE S on 10/9/1999 (jday 282)

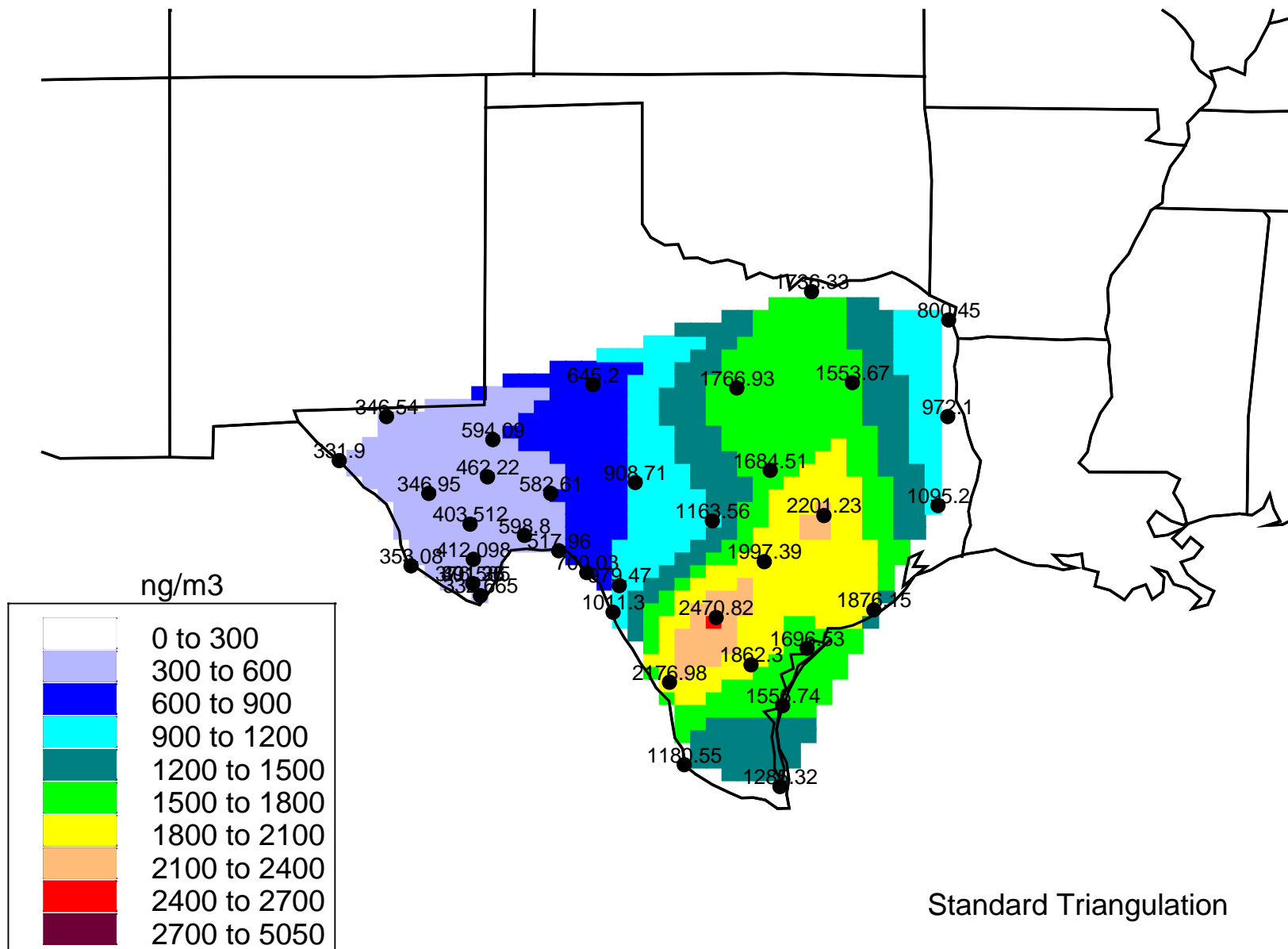


Standard Triangulation

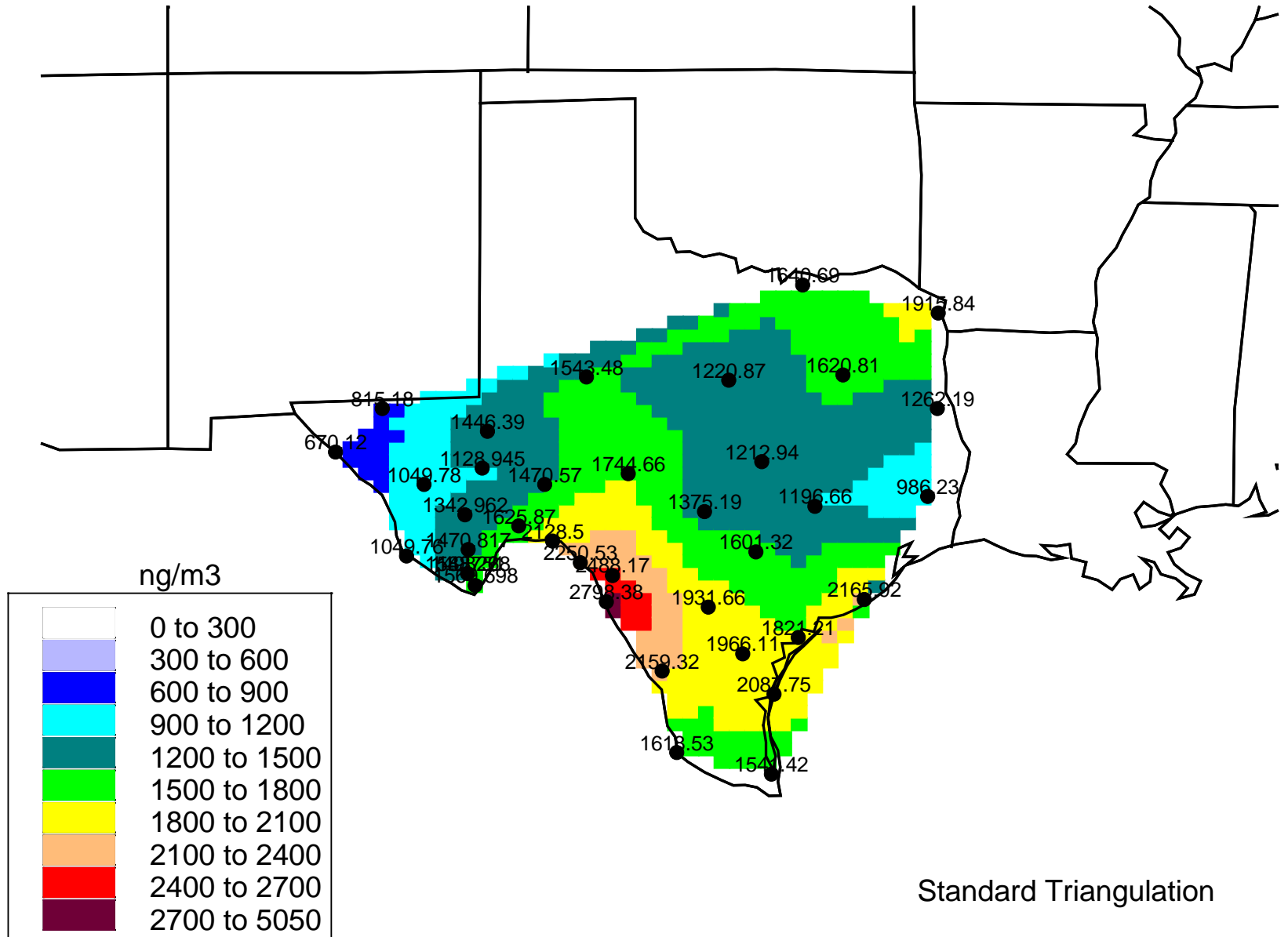
PIXE S on 10/9/1999 (jday 282)



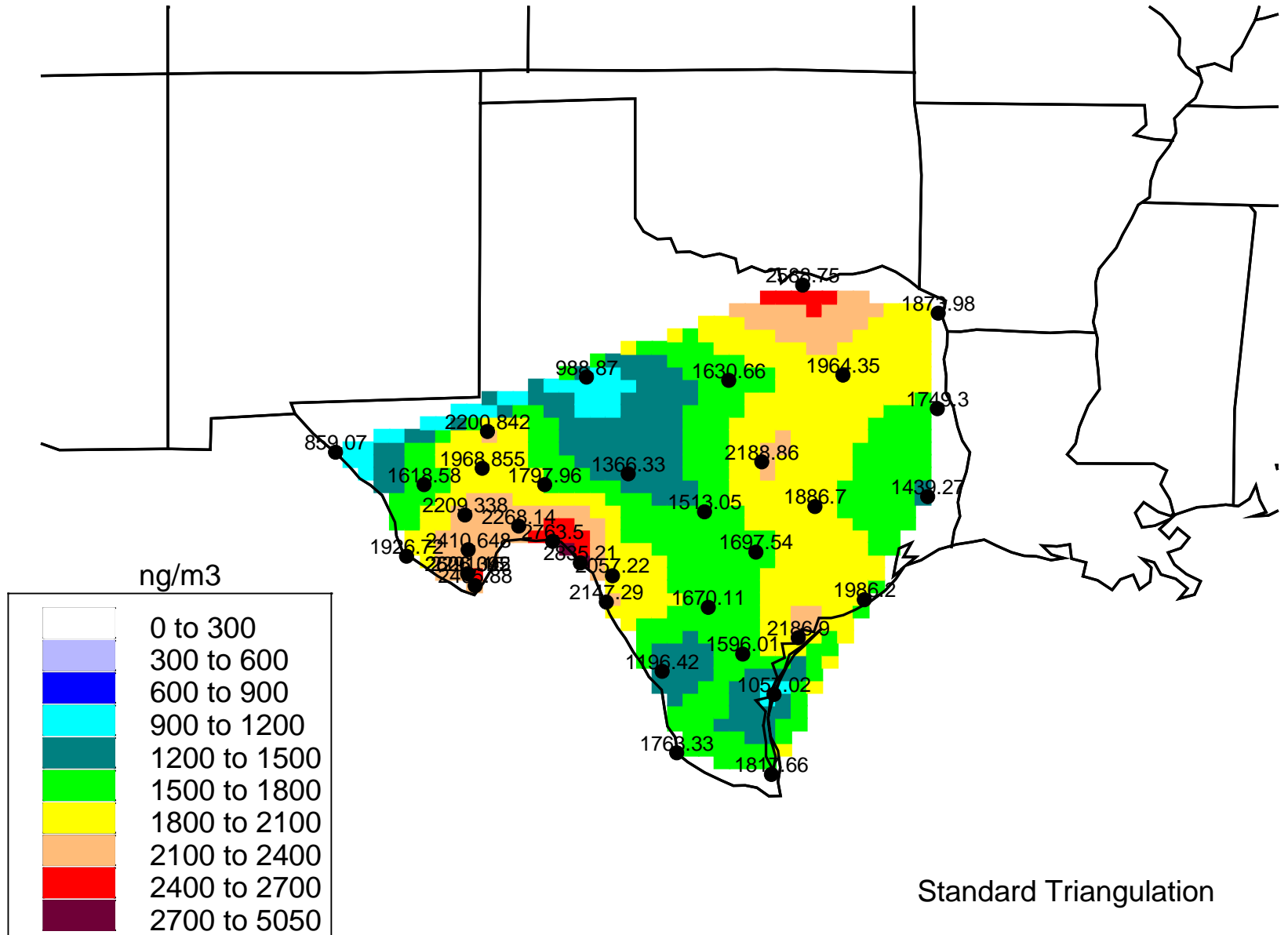
PIXE S on 10/10/1999 (jday 283)



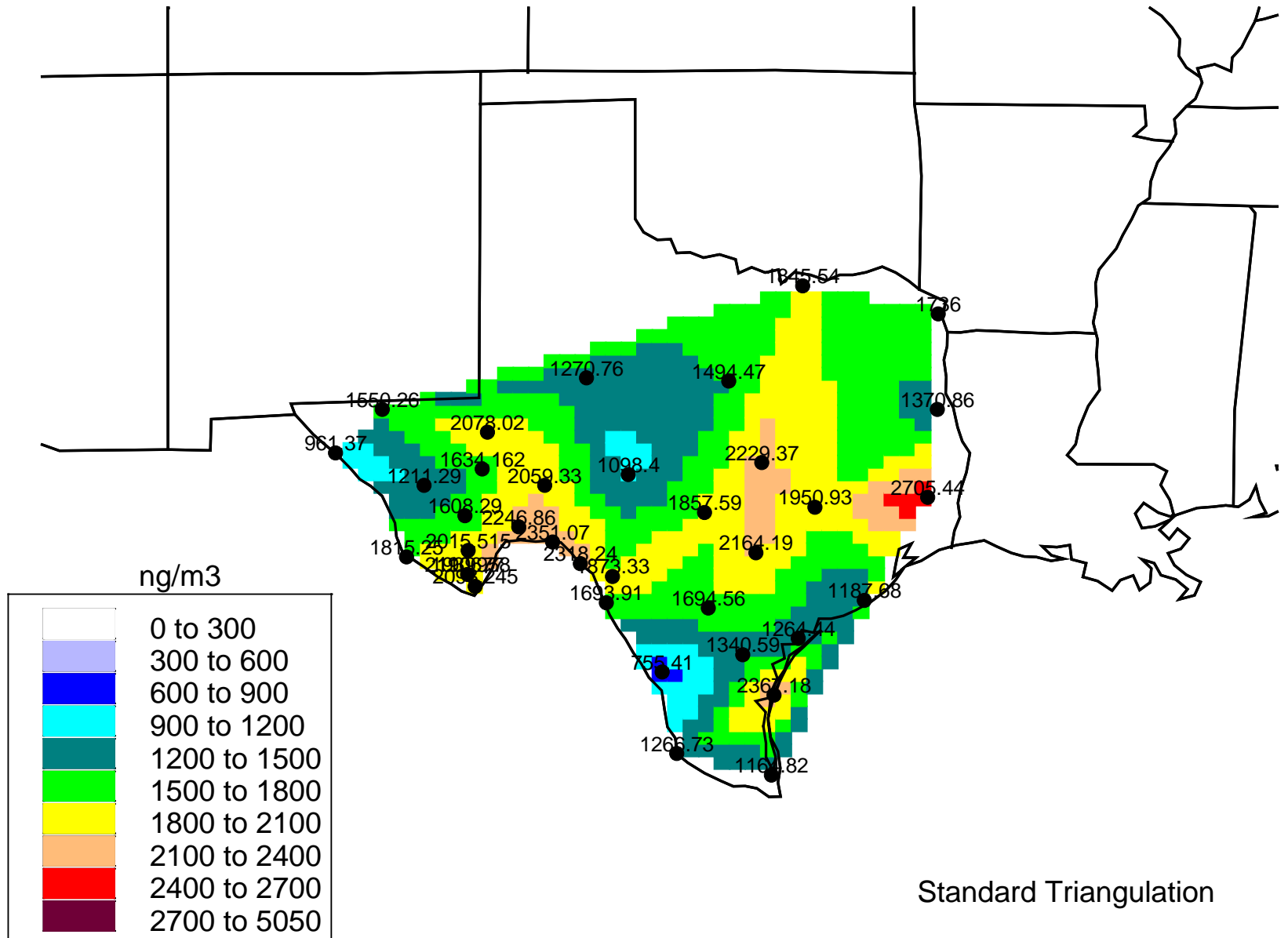
PIXE S on 10/11/1999 (jday 284)



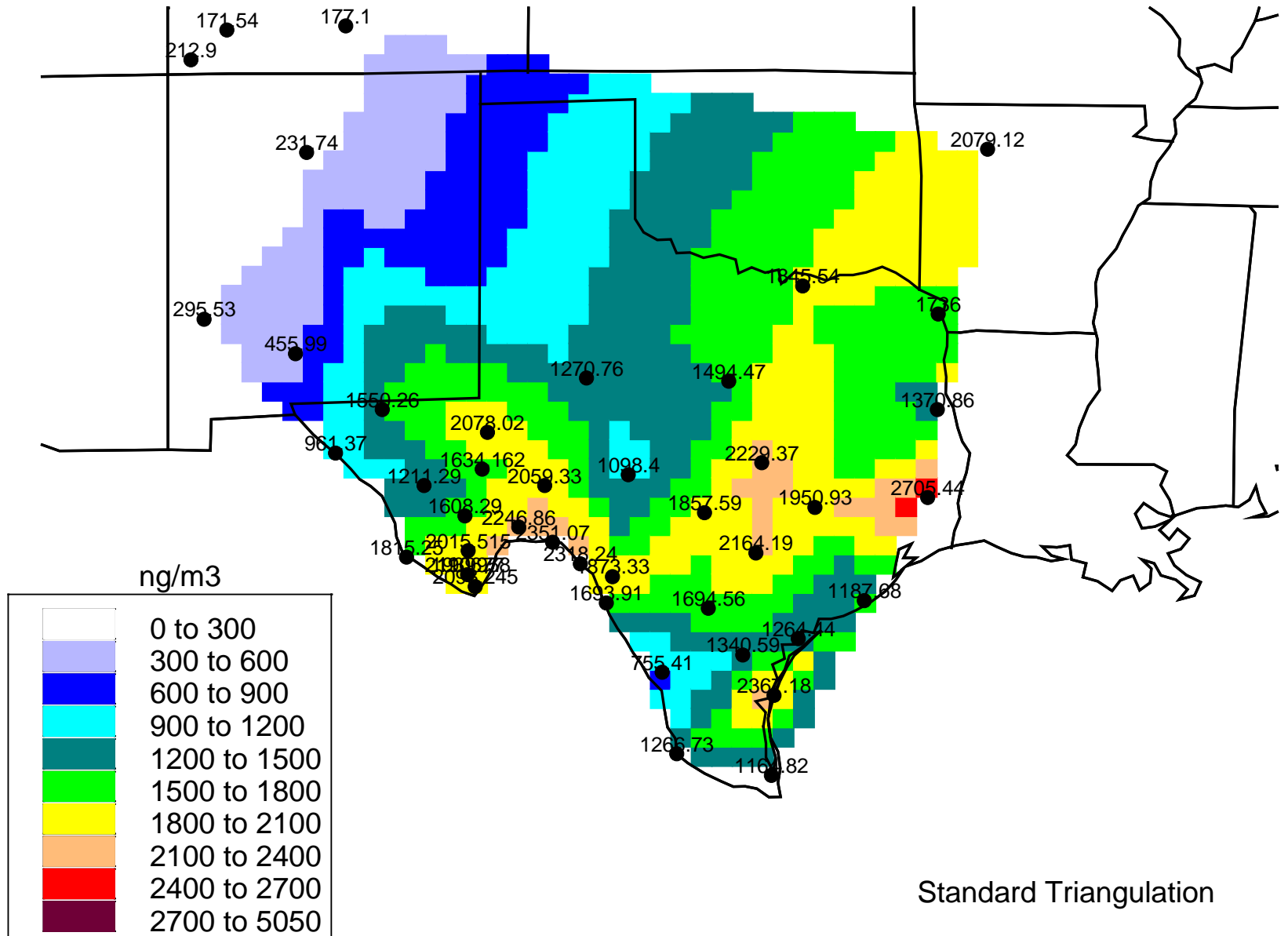
PIXE S on 10/12/1999 (jday 285)



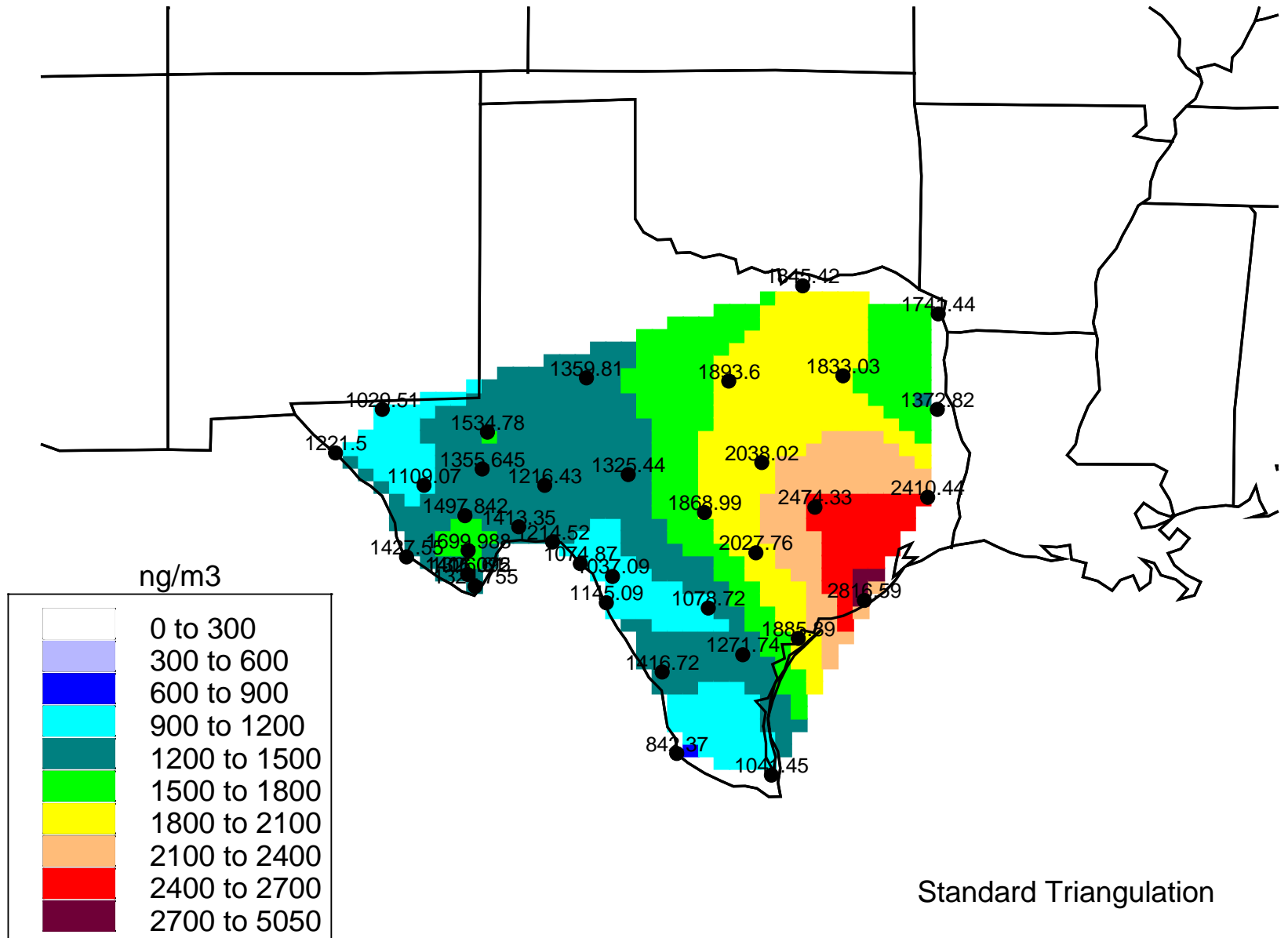
PIXE S on 10/13/1999 (jday 286)



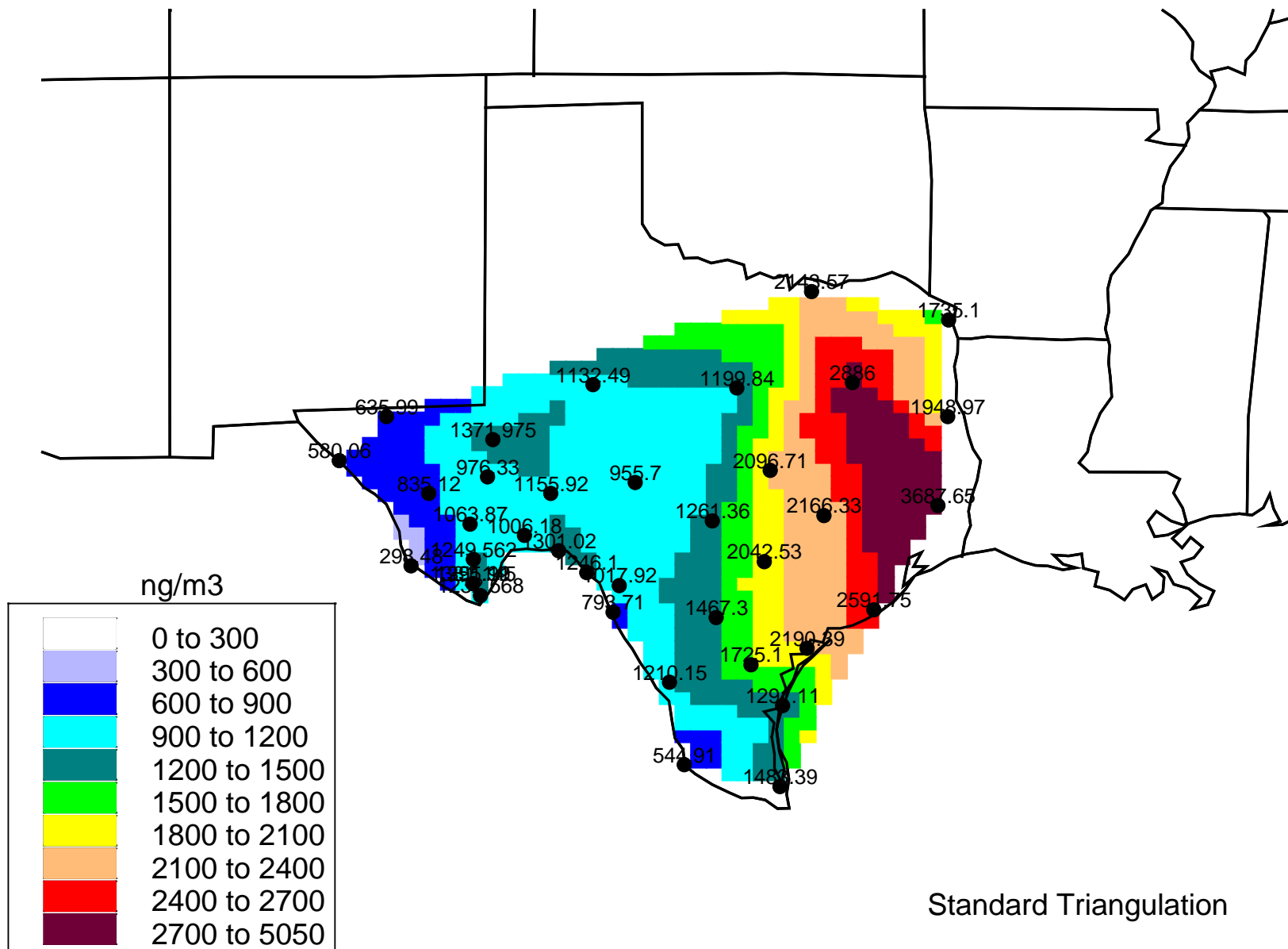
PIXE S on 10/13/1999 (jday 286)



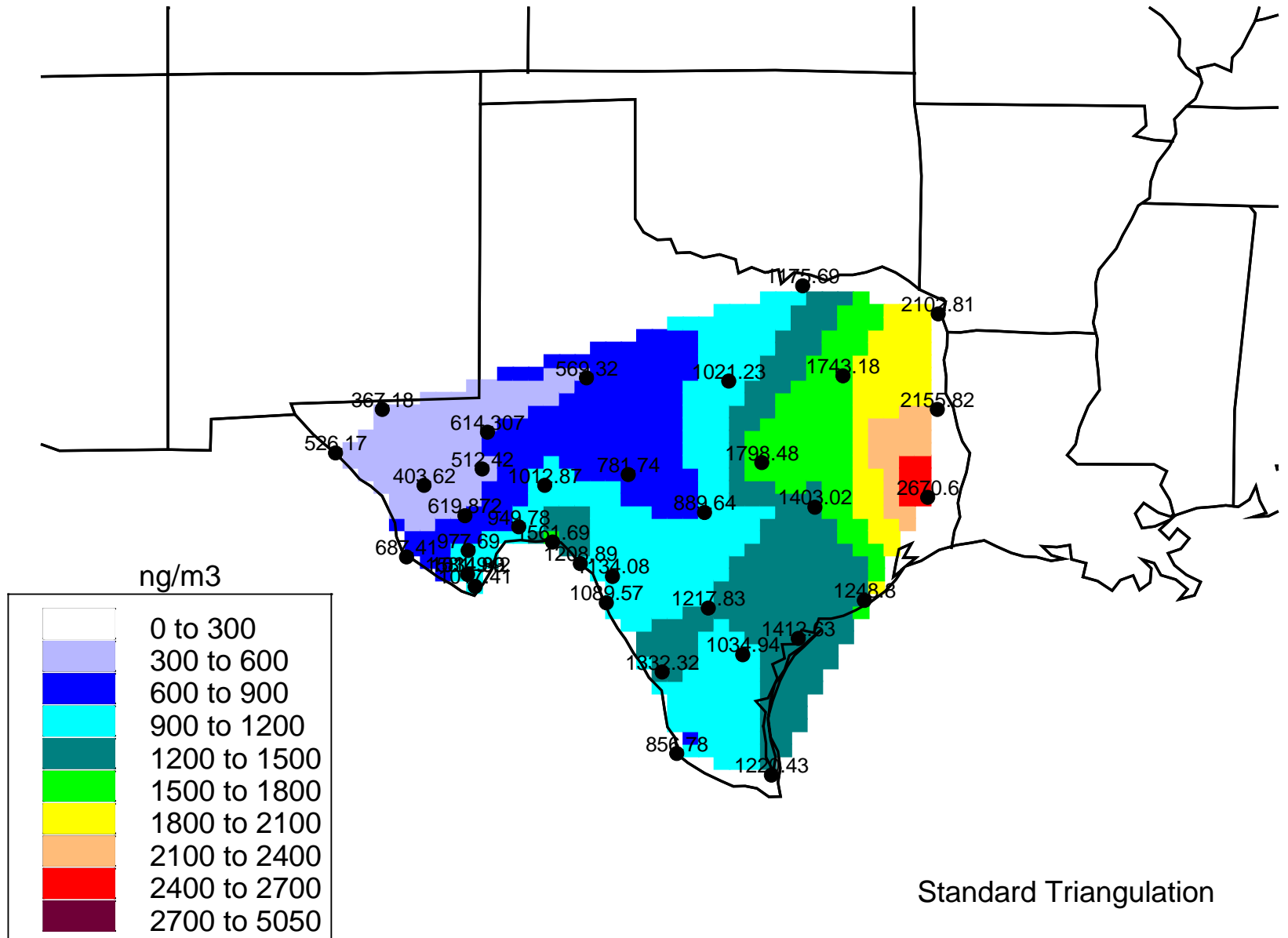
PIXE S on 10/14/1999 (jday 287)



PIXE S on 10/15/1999 (jday 288)

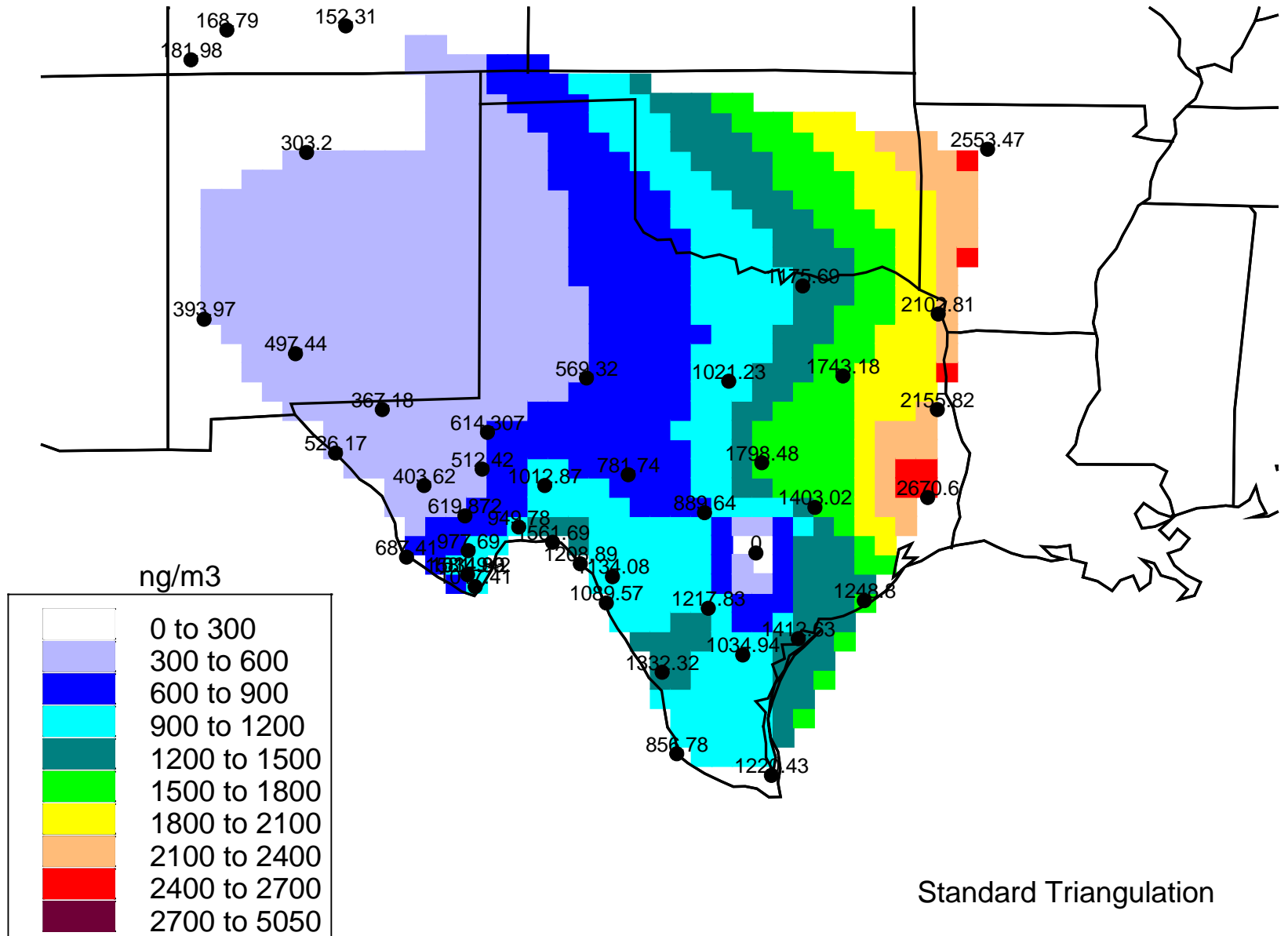


PIXE S on 10/16/1999 (jday 289)



Standard Triangulation

PIXE S on 10/16/1999 (jday 289)



181.98
168.79

152.31

303.2

393.97

497.44

367.18

526.17

614.307

512.42

403.62

619.872

949.78

1561.69

1208.89

687.41

977.69

1134.92

1574.741

1012.87

781.74

1089.57

1332.32

856.78

1217.83

1034.94

1413.53

1220.43

569.32

1021.23

1743.18

1798.48

889.64

1403.02

1175.69

2102.81

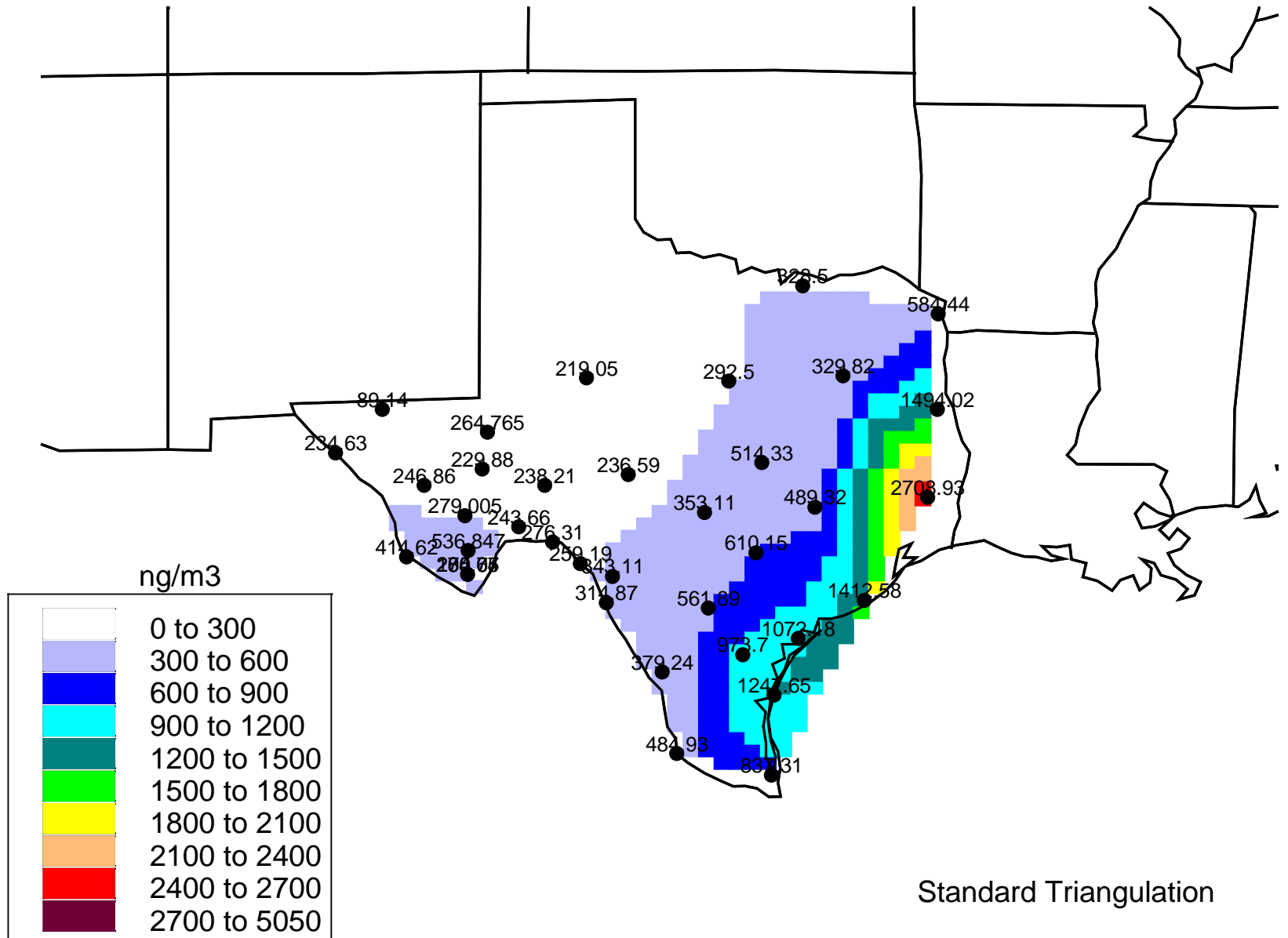
2155.82

2670.6

2553.47

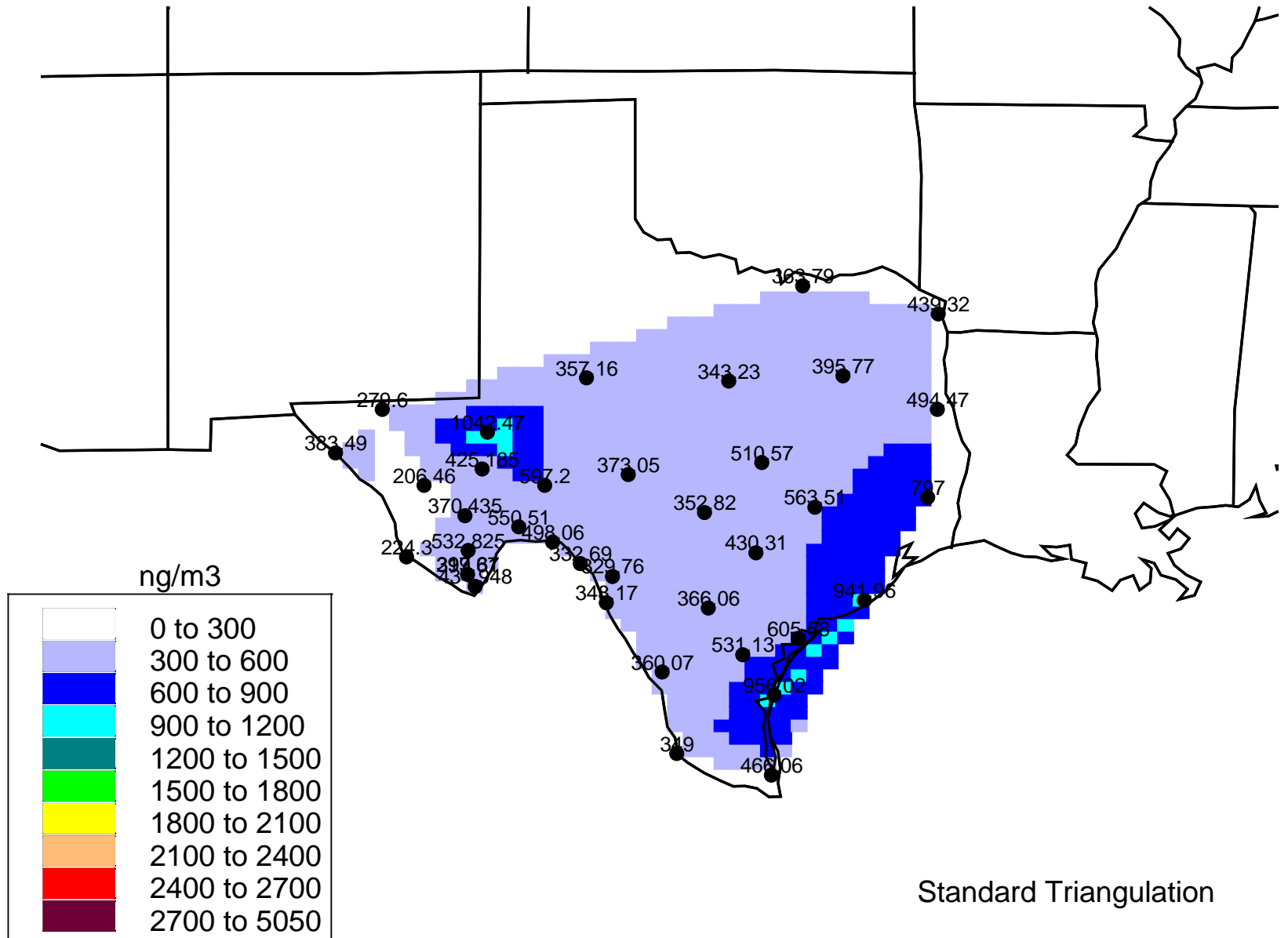
Standard Triangulation

PIXE S on 10/17/1999 (jday 290)

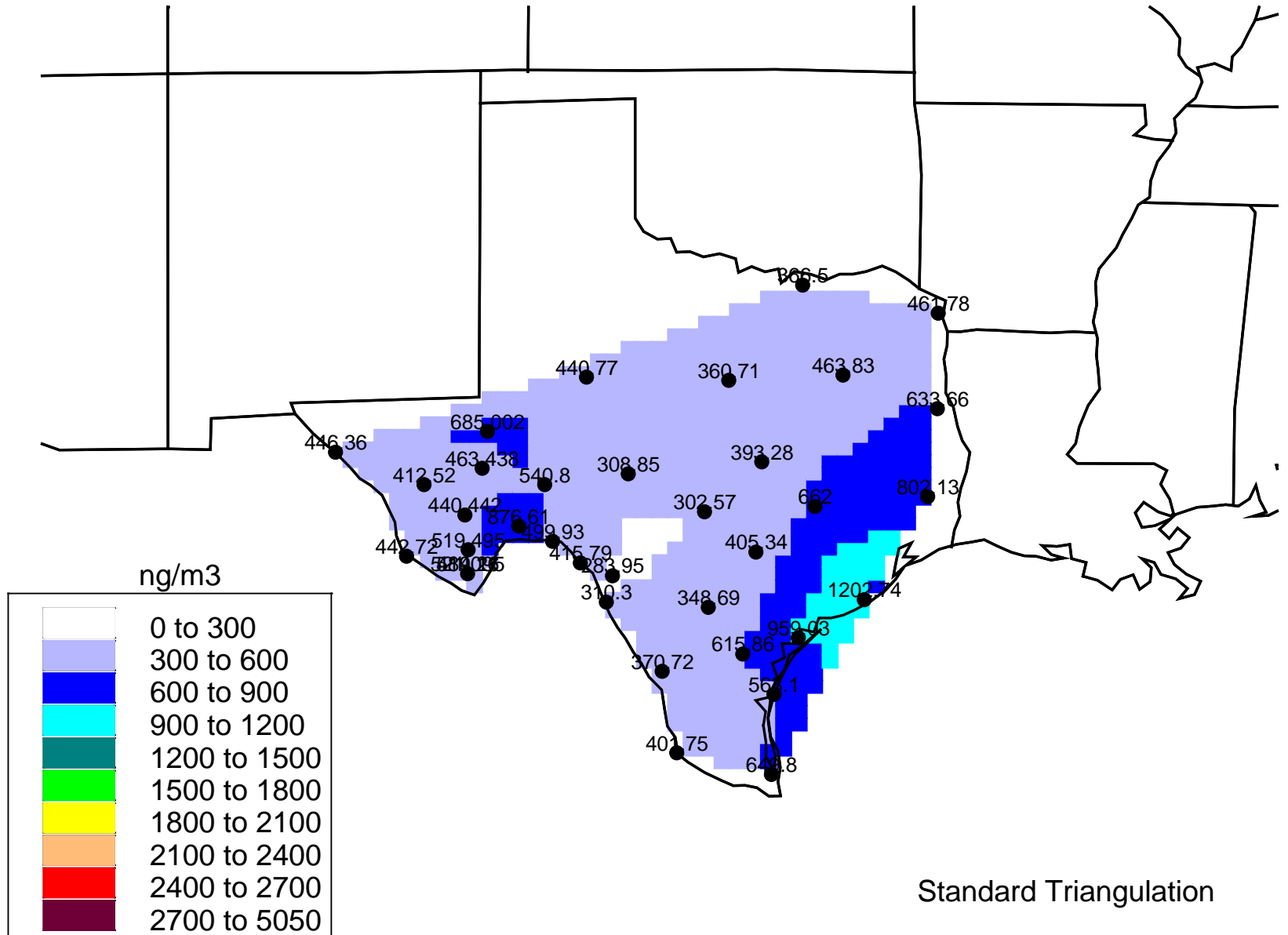


Standard Triangulation

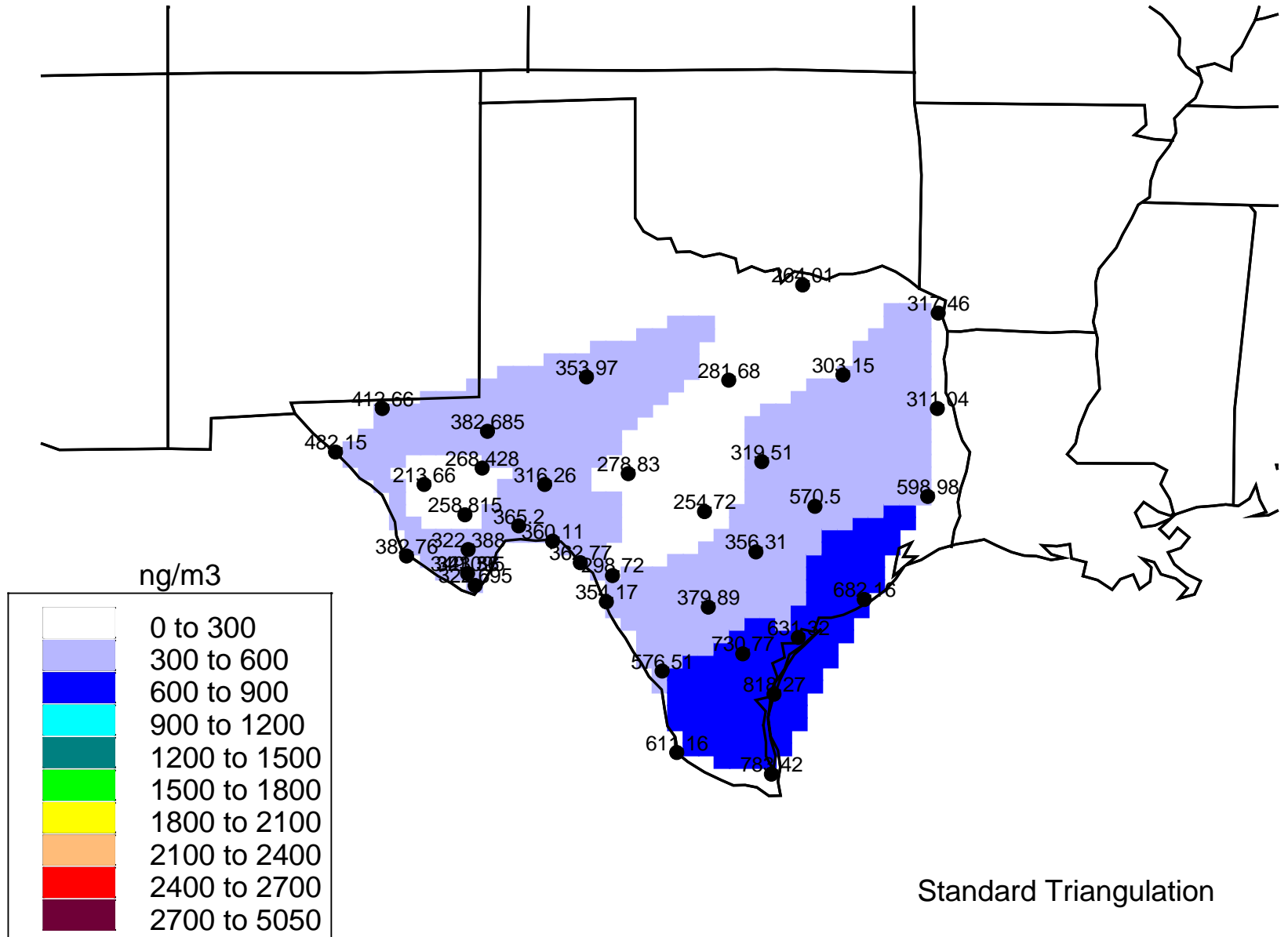
PIXE S on 10/18/1999 (jday 291)



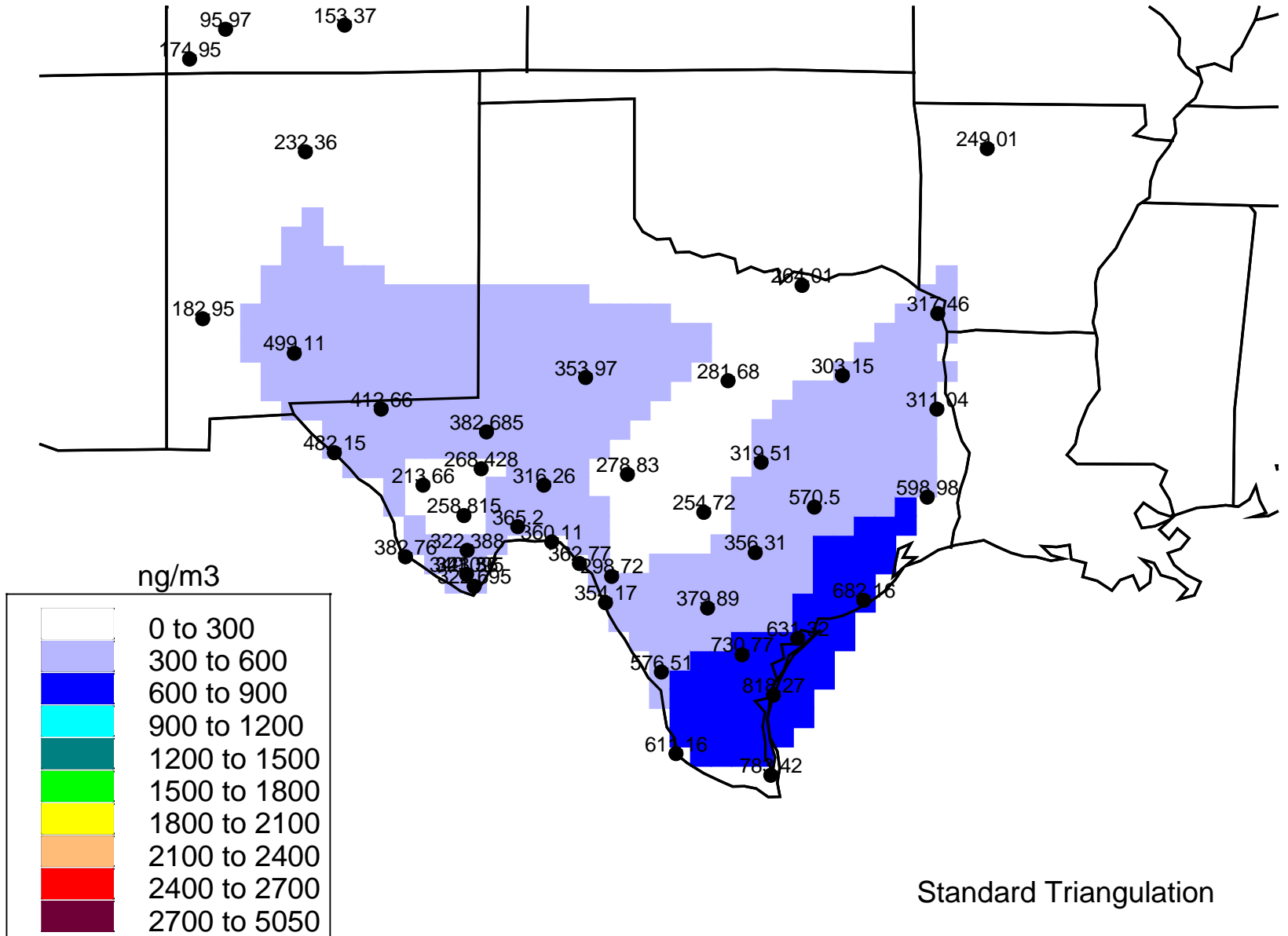
PIXE S on 10/19/1999 (jday 292)



PIXE S on 10/20/1999 (jday 293)



PIXE S on 10/20/1999 (jday 293)



174.95
95.97

153.37

232.36

249.01

182.95

499.11

267.81

317.46

353.97

281.68

303.15

412.66

382.685

311.04

482.15

268.428

316.26

278.83

319.51

213.66

258.815

365.2

360.11

254.72

570.5

598.98

382.76

322.388

362.77

356.31

ng/m³

342.815

322.695

362.77

379.89

682.16

342.815

354.17

576.51

730.77

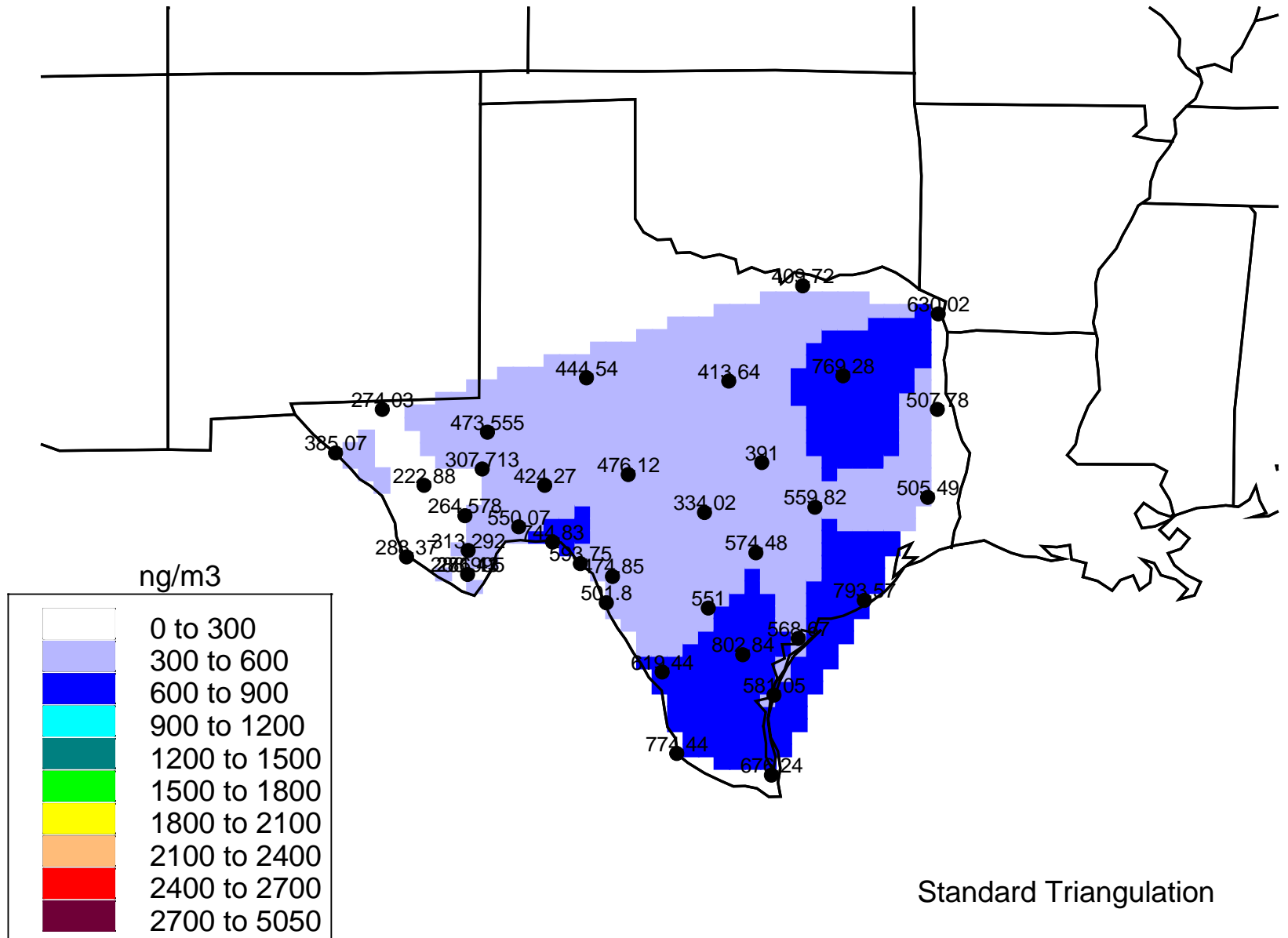
631.32

611.16

783.42

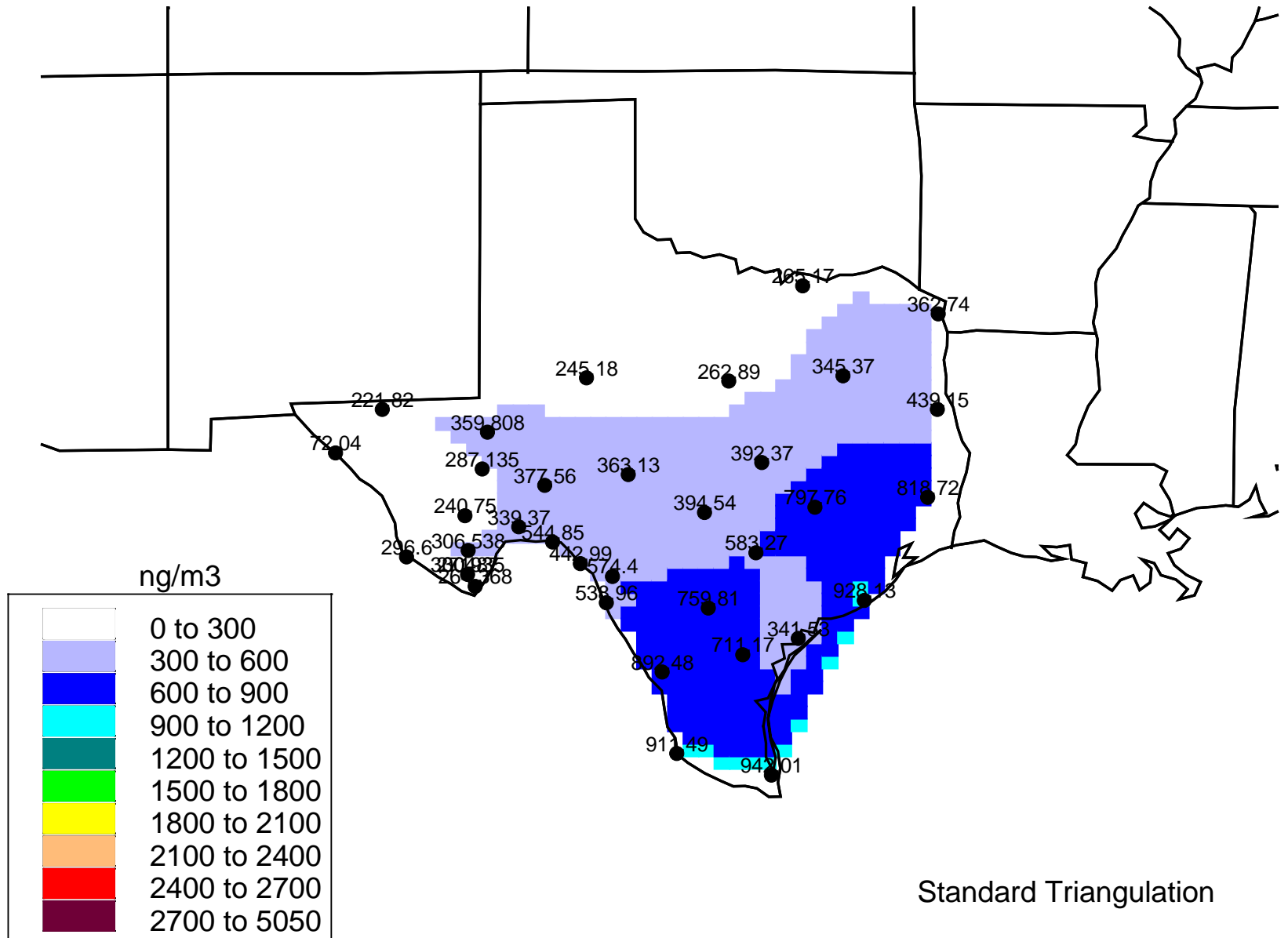
Standard Triangulation

PIXE S on 10/21/1999 (jday 294)



385.07 274.03 473.555 444.54 413.64 769.28 630.02 507.78 307.713 424.27 476.12 391 505.49 222.88 264.578 550.07 334.02 559.82 288.37 213.292 744.83 574.48 501.8 551 793.57 211.945 593.75 774.85 802.84 568.67 619.44 587.05 777.44 678.24

PIXE S on 10/22/1999 (jday 295)

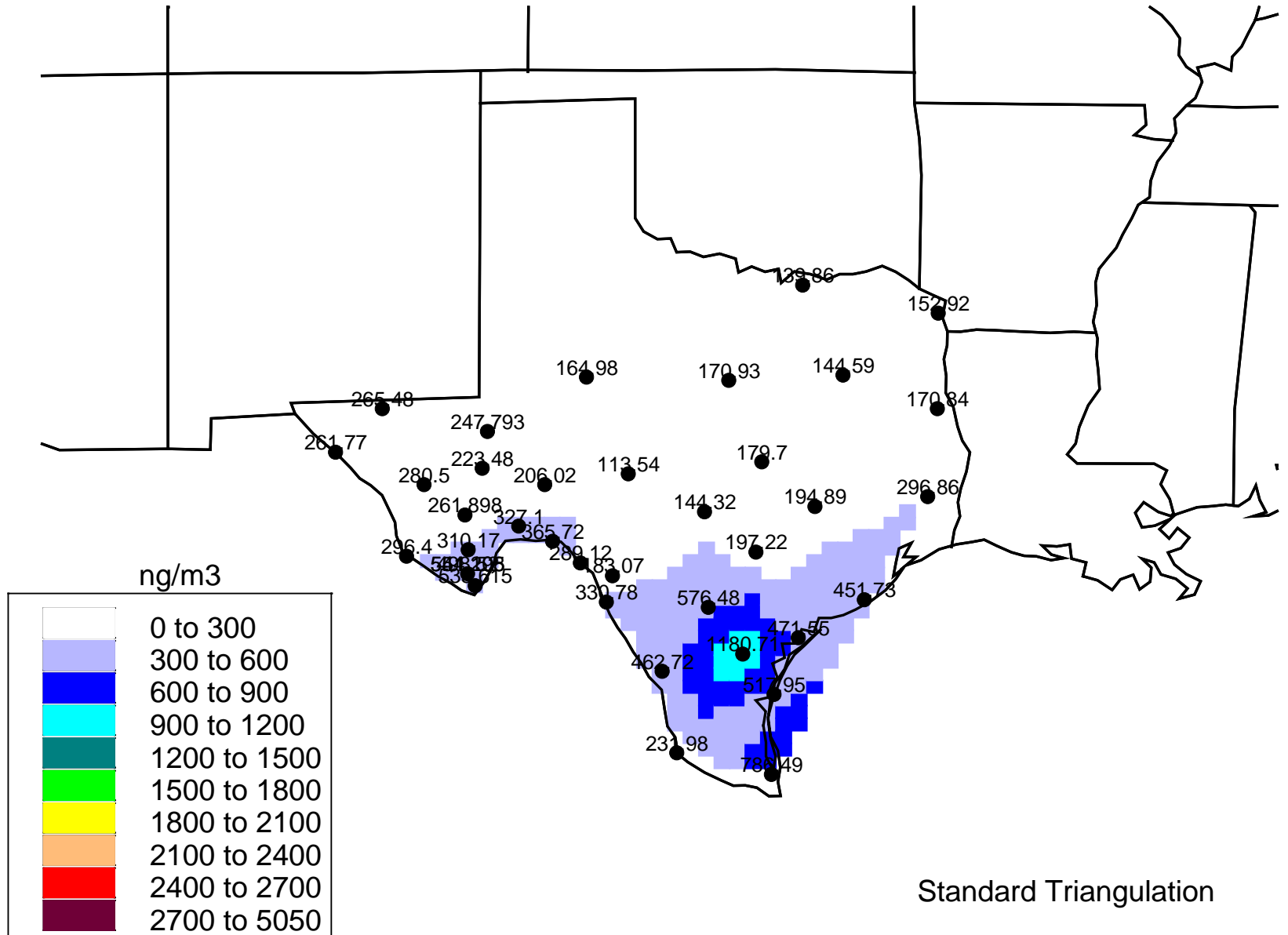


ng/m³

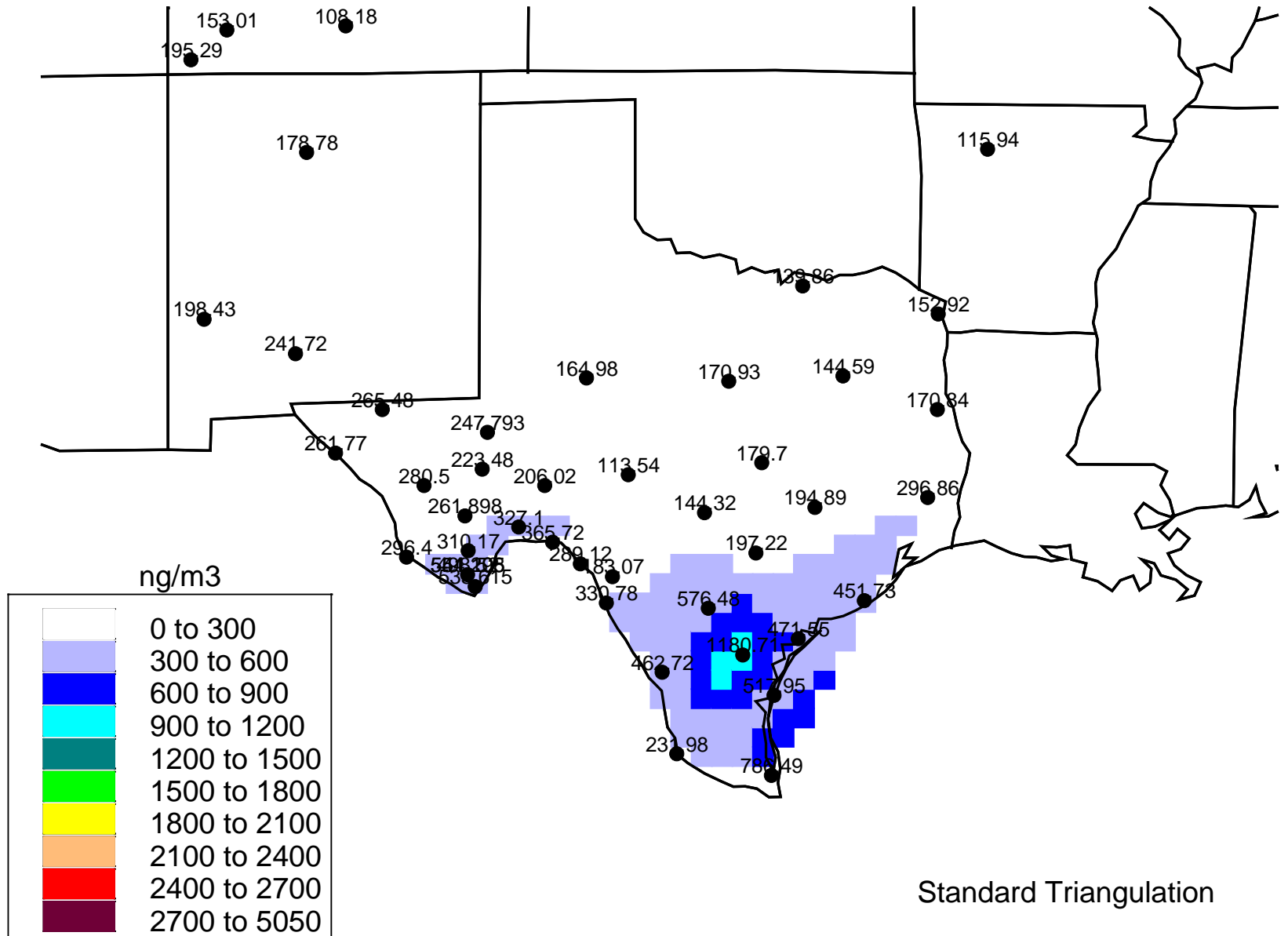
- 0 to 300
- 300 to 600
- 600 to 900
- 900 to 1200
- 1200 to 1500
- 1500 to 1800
- 1800 to 2100
- 2100 to 2400
- 2400 to 2700
- 2700 to 5050

Standard Triangulation

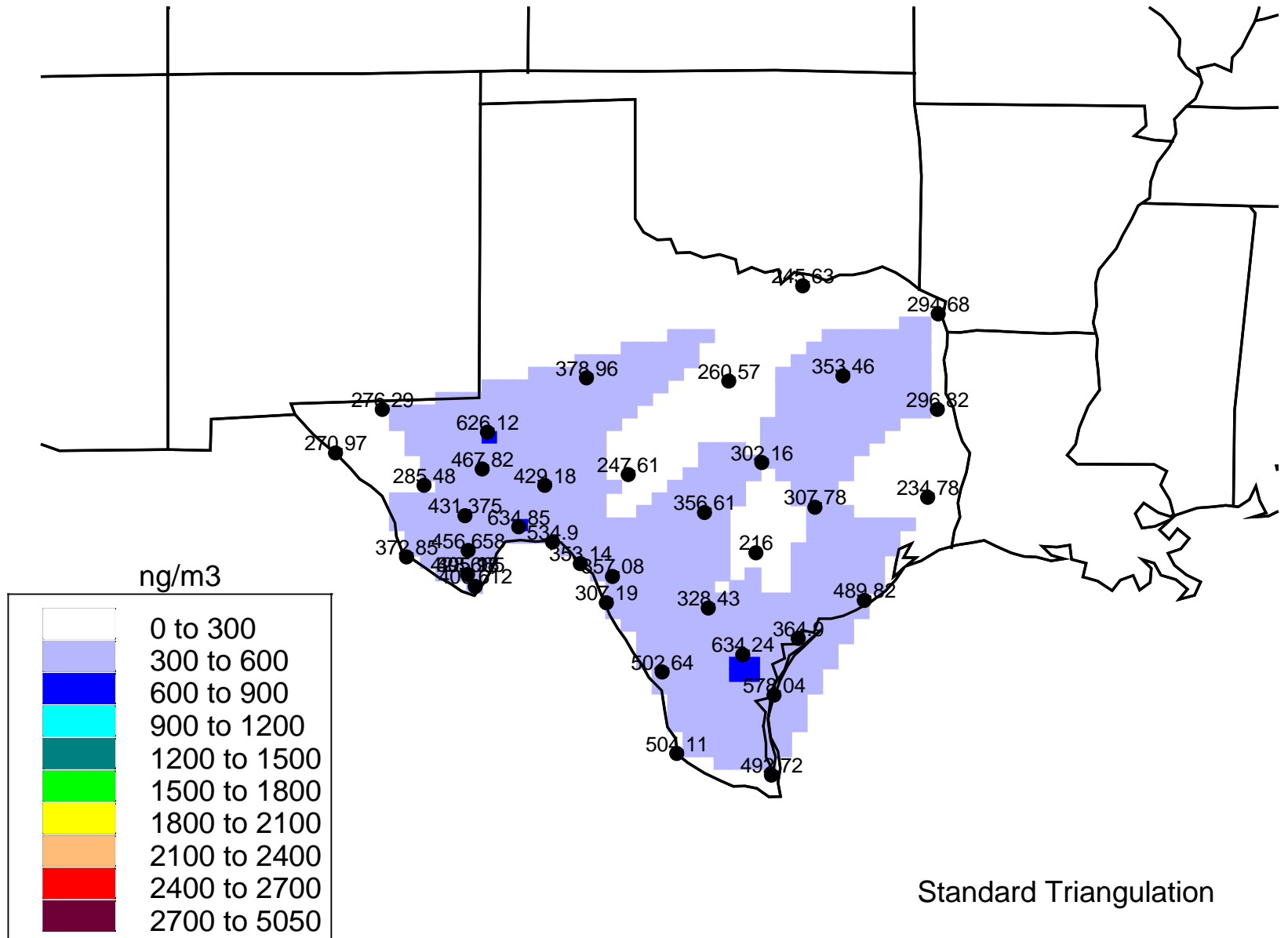
PIXE S on 10/23/1999 (jday 296)



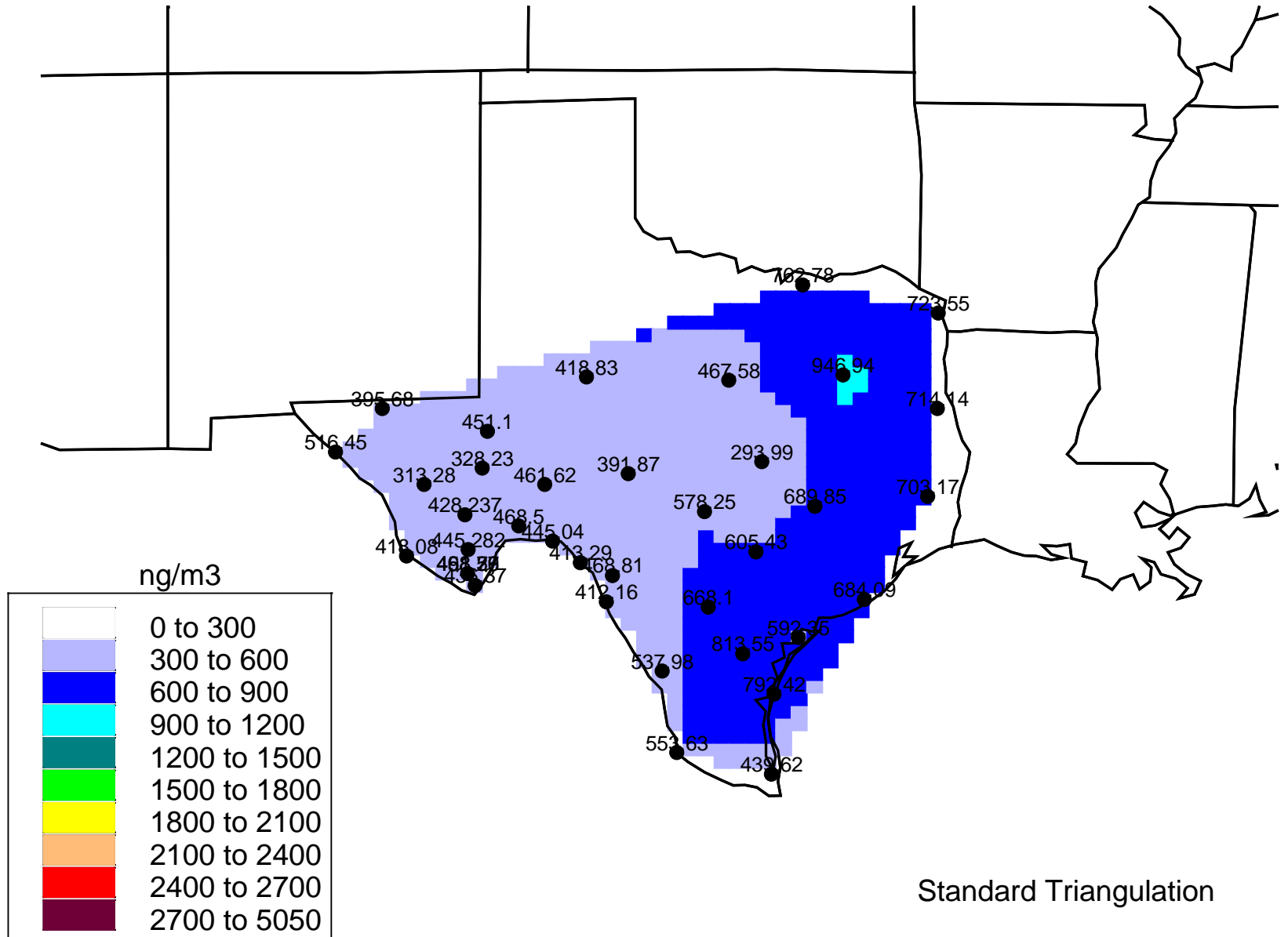
PIXE S on 10/23/1999 (jday 296)



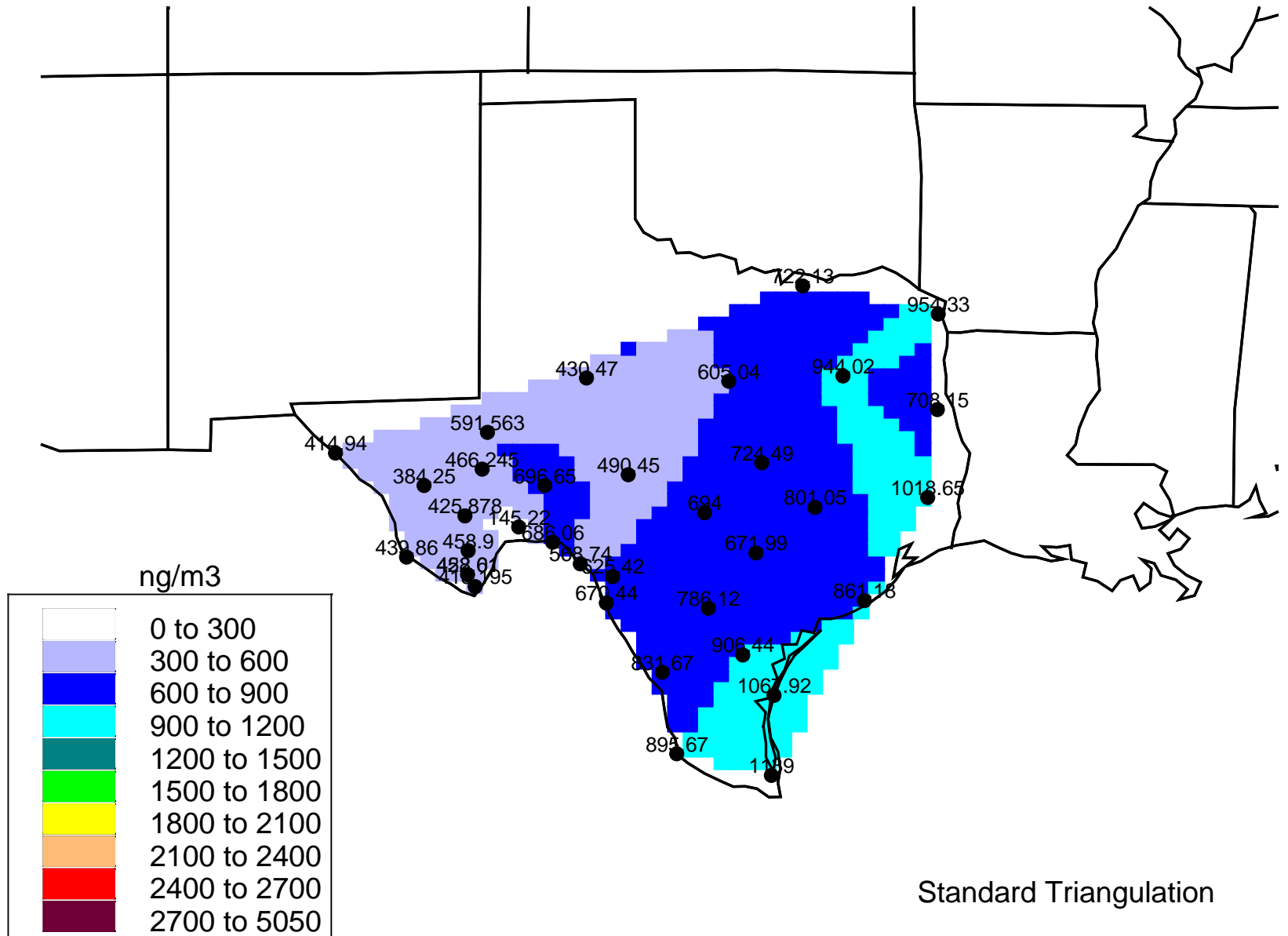
PIXE S on 10/24/1999 (jday 297)



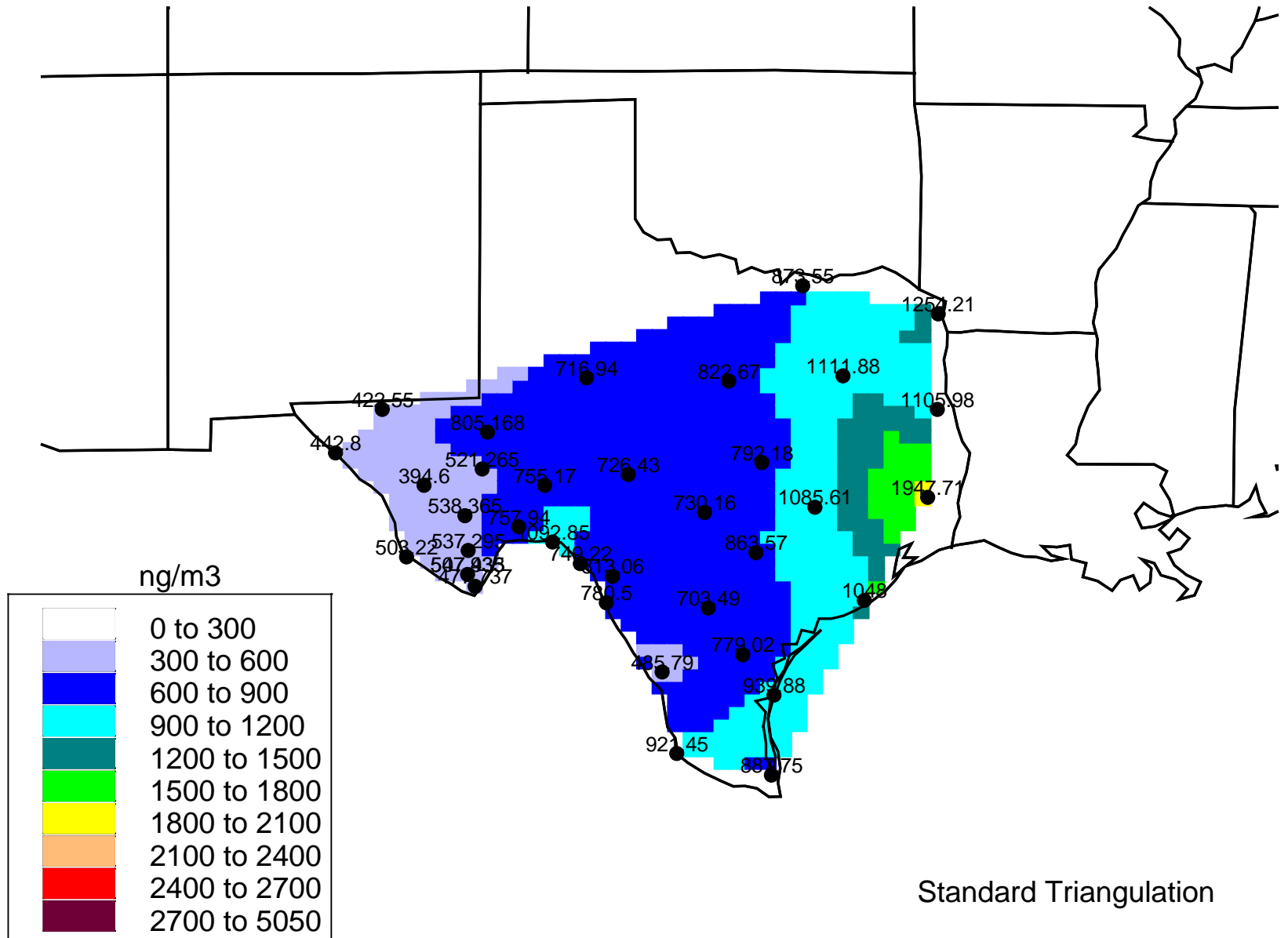
PIXE S on 10/25/1999 (jday 298)



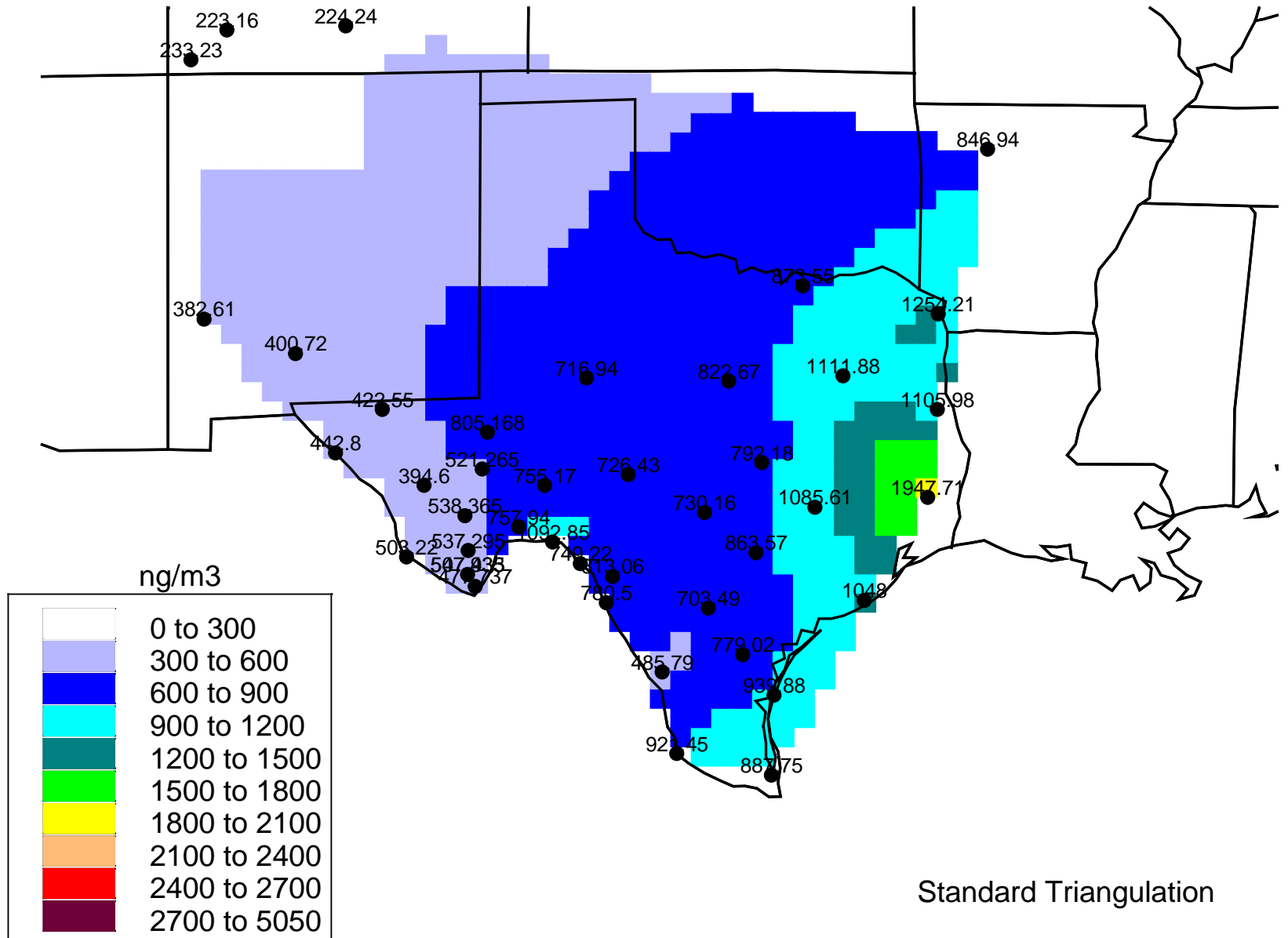
PIXE S on 10/26/1999 (jday 299)



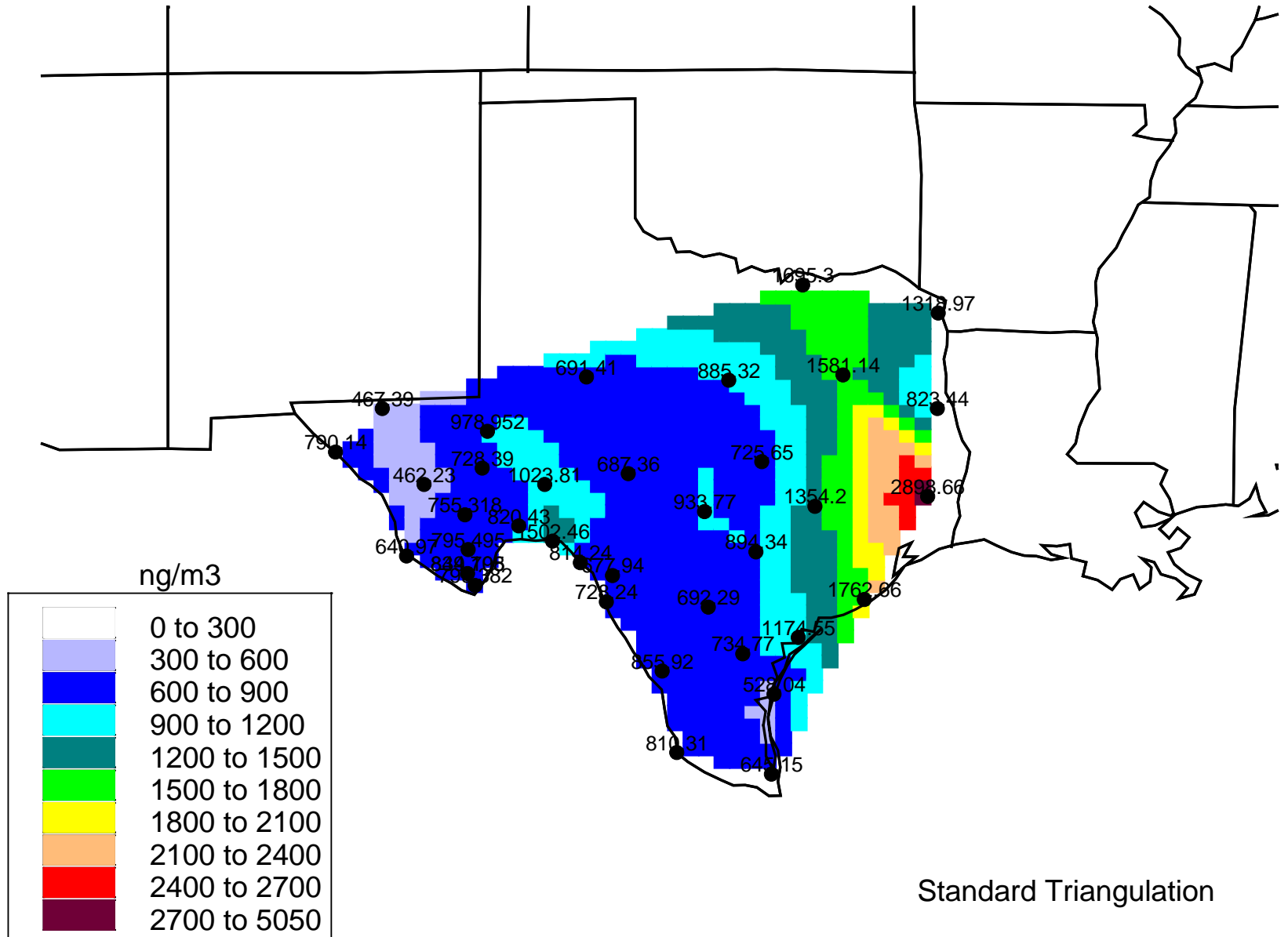
PIXE S on 10/27/1999 (jday 300)



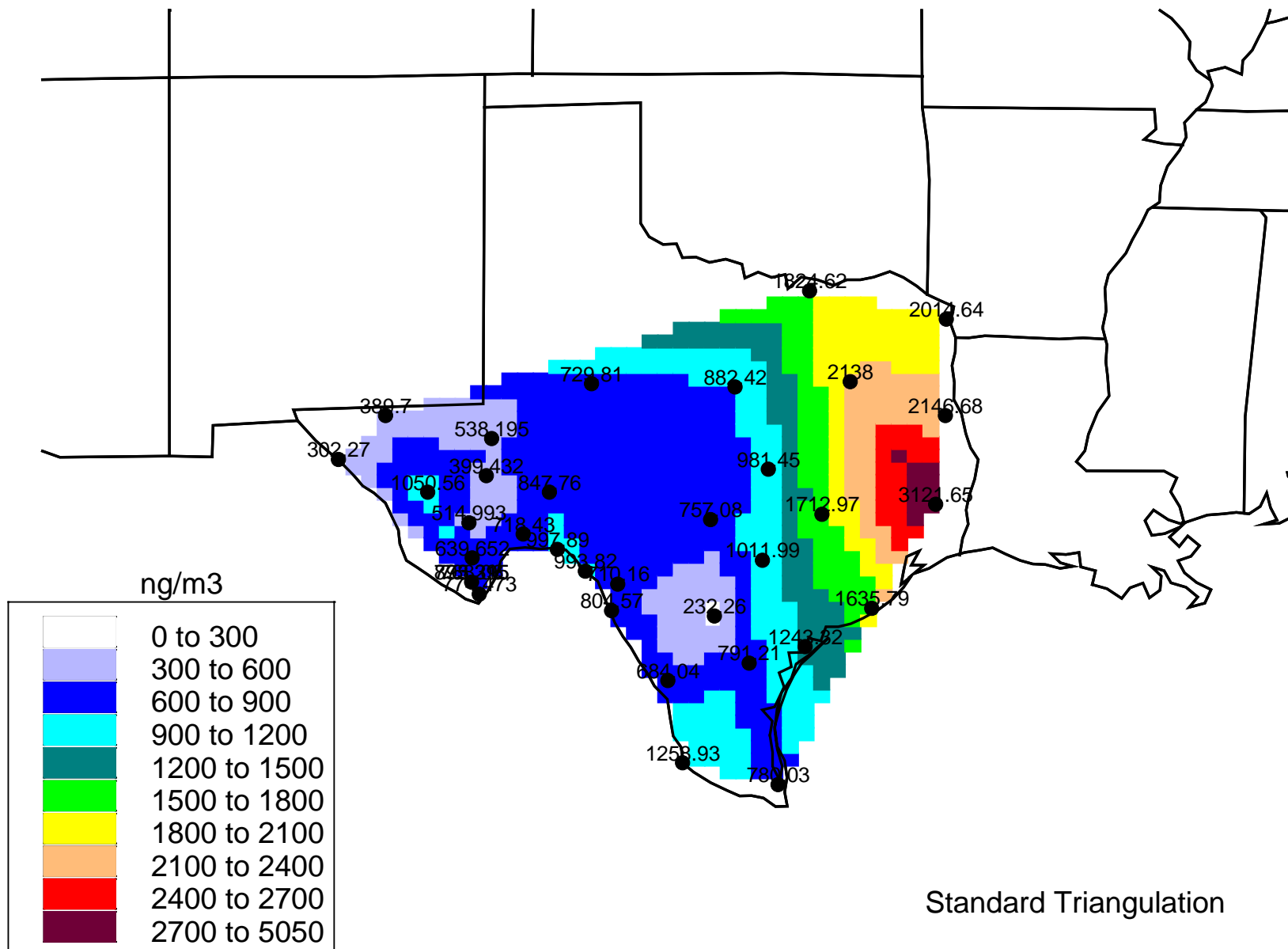
PIXE S on 10/27/1999 (jday 300)



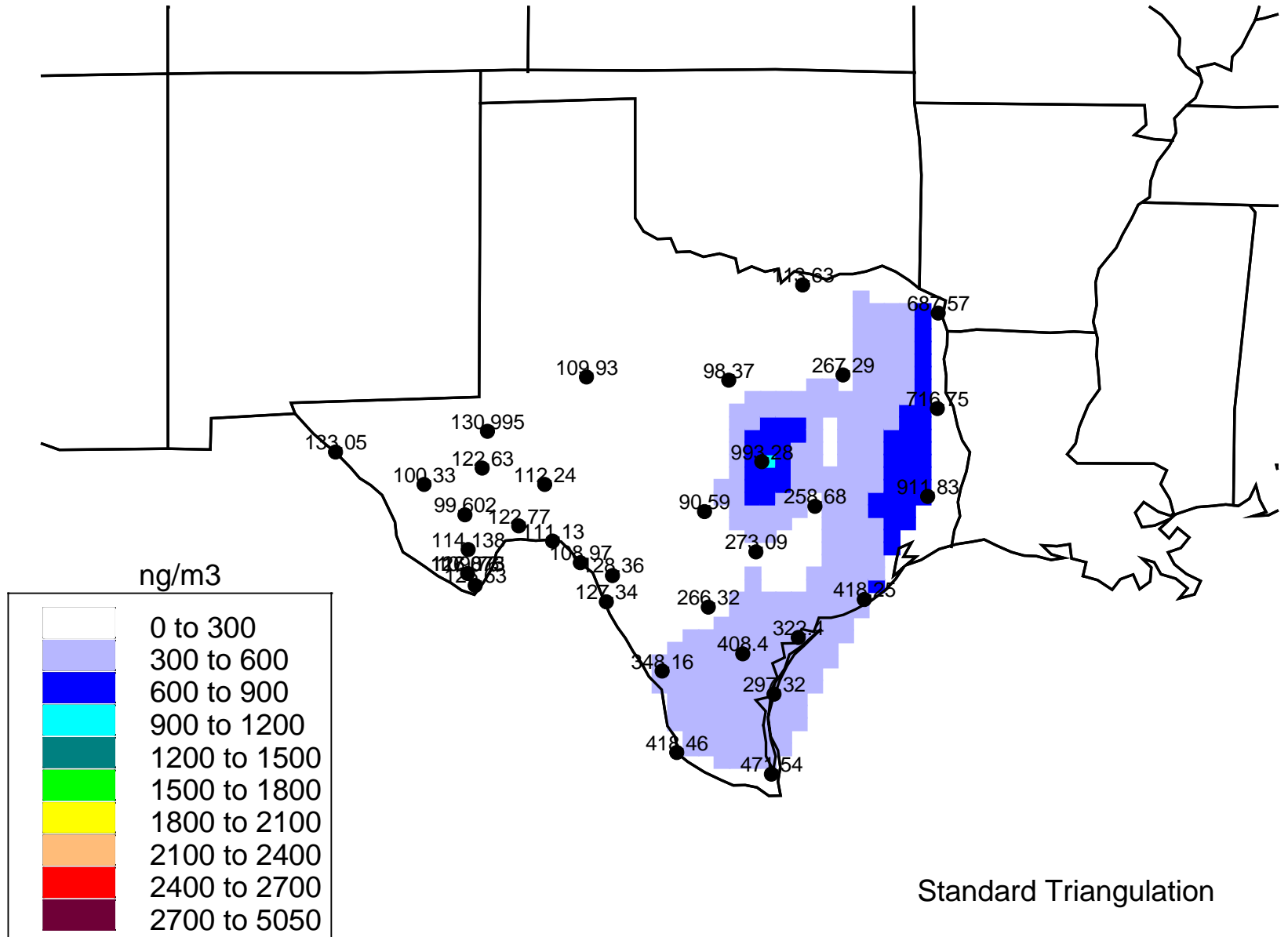
PIXE S on 10/28/1999 (jday 301)



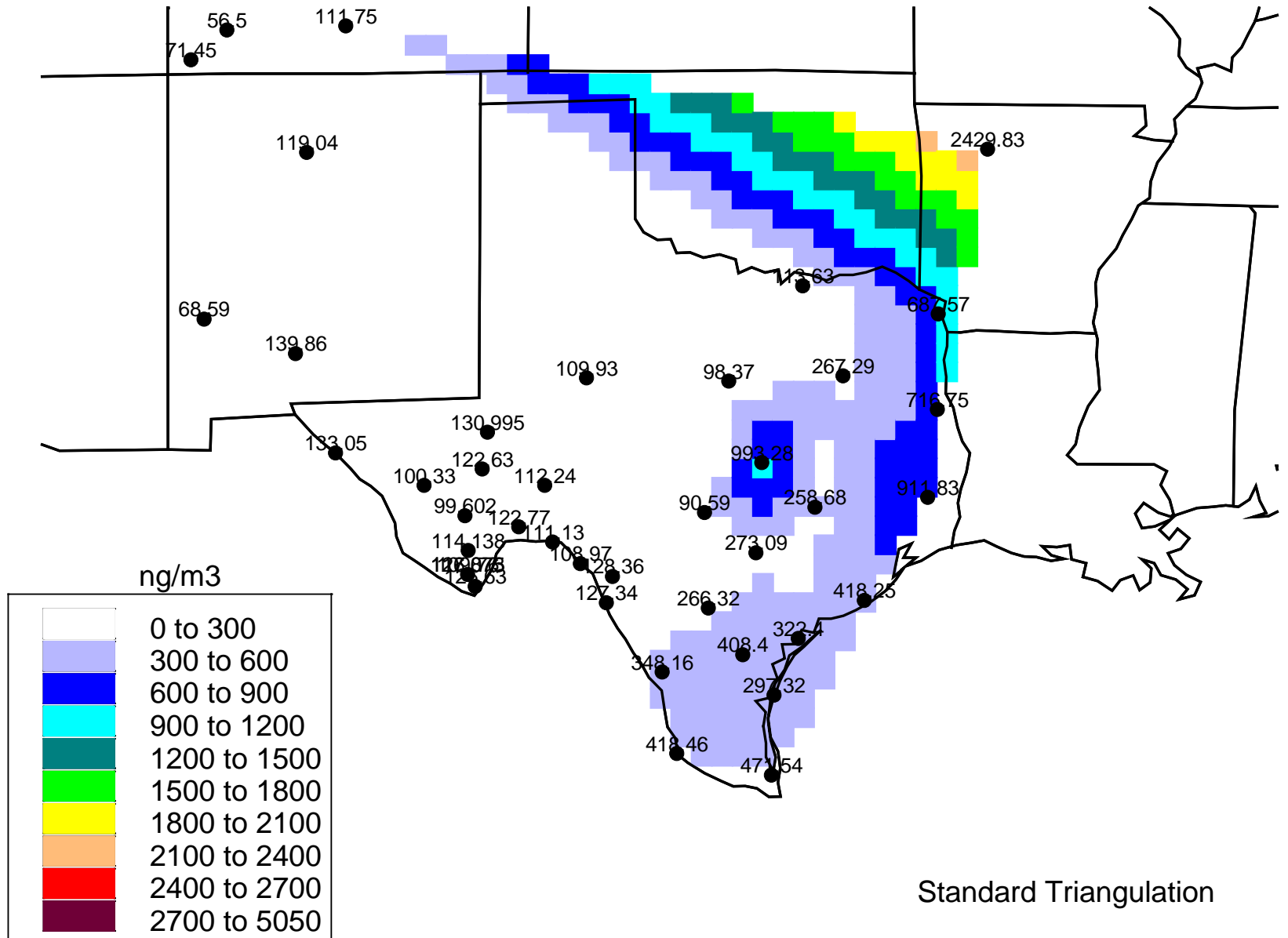
PIXE S on 10/29/1999 (jday 302)



PIXE S on 10/30/1999 (jday 303)



PIXE S on 10/30/1999 (jday 303)



PIXE S on 10/31/1999 (jday 304)

