

Supplementary files

Table 4. Cases of swine erysipelas in Hunan Province, China.

Year	Month	Cases of Swine Erysipelas	Year	Month	Cases of Swine Erysipelas
2015	12	60	2012	12	0
2015	11	33	2012	11	116
2015	10	117	2012	10	149
2015	9	43	2012	9	2030
2015	8	793	2012	8	3555
2015	7	912	2012	7	649
2015	6	81	2012	6	69
2015	5	43	2012	5	147
2015	4	78	2012	4	17
2015	3	56	2012	3	5
2015	2	25	2012	2	10
2015	1	73	2012	1	18
2014	12	0	2011	12	12
2014	11	187	2011	11	51
2014	10	52	2011	10	16
2014	9	75	2011	9	162
2014	8	954	2011	8	115
2014	7	21455	2011	7	528
2014	6	238	2011	6	461
2014	5	330	2011	5	130
2014	4	101	2011	4	275
2014	3	23	2011	3	17
2014	2	22	2011	2	49
2014	1	26	2011	1	1
2013	12	137	2010	12	0
2013	11	147	2010	11	215
2013	10	43	2010	10	654
2013	9	2524	2010	9	654
2013	8	882	2010	8	353
2013	7	602	2010	7	58
2013	6	190	2010	6	103
2013	5	621	2010	5	91
2013	4	17	2010	4	96
2013	3	19	2010	3	20
2013	2	16	2010	2	237
2013	1	22	2010	1	85

Table 5. Meteorological elements in Hunan Province, China. We take the following notation. **a1:** Average minimum temperature (one day), **a2:** Average maximum temperature (0.1 °C), **a3:** Daily precipitation >=0.1mm days (0.1m/s), **a4:** Sunshine percentage (0.1mm), **a5:** Sunshine duration (0.1 °C), **a6:** Maximum wind speed (bearing), **a7:** Wind direction of maximum wind speed (0.1 °C), **a8:** Maximum daily precipitation (0.1m/s), **a9:** Minimum relative humidity (1%), **a10:** Maximum wind speed (0.1 °C), **a11:** Wind direction for maximum wind speed (0.1 °C), **a12:** Extreme minimum Station Pressure (0.1 °C), **a13:** Extreme Minimum Temperature (0.1hPa), **a14:** Extreme maximum Station Pressure (0.1hPa), **a15:** Extreme maximum temperature (0.1hPa), **a16:** Precipitation anomaly percentage (1%), **a17:** Precipitation (0.1mm), **a18:** Average station air pressure (1%), **a19:** Average wind speed (0.1 hours), **a20:** Average temperature (1%), **a21:** Average temperature anomaly (0.1mm), **a22:** Average water vapor pressure (0.1m/s), **a23:** Mean relative humidity (orientation).

Year	Month	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14	a15	a16	a17	a18	a19	a20	a21	a22	a23
2010	1	44	107.75	12	19	627.75	76.25	6	141.75	26.75	127.5	6.25	9970.75	-11.75	10200.3	218	-38.75	462.75	10082.75	19.25	69.5	18.25	73.75	73
2010	2	59.75	126.25	9	21	650.75	86.5	8	111	20.25	143.75	8	9799.75	-7.5	10207.3	299	-45	287.25	10031.75	21.75	86.75	17.75	83.25	71.75
2010	3	88	170	16.75	30.25	1118.5	82	10.25	221.75	16.25	135.25	7	9881	0.75	10253.5	288.5	-7.25	1079.25	10031.5	23.25	121.75	15	95	67.5
2010	4	125.75	195.75	19.75	23.25	889.75	80.5	6	417.5	22.5	139	5.75	9869.5	46	10134.3	300.5	19.25	2124.5	10005.5	19.25	155.25	-15.25	131.25	74.75
2010	5	188	258.5	18.75	23.25	968.5	70.75	230.75	675.5	22.5	129	3.75	9834	151.5	10010.5	336.25	34.25	2539.5	9929.5	15.75	217.75	-0.5	195.25	76
2010	6	219.25	285.5	16.75	21.25	888.25	65.5	5.75	952.5	38.25	112	10.5	9838.75	174	9997.5	350.75	49.25	2912.25	9913.25	15.75	246.5	-6.75	240.75	78
2010	7	265.75	343	9.25	55.5	2359.25	88.5	10.75	576.25	40	162.75	11	9835	240.5	9949	365.75	-20	1209	9891.25	19.5	298	14.75	289.25	70.25
2010	8	254.5	344.75	8	65	2638.25	73.75	8.5	356	27.5	135.5	9.25	9843.25	196.5	9988.75	401.25	-26	906.75	9920	18.5	292.75	15.25	265.25	67
2010	9	220.25	286.5	14	31.75	1173.75	74.5	5.75	434	32.25	131.5	2.25	9868	150.5	10051.3	377.75	66.25	1243	9953.75	18.25	246.5	11.5	238.25	77.5
2010	10	149.5	219.25	11	32	1134	65	5.75	239.5	24.25	114.75	6.25	9908	72	10171	281.25	-2.25	836.5	10031.75	18.5	178	-4	152	74.75
2010	11	104	192	10	44.75	1437.25	69.75	5.75	124.25	18.5	117.75	6.25	9937	64.75	10168.8	268.25	-48	317.5	10056.5	14.25	140	13.5	109.75	71.5
2010	12	54	139	8.25	34.25	1100.75	72.5	5.75	393	17.5	123.75	5.5	9932	-14.25	10199.8	233.25	154	960.5	10047	17.75	89	12	79.5	70.75
2011	1	3.5	44.5	10.75	11.75	387	67.25	6.25	154.5	19.25	107.5	231	10032.8	-36	10223.5	96.75	-27.5	482.5	10134.5	19.25	20.75	-30.5	46.5	67
2011	2	54.75	136.75	8.25	22.75	709.5	73.25	6.5	97	23.75	118	6.75	9883.75	-9.5	10148.3	246	-66.5	303.25	10037.25	17.75	87.5	18.5	81.75	71.5
2011	3	75.75	147	15.5	22.25	821	82.75	5.75	162	14.25	148.25	5.5	9906.25	17.5	10207.3	245	-56.75	559.75	10070.5	17.5	104.75	-2	86.75	70
2011	4	149.75	233.75	13.75	30.75	1169.75	72.25	5.75	182	15.25	122.25	8	9863.5	55.5	10106.3	331.5	-66.25	588.25	9987	17	186	15.5	144.75	69.25
2011	5	182	279.75	9.5	42.5	1775.5	76.5	6.25	388.25	17.25	130.75	233	9816.25	124	10027	352.75	-46	1064.5	9942.5	19	224.5	6.25	175.75	66.25
2011	6	231.75	298.75	17	28.5	1183.25	61.5	227.5	643.5	38	104.5	9	9811.75	181.5	9972.25	360.25	18.75	2477.75	9884.5	16.25	258.25	5	258	78.25
2011	7	257.25	345.75	4.25	57.5	2437.5	80.5	11.75	100.25	27.75	133.5	11.25	9808.25	215.5	9922.5	391.25	-88.75	187.5	9876.5	19.5	296.75	13.5	256.75	63
2011	8	244.5	331.25	6.75	56.25	2288.75	74.75	10.25	301	26	137.75	8.5	9838.25	203.75	9969	379	-46.25	670.5	9906.25	19.5	281.25	3.75	252	68.25

2011	9	208.25	281.75	10.75	27.75	1019.25	64.75	231.5	248.75	31.25	115.75	7.25	9862.25	125.25	10071.3	357.75	-33	454.5	9960.75	18.75	237	2	210	71
2011	10	153.25	223.75	11.75	31.5	1117.75	56	6.25	297	22.25	106	6.25	9954.5	103	10118.3	303.75	23.5	1050.5	10032.75	16.25	181.75	-0.25	152.5	74.75
2011	11	127	207.75	6.75	38.75	1256	61.75	231	165.25	30	111.75	6.25	9943.5	51	10145.5	251.5	-29	437.75	10042.75	15.5	159.25	32.75	134.75	74.75
2011	12	48.5	103.75	7.75	22.25	716.75	58.75	2.5	73.25	18.25	109.25	2.25	10026.3	-3.25	10220.3	155	-58.75	161	10123	17	71.25	-5.75	61.5	62
2012	1	23.25	58.5	14.5	6.5	213.25	70.5	230.5	306.5	31.75	116.75	6	9963.5	-32.75	10170.5	128.25	17.25	840.25	10062.75	21.5	38	-13.25	60.25	75.5
2012	2	33.75	71.5	17.25	6.75	217.75	76.5	5.75	172.75	22	120.5	6	9905.75	-3.75	10137.5	139.75	-30.5	552.25	10029.25	24	49.5	-19.5	65	74.5
2012	3	77.75	136	19.25	16.75	613.5	78.75	6	341.5	12.75	130.5	6.5	9900	30.5	10102.5	273.5	23	1447.5	9996.75	22	102.25	-4.5	93.25	76.25
2012	4	155.25	234.25	17	28.75	1096.5	104	11.5	345	16.25	189.25	9	9758.5	92.75	10066.5	321.75	-11.75	1547.25	9921	22	187	16.5	155.5	72.75
2012	5	194	260.75	19.25	25.5	1065	98.25	6.5	536	30.75	171	10.25	9813	155.5	9955.25	336.75	30.5	2449	9899	21.25	221.5	3.25	209.5	80
2012	6	228.75	300.25	14.5	29	1199.25	70.5	5.75	463.5	32	118.5	9.5	9770.75	182.75	9941.25	354.75	-14.25	1729.5	9839	17.25	258.75	5.5	254.25	77.5
2012	7	257.5	335.75	11	58.25	2476.25	96.5	7.25	694.5	38.25	154.5	230.75	9784.25	231.5	9891.25	368	21.75	1807.75	9839.75	23.5	291.5	8.25	278.5	70.5
2012	8	244.5	324.25	8.5	44.75	1830.75	107.5	5.25	383.5	34.75	181	8.25	9789	201.25	9947.75	367	-11.25	1159.5	9863.25	22.5	277.25	-0.25	271.5	74
2012	9	201.75	281.25	11.25	39.75	1465	85.25	227.75	450	21.25	150.25	2	9857.75	146.75	10020.3	352	50.5	1066	9943.75	21	233.75	-1.25	204.5	72
2012	10	159.25	228.25	11.25	27.75	995.25	104.25	6	240.25	21.75	169.75	2	9924.75	103.5	10076.5	294.75	-12.25	750.5	9986.75	19.5	187.5	5.5	157.75	74.75
2012	11	93.75	150.5	14.75	23	728.75	88.5	6	402	26.25	147.5	6.25	9934.25	49.5	10100.8	231.25	114.75	1327	10005	21	117.5	-9	106.5	78
2012	12	37.25	88.25	16	20.25	653.5	76.75	5.75	195.5	24.75	139.5	5.25	9931.25	-20.75	10196.8	188	88.75	721.25	10048.75	22.75	58.25	-18.75	73	78.75
2013	1	31	98	11	22.25	731.75	75.5	5.5	58	23.75	134.75	6.5	9944	-29.5	10198.3	196	-65.5	226.75	10053.5	18.75	59	6.5	70	74.25
2013	2	54.25	107	16.25	9.75	305.5	78.75	5.5	143.75	40.5	134.75	7.5	9852.25	-16.5	10145.8	226	-35.25	552.75	10025.75	21.5	75.5	1.5	88.5	83.25
2013	3	109.25	202.25	14	30.75	1147.25	116	8.5	371.75	15.25	186.75	8	9845.75	31.25	10153	301	23.5	1476.75	9974.5	23.5	146.5	33.5	115.5	69.75
2013	4	138.75	223.75	15.5	28.5	1108.5	118.75	8	426.5	18.75	209.5	5.25	9815.25	66.25	10059.3	324.75	-5.75	1579	9940.25	21.75	174	-0.25	143.5	72.5
2013	5	193.25	277.25	17.75	31.25	1307.5	93.25	5	719	17.75	158.25	4.5	9781	145.25	9976.25	353.75	33	2530.5	9893	19.75	228	5.75	206.25	75.5
2013	6	233.5	314.25	10.5	48.25	2002.25	90.75	5	373	27	143	230	9774.25	171	9934.25	370.75	-36	1306.75	9857.5	19.5	268	11.75	259.75	74.75
2013	7	268	357	2.75	76.5	3235.75	94	10.5	142	28.75	146.5	10.75	9791.75	247.5	9891.25	390	-85.25	237	9845.25	24.75	308.75	23	259.75	59.5
2013	8	262.75	351.25	8.5	59	2369.5	114.25	3.75	541.75	24	186.5	6.75	9762.75	227	9936.75	401	11.5	1375.5	9853.25	26	300.25	21.5	260.75	64.25
2013	9	201	277.5	10.75	40.5	1470.25	104	5	702.75	27.75	172.5	230.25	9833	127.25	10044.3	349	190.5	1909.25	9933	22.5	232.75	-5.75	216.5	77.25
2013	10	157.5	243.5	5.5	44	1538	82.25	5.75	110.25	21	144	5.5	9911.25	102.75	10088	318	-78.75	181	9998.5	20.25	194	9.75	145.5	66.75

2013	11	109	185	8.75	39.25	1260	79.75	9.5	377.5	24.25	147	9.5	9917	32.5	10141.5	285	48.5	1065	10028.5	19.75	140.5	10.5	118.75	74.25
2013	12	45.25	126.75	3.75	40.25	1292.75	80.5	227	187	14.5	142	6	9931.5	-13	10157	216.25	-11.25	387	10057.25	19.5	80.75	4.75	64.25	61
2014	1	50.25	140.5	6.25	41.5	1367.5	63.5	12	89	13	109.5	7.5	9896.5	-3.5	10166	256.25	-63.25	242	10044.25	19.25	88.5	36	67.5	62.25
2014	2	40.5	88.25	14.75	14	446.5	84.75	6.25	223.5	31.5	134.5	5	9874.5	-37.75	10135.8	251.5	-2.5	804.75	10028.5	21.25	59.25	-14.75	78.5	81.75
2014	3	105	171.25	18.5	18.5	698	87.25	8.5	297.75	33.25	160.75	6	9834.5	39	10105	280.75	8.75	1354.5	9993	20.75	131.25	18.25	125.75	81.25
2014	4	153.5	220.25	14.75	20.25	793.25	81.75	10.5	258.5	27	128.75	3.75	9860	119.75	10029.8	296	-29.25	1185.25	9951.5	20.25	180.25	6	166.25	81.5
2014	5	186.75	258.25	18	24.25	1025.25	82.5	8.75	573.5	22.5	142.25	5.25	9804.5	130	10026.5	324	19	2244	9904.25	18.75	216.25	-6	207.75	80.75
2014	6	226	287.75	17	18.75	764.5	79.25	13.25	779.75	39	135.5	10.75	9790.5	202	9903.75	342.75	-10.25	1814.25	9857.25	18.5	251.25	-5	269.25	85.25
2014	7	247.5	328	13.5	50.25	2122.25	84.75	8.5	751.5	36.75	133	7.25	9789	218.75	9925	373.5	39.25	2097.25	9860	17.25	280.5	-5.25	298.75	80.75
2014	8	234	308.25	13	40.75	1648	79	233	594.25	39.5	132.25	13.75	9801.75	191.5	9959.5	371.5	4.25	1221.25	9882.25	18.5	263.5	-15.25	272.75	81
2014	9	214.5	289.75	9.25	38.5	1408	70.5	11	252.25	34.75	113.25	5.25	9842.5	172	10004.3	355.75	-1	629	9918.75	20.25	244.25	5.75	240.75	79.75
2014	10	170	259.5	6	50.75	1788.75	72.5	7.5	335.25	22.75	127.5	6.5	9909.5	127.25	10075.3	314.25	-19.75	672.5	9985.75	20.25	207.25	23	165.5	70
2014	11	114.75	165.5	15.25	18.75	600	77.5	6.25	367.25	26.25	135.25	2	9923.75	74.75	10109.3	223.5	47.75	1054.75	10021.5	20.25	135.25	5.25	117.25	77
2014	12	48.25	123	5.75	38.75	1245.75	75.75	226.75	76.75	15.5	129.75	6.25	9973.5	-5.75	10201.5	192	-65.5	155	10079.5	20.75	79.25	3.25	62.75	60.75
2015	1	52.75	116.75	11.5	22.75	750.5	80.75	9.25	69.25	22.5	138.5	5.5	9883.75	-6	10142	198.75	-59.75	264.25	10038.25	22	79.75	27.25	78	74.25
2015	2	62	125.25	15	22.75	721.25	87.5	10.25	318.25	24.75	145.25	7.5	9887.25	-8.5	10135	233.5	5.5	913	10005.5	22	88.75	14.75	89.75	78.5
2015	3	97.25	159	15	14.75	554.25	84.75	457	275.5	41.25	140.75	8.25	9815	31.25	10103.3	303	-28.25	883.5	9984	22.5	122.5	9.5	123.5	84.5
2015	4	141.25	225.5	14.5	33	1272	100.5	5.25	441.5	21	172.75	11.25	9756.75	69	10083	322.75	-38	1027	9936.5	25.75	176.5	2.25	158.75	78.25
2015	5	195	266.5	18	22	921.75	130.5	5.75	470.25	39.5	215.25	4.5	9787	117.75	9982.25	323	19.5	2271.25	9874.5	21.25	224.25	2	229.75	85
2015	6	229	299.75	14.75	32.5	1345	86.75	12.5	582.25	40.25	143.25	8.25	9778.25	176	9912.5	357.75	5	2173.5	9844	23	258	1.75	276.5	84.25
2015	7	230.75	303.25	12.25	31.5	1339	81.75	10	546.75	43.25	138	3.75	9775.25	186.5	9897.75	367	-5.5	1404	9845.25	22	260.75	-25	276.75	82.75
2015	8	234.25	316.75	10.5	48.75	1961.75	102.75	9	421.5	38	163.75	9	9798.75	202	9921	356.25	8.5	1278.75	9865.75	21.5	267.75	-11	274.75	79.75
2015	9	211.25	286	12.75	28.25	1030.75	82.75	7.5	366.25	31	138.25	230.5	9825.75	177.5	10001.3	335	49.5	1000.25	9916.5	20.75	240.75	2.25	240	81
2015	10	159.5	246.75	8	45.5	1610.25	103	6	476.5	26	172.75	5.75	9898.5	113	10094.8	297	39	1086	9975.5	21.5	195.5	11.25	170.5	76.75
2015	11	101.25	149.5	18.75	10.5	331.25	85	231.5	379.5	40	144.5	5.5	9892.75	24.5	10119.3	257.5	122.25	1611.75	10011	20.75	120.5	-9.5	130.75	90.5
2015	12	56	101.25	14.5	13.25	425.25	77.25	2.75	360	26	127	2.75	9956	-1.75	10150.3	155	120.75	944.25	10055.75	21.5	74.25	-1.75	86.25	83.5