

# 72249 FWD Ft Worth Observations at 00Z 26 Jul 2015

| PRES<br>hPa | HGHT<br>m | TEMP<br>C | DWPT<br>C | RELH<br>% | MIXR<br>g/kg | DRCT<br>deg | SKNT<br>knot | THTA<br>K | THTE<br>K | THTV<br>K |
|-------------|-----------|-----------|-----------|-----------|--------------|-------------|--------------|-----------|-----------|-----------|
| 1000.0      | 95        |           |           |           |              |             |              |           |           |           |
| 989.0       | 171       | 35.8      | 14.8      | 29        | 10.81        | 165         | 6            | 309.9     | 343.3     | 311.9     |
| 985.0       | 209       | 35.0      | 14.0      | 28        | 10.30        | 165         | 6            | 309.5     | 341.2     | 311.4     |
| 943.6       | 610       | 31.2      | 12.2      | 31        | 9.56         | 160         | 9            | 309.4     | 338.9     | 311.2     |
| 925.0       | 796       | 29.4      | 11.4      | 33        | 9.23         | 165         | 9            | 309.4     | 337.9     | 311.1     |
| 912.8       | 914       | 28.3      | 11.2      | 35        | 9.24         | 170         | 9            | 309.4     | 337.9     | 311.1     |
| 899.0       | 1049      | 27.0      | 11.0      | 37        | 9.25         | 166         | 11           | 309.4     | 338.0     | 311.1     |
| 881.8       | 1219      | 25.7      | 9.0       | 35        | 8.23         | 160         | 14           | 309.8     | 335.3     | 311.3     |
| 851.6       | 1524      | 23.3      | 5.4       | 31        | 6.64         | 150         | 17           | 310.4     | 331.3     | 311.6     |
| 850.0       | 1541      | 23.2      | 5.2       | 31        | 6.56         | 150         | 14           | 310.4     | 331.1     | 311.7     |
| 830.0       | 1748      | 21.4      | 3.4       | 31        | 5.92         | 168         | 10           | 310.7     | 329.3     | 311.8     |
| 822.2       | 1829      | 21.4      | -1.5      | 21        | 4.18         | 175         | 8            | 311.5     | 324.9     | 312.3     |
| 819.0       | 1863      | 21.4      | -3.6      | 18        | 3.59         | 175         | 8            | 311.8     | 323.5     | 312.5     |
| 804.0       | 2023      | 21.2      | -6.8      | 15        | 2.87         | 175         | 10           | 313.3     | 322.8     | 313.8     |
| 793.7       | 2134      | 20.5      | -7.5      | 14        | 2.76         | 175         | 11           | 313.7     | 322.9     | 314.2     |
| 774.0       | 2350      | 19.2      | -8.8      | 14        | 2.55         | 182         | 12           | 314.6     | 323.1     | 315.0     |
| 770.0       | 2395      | 19.0      | -2.0      | 24        | 4.31         | 184         | 12           | 314.8     | 328.8     | 315.6     |
| 766.1       | 2438      | 18.7      | -2.2      | 24        | 4.27         | 185         | 12           | 314.9     | 328.9     | 315.8     |
| 739.0       | 2743      | 16.6      | -3.5      | 25        | 4.00         | 170         | 5            | 315.9     | 329.0     | 316.6     |
| 700.0       | 3204      | 13.4      | -5.6      | 26        | 3.62         | 155         | 6            | 317.3     | 329.3     | 318.0     |
| 687.6       | 3353      | 12.3      | -6.3      | 27        | 3.48         | 200         | 1            | 317.6     | 329.2     | 318.3     |
| 670.0       | 3570      | 10.6      | -7.4      | 28        | 3.29         | 292         | 2            | 318.1     | 329.1     | 318.8     |
| 662.9       | 3658      | 10.0      | -7.6      | 28        | 3.27         | 330         | 3            | 318.5     | 329.4     | 319.1     |
| 650.0       | 3821      | 9.0       | -8.0      | 29        | 3.24         | 331         | 4            | 319.1     | 330.0     | 319.7     |
| 640.0       | 3949      | 8.6       | -11.4     | 23        | 2.51         | 332         | 5            | 320.1     | 328.6     | 320.6     |
| 615.5       | 4267      | 5.8       | -11.0     | 29        | 2.69         | 335         | 8            | 320.4     | 329.5     | 320.9     |
| 588.0       | 4640      | 2.4       | -10.6     | 38        | 2.91         | 323         | 7            | 320.7     | 330.6     | 321.3     |
| 573.0       | 4849      | 1.8       | -24.2     | 13        | 0.95         | 316         | 7            | 322.4     | 325.8     | 322.6     |
| 571.0       | 4877      | 2.0       | -26.2     | 10        | 0.79         | 315         | 7            | 323.0     | 325.9     | 323.1     |
| 564.0       | 4976      | 2.8       | -33.2     | 5         | 0.42         | 324         | 7            | 325.0     | 326.6     | 325.1     |
| 540.0       | 5326      | 1.6       | -33.4     | 5         | 0.43         | 354         | 9            | 327.6     | 329.3     | 327.7     |
| 527.0       | 5521      | 0.0       | -30.0     | 8         | 0.60         | 11          | 10           | 328.0     | 330.3     | 328.1     |
| 522.0       | 5597      | -0.3      | -20.3     | 20        | 1.47         | 18          | 10           | 328.5     | 333.9     | 328.8     |
| 509.5       | 5791      | -1.5      | -17.3     | 29        | 1.94         | 35          | 11           | 329.4     | 336.4     | 329.8     |
| 507.0       | 5830      | -1.7      | -16.7     | 31        | 2.05         | 39          | 10           | 329.6     | 336.9     | 330.0     |
| 500.0       | 5940      | -2.3      | -17.3     | 31        | 1.98         | 50          | 9            | 330.2     | 337.3     | 330.6     |
| 490.2       | 6096      | -3.3      | -18.3     | 30        | 1.85         | 50          | 10           | 330.8     | 337.5     | 331.2     |
| 479.0       | 6279      | -4.5      | -19.5     | 30        | 1.71         | 51          | 10           | 331.5     | 337.8     | 331.9     |
| 449.0       | 6784      | -8.3      | -22.3     | 31        | 1.43         | 52          | 11           | 332.9     | 338.2     | 333.2     |
| 432.0       | 7083      | -10.3     | -27.3     | 23        | 0.95         | 53          | 11           | 334.1     | 337.7     | 334.3     |
| 412.0       | 7445      | -13.1     | -28.1     | 27        | 0.92         | 54          | 12           | 335.0     | 338.6     | 335.2     |
| 402.6       | 7620      | -14.0     | -29.8     | 25        | 0.81         | 55          | 12           | 336.0     | 339.1     | 336.2     |
| 400.0       | 7670      | -14.3     | -30.3     | 24        | 0.77         | 50          | 12           | 336.3     | 339.3     | 336.5     |
| 374.0       | 8178      | -17.9     | -36.9     | 17        | 0.43         | 67          | 12           | 338.1     | 339.8     | 338.2     |
| 356.4       | 8534      | -20.8     | -38.7     | 18        | 0.38         | 80          | 12           | 338.9     | 340.4     | 339.0     |
| 342.0       | 8839      | -23.2     | -40.2     | 20        | 0.34         | 75          | 13           | 339.6     | 341.0     | 339.7     |
| 328.2       | 9144      | -25.7     | -41.7     | 21        | 0.30         | 90          | 15           | 340.2     | 341.5     | 340.3     |
| 328.0       | 9148      | -25.7     | -41.7     | 21        | 0.30         | 90          | 15           | 340.3     | 341.5     | 340.3     |
| 317.0       | 9395      | -27.5     | -47.5     | 13        | 0.17         | 92          | 19           | 341.1     | 341.8     | 341.1     |
| 305.0       | 9672      | -30.1     | -41.1     | 33        | 0.35         | 94          | 24           | 341.2     | 342.6     | 341.3     |
| 301.5       | 9754      | -30.5     | -38.7     | 44        | 0.45         | 95          | 25           | 341.8     | 343.6     | 341.9     |
| 300.0       | 9790      | -30.7     | -37.7     | 50        | 0.50         | 95          | 24           | 342.0     | 344.0     | 342.1     |
| 299.0       | 9814      | -30.9     | -36.9     | 56        | 0.54         | 96          | 24           | 342.0     | 344.2     | 342.1     |

|       |       |       |       |    |      |     |    |       |       |       |
|-------|-------|-------|-------|----|------|-----|----|-------|-------|-------|
| 283.0 | 10202 | -33.1 | -39.1 | 55 | 0.46 | 116 | 20 | 344.3 | 346.2 | 344.4 |
| 276.5 | 10363 | -34.5 | -40.5 | 54 | 0.41 | 125 | 18 | 344.6 | 346.3 | 344.7 |
| 262.0 | 10739 | -37.7 | -43.7 | 53 | 0.30 | 117 | 17 | 345.2 | 346.5 | 345.3 |
| 250.0 | 11060 | -40.5 | -48.5 | 42 | 0.19 | 110 | 16 | 345.7 | 346.5 | 345.8 |
| 247.0 | 11142 | -41.1 | -50.1 | 37 | 0.16 | 110 | 15 | 346.0 | 346.7 | 346.1 |
| 243.0 | 11252 | -42.1 | -50.1 | 41 | 0.16 | 110 | 13 | 346.1 | 346.8 | 346.2 |
| 242.1 | 11278 | -42.1 | -50.6 | 39 | 0.15 | 110 | 13 | 346.5 | 347.2 | 346.6 |
| 238.0 | 11392 | -42.1 | -53.1 | 29 | 0.12 | 111 | 13 | 348.2 | 348.7 | 348.2 |
| 233.0 | 11535 | -43.5 | -60.5 | 14 | 0.05 | 112 | 12 | 348.2 | 348.4 | 348.2 |
| 225.0 | 11768 | -45.1 | -64.1 | 10 | 0.03 | 114 | 11 | 349.2 | 349.4 | 349.2 |
| 220.0 | 11917 | -46.5 | -61.5 | 17 | 0.04 | 115 | 11 | 349.3 | 349.5 | 349.3 |
| 208.0 | 12286 | -49.7 | -66.7 | 12 | 0.02 | 118 | 10 | 350.0 | 350.1 | 350.0 |
| 204.0 | 12412 | -50.9 | -62.9 | 23 | 0.04 | 119 | 9  | 350.0 | 350.2 | 350.0 |
| 200.0 | 12540 | -51.9 | -62.9 | 25 | 0.04 | 120 | 9  | 350.4 | 350.6 | 350.4 |
| 193.0 | 12770 | -53.9 | -63.9 | 28 | 0.04 | 117 | 8  | 350.8 | 351.0 | 350.8 |
| 175.0 | 13391 | -58.9 | -70.9 | 20 | 0.02 | 110 | 4  | 352.5 | 352.6 | 352.5 |
| 174.4 | 13411 | -59.1 | -70.9 | 20 | 0.02 | 110 | 4  | 352.5 | 352.6 | 352.6 |
| 168.0 | 13645 | -61.3 | -71.3 | 25 | 0.02 | 116 | 6  | 352.7 | 352.8 | 352.7 |
| 160.0 | 13947 | -63.3 | -75.3 | 18 | 0.01 | 125 | 9  | 354.2 | 354.3 | 354.2 |
| 150.3 | 14326 | -66.4 | -77.4 | 20 | 0.01 | 135 | 12 | 355.3 | 355.3 | 355.3 |
| 150.0 | 14340 | -66.5 | -77.5 | 20 | 0.01 | 135 | 9  | 355.3 | 355.4 | 355.3 |
| 148.0 | 14421 | -67.1 | -77.1 | 23 | 0.01 | 129 | 10 | 355.7 | 355.7 | 355.7 |
| 142.9 | 14630 | -68.3 | -78.3 | 23 | 0.01 | 115 | 11 | 357.1 | 357.2 | 357.1 |
| 138.0 | 14841 | -69.5 | -79.5 | 22 | 0.01 | 132 | 14 | 358.6 | 358.6 | 358.6 |
| 135.8 | 14935 | -69.6 | -79.6 | 22 | 0.01 | 140 | 16 | 360.0 | 360.0 | 360.0 |
| 132.0 | 15106 | -69.9 | -79.9 | 22 | 0.01 | 140 | 15 | 362.5 | 362.5 | 362.5 |
| 129.1 | 15240 | -70.6 | -80.6 | 22 | 0.00 | 140 | 15 | 363.5 | 363.6 | 363.5 |
| 124.0 | 15476 | -71.9 | -81.9 | 21 | 0.00 | 140 | 20 | 365.4 | 365.4 | 365.4 |
| 122.6 | 15545 | -72.5 | -82.2 | 22 | 0.00 | 140 | 21 | 365.6 | 365.6 | 365.6 |
| 118.0 | 15767 | -74.3 | -83.3 | 24 | 0.00 | 148 | 16 | 366.2 | 366.2 | 366.2 |
| 114.0 | 15968 | -74.9 | -82.9 | 28 | 0.00 | 155 | 12 | 368.7 | 368.7 | 368.7 |
| 105.0 | 16445 | -74.9 | -83.9 | 24 | 0.00 | 120 | 13 | 377.5 | 377.5 | 377.5 |
| 102.0 | 16614 | -73.5 | -83.5 | 21 | 0.00 | 108 | 14 | 383.3 | 383.3 | 383.3 |
| 100.0 | 16730 | -73.7 | -83.7 | 20 | 0.00 | 100 | 14 | 385.1 | 385.1 | 385.1 |
| 90.4  | 17320 | -72.7 | -83.7 | 18 | 0.00 | 144 | 17 | 398.3 | 398.4 | 398.3 |
| 87.2  | 17534 | -68.3 | -81.3 | 14 | 0.01 | 160 | 18 | 411.3 | 411.3 | 411.3 |
| 85.2  | 17678 | -67.6 | -81.7 | 12 | 0.01 | 170 | 19 | 415.4 | 415.5 | 415.4 |
| 81.0  | 17983 | -66.2 | -82.6 | 8  | 0.01 | 175 | 14 | 424.4 | 424.4 | 424.4 |
| 77.0  | 18288 | -64.8 | -83.4 | 6  | 0.00 | 115 | 5  | 433.5 | 433.5 | 433.5 |
| 73.2  | 18593 | -63.4 | -84.3 | 4  | 0.00 | 75  | 1  | 442.8 | 442.8 | 442.8 |
| 73.1  | 18604 | -63.3 | -84.3 | 4  | 0.00 | 77  | 1  | 443.1 | 443.1 | 443.1 |
| 70.0  | 18870 | -63.9 | -86.9 | 3  | 0.00 | 125 | 13 | 447.3 | 447.4 | 447.3 |
| 69.7  | 18898 | -64.0 | -87.0 | 3  | 0.00 | 130 | 15 | 447.7 | 447.7 | 447.7 |
| 68.8  | 18976 | -64.3 | -87.3 | 3  | 0.00 | 130 | 14 | 448.7 | 448.7 | 448.7 |
| 66.3  | 19202 | -63.7 | -87.7 | 3  | 0.00 | 130 | 13 | 454.8 | 454.8 | 454.8 |
| 64.0  | 19420 | -63.1 | -88.1 | 2  | 0.00 | 101 | 15 | 460.7 | 460.7 | 460.7 |
| 63.1  | 19507 | -62.7 | -88.1 | 2  | 0.00 | 90  | 16 | 463.4 | 463.4 | 463.4 |
| 60.1  | 19812 | -61.3 | -87.9 | 2  | 0.00 | 135 | 17 | 473.0 | 473.1 | 473.0 |
| 57.2  | 20117 | -60.0 | -87.8 | 2  | 0.00 | 85  | 21 | 482.8 | 482.8 | 482.8 |
| 54.7  | 20396 | -58.7 | -87.7 | 1  | 0.00 | 112 | 17 | 491.9 | 491.9 | 491.9 |
| 54.5  | 20422 | -58.7 | -87.7 | 1  | 0.00 | 115 | 17 | 492.5 | 492.5 | 492.5 |
| 51.9  | 20726 | -58.9 | -87.9 | 1  | 0.00 | 95  | 20 | 498.8 | 498.9 | 498.8 |
| 50.0  | 20960 | -59.1 | -88.1 | 1  | 0.00 | 105 | 19 | 503.8 | 503.8 | 503.8 |
| 47.1  | 21336 | -59.0 | -88.0 | 1  | 0.00 | 110 | 20 | 512.6 | 512.7 | 512.6 |
| 44.9  | 21641 | -59.0 | -88.0 | 1  | 0.00 | 100 | 10 | 519.9 | 520.0 | 519.9 |
| 41.1  | 22189 | -58.9 | -87.9 | 1  | 0.00 | 95  | 17 | 533.3 | 533.3 | 533.3 |
| 39.2  | 22487 | -56.1 | -87.1 | 1  | 0.01 | 93  | 20 | 547.6 | 547.7 | 547.6 |
| 37.8  | 22718 | -55.9 | -87.9 | 1  | 0.00 | 91  | 23 | 553.9 | 553.9 | 553.9 |
| 37.0  | 22860 | -54.3 | -86.8 | 1  | 0.01 | 90  | 25 | 561.6 | 561.6 | 561.6 |
| 36.3  | 22978 | -52.9 | -85.9 | 1  | 0.01 | 73  | 27 | 568.0 | 568.1 | 568.0 |
| 35.3  | 23165 | -53.4 | -86.1 | 1  | 0.01 | 45  | 30 | 571.6 | 571.6 | 571.6 |

|      |       |       |       |   |      |     |    |       |       |       |
|------|-------|-------|-------|---|------|-----|----|-------|-------|-------|
| 32.4 | 23707 | -54.7 | -86.7 | 1 | 0.01 | 76  | 25 | 582.0 | 582.0 | 582.0 |
| 32.1 | 23774 | -54.6 | -86.6 | 1 | 0.01 | 80  | 24 | 583.9 | 584.0 | 583.9 |
| 30.6 | 24079 | -54.2 | -86.2 | 1 | 0.01 | 80  | 38 | 592.9 | 593.0 | 593.0 |
| 30.0 | 24200 | -54.1 | -86.1 | 1 | 0.01 | 85  | 38 | 596.6 | 596.6 | 596.6 |
| 29.1 | 24384 | -53.9 | -86.1 | 1 | 0.01 | 95  | 34 | 602.1 | 602.1 | 602.1 |
| 26.4 | 25023 | -53.1 | -86.1 | 1 | 0.01 | 98  | 31 | 621.6 | 621.7 | 621.6 |
| 25.3 | 25298 | -53.6 | -86.2 | 1 | 0.01 | 100 | 29 | 627.9 | 627.9 | 627.9 |
| 23.3 | 25826 | -54.5 | -86.5 | 1 | 0.01 | 95  | 31 | 640.1 | 640.1 | 640.1 |
| 20.0 | 26822 | -47.9 | -82.9 | 1 | 0.02 | 90  | 36 | 688.9 | 689.1 | 688.9 |
| 20.0 | 26820 | -47.9 | -82.9 | 1 | 0.02 | 85  | 35 | 688.8 | 689.0 | 688.8 |
| 19.4 | 27021 | -46.9 | -81.9 | 1 | 0.03 | 83  | 36 | 697.9 | 698.2 | 697.9 |
| 18.2 | 27432 | -47.3 | -82.3 | 1 | 0.03 | 70  | 37 | 709.2 | 709.5 | 709.3 |
| 17.5 | 27703 | -47.5 | -82.5 | 1 | 0.03 | 76  | 37 | 716.8 | 717.1 | 716.9 |
| 15.2 | 28651 | -45.0 | -80.0 | 1 | 0.04 | 95  | 39 | 754.9 | 755.4 | 754.9 |
| 15.2 | 28639 | -45.1 | -80.1 | 1 | 0.04 | 95  | 39 | 754.2 | 754.7 | 754.2 |
| 14.2 | 29097 | -41.9 | -77.9 | 1 | 0.07 | 91  | 45 | 779.8 | 780.6 | 779.9 |
| 13.9 | 29261 | -42.0 | -78.0 | 1 | 0.07 | 90  | 47 | 784.8 | 785.5 | 784.8 |
| 12.9 | 29746 | -42.5 | -78.5 | 1 | 0.07 | 98  | 42 | 799.4 | 800.2 | 799.5 |
| 11.8 | 30354 | -37.5 | -75.5 | 1 | 0.11 | 108 | 36 | 837.8 | 839.2 | 837.9 |
| 11.6 | 30480 | -37.8 | -75.7 | 1 | 0.11 | 110 | 35 | 841.2 | 842.6 | 841.3 |
| 10.6 | 31090 | -39.2 | -76.5 | 1 | 0.11 | 85  | 25 | 857.7 | 859.1 | 857.8 |
| 10.0 | 31490 | -40.1 | -77.1 | 1 | 0.11 | 75  | 29 | 868.7 | 870.1 | 868.8 |
| 9.7  | 31698 | -40.3 | -77.3 | 1 | 0.11 | 74  | 32 | 875.6 | 876.9 | 875.6 |
| 8.5  | 32614 | -36.7 | -74.7 | 1 | 0.18 | 70  | 46 | 923.6 | 926.0 | 923.7 |
| 8.5  | 32605 | -36.7 | -74.7 | 1 | 0.18 | 70  | 46 | 923.3 | 925.7 | 923.4 |
| 7.4  | 33528 | -37.3 | -75.3 | 1 | 0.19 | 80  | 38 | 956.6 | 959.2 | 956.7 |
| 7.2  | 33752 | -37.5 | -75.5 | 1 | 0.19 |     |    | 964.9 | 967.5 | 965.0 |

## Station information and sounding indices

```

Station identifier: FWD
Station number: 72249
Observation time: 150726/0000
Station latitude: 32.83
Station longitude: -97.30
Station elevation: 171.0
Showalter index: 8.53
Lifted index: 4.57
LIFT computed using virtual temperature: 4.15
SWEAT index: 99.40
K index: 11.70
Cross totals index: 7.50
Vertical totals index: 25.50
Totals totals index: 33.00
Convective Available Potential Energy: 0.00
CAPE using virtual temperature: 0.00
Convective Inhibition: 0.00
CINS using virtual temperature: 0.00
Bulk Richardson Number: 0.00
Bulk Richardson Number using CAPV: 0.00
Temp [K] of the Lifted Condensation Level: 281.87
Pres [hPa] of the Lifted Condensation Level: 721.27
Mean mixed layer potential temperature: 309.46
Mean mixed layer mixing ratio: 9.93
1000 hPa to 500 hPa thickness: 5845.00
Precipitable water [mm] for entire sounding: 25.37

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Description of the [data columns](#) or [sounding indices](#).

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Questions about the weather data provided by this site can be addressed to [Larry Oolman \(ldoolman@uwyo.edu\)](mailto:Larry.Oolman@uwyo.edu)

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