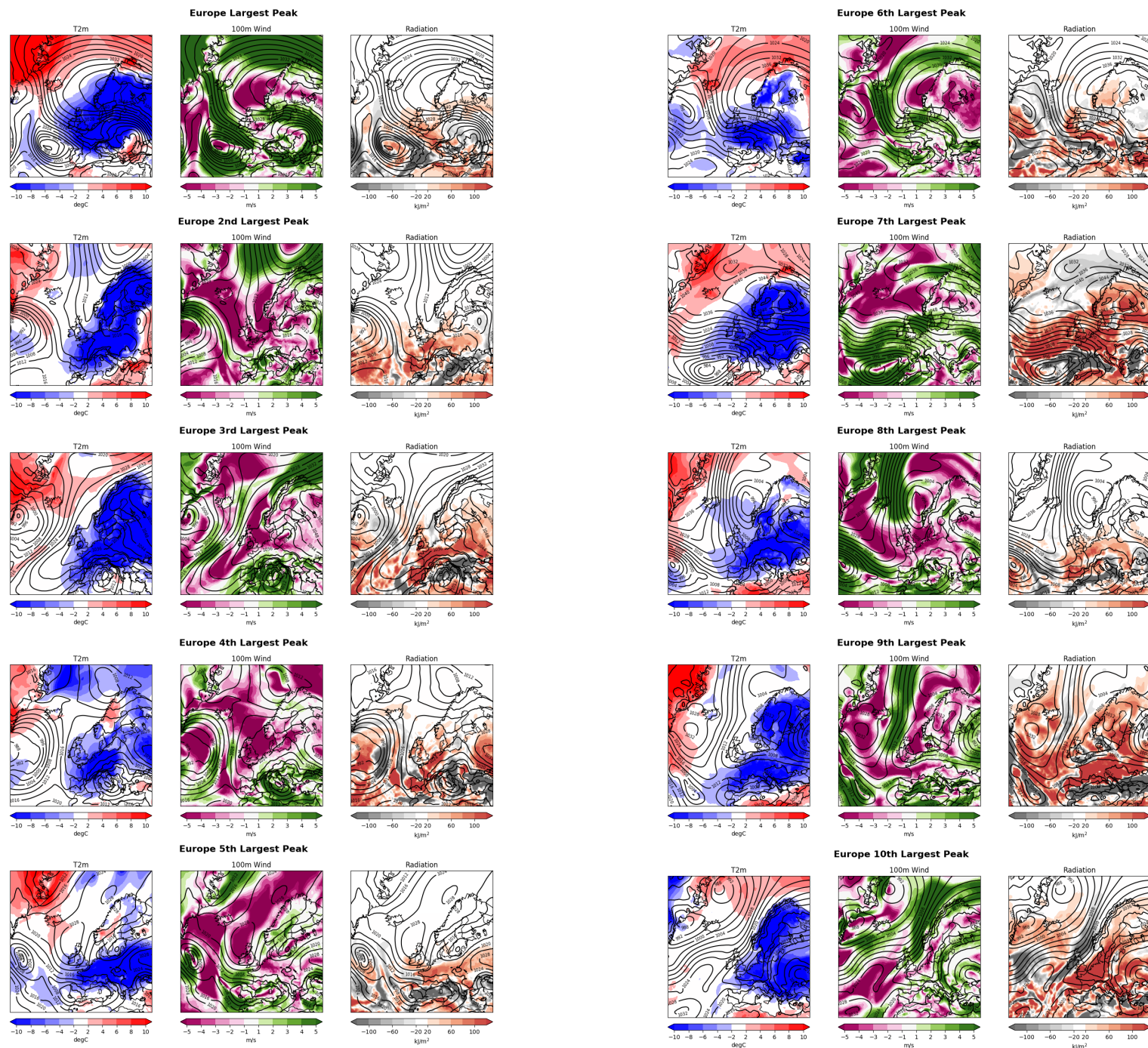


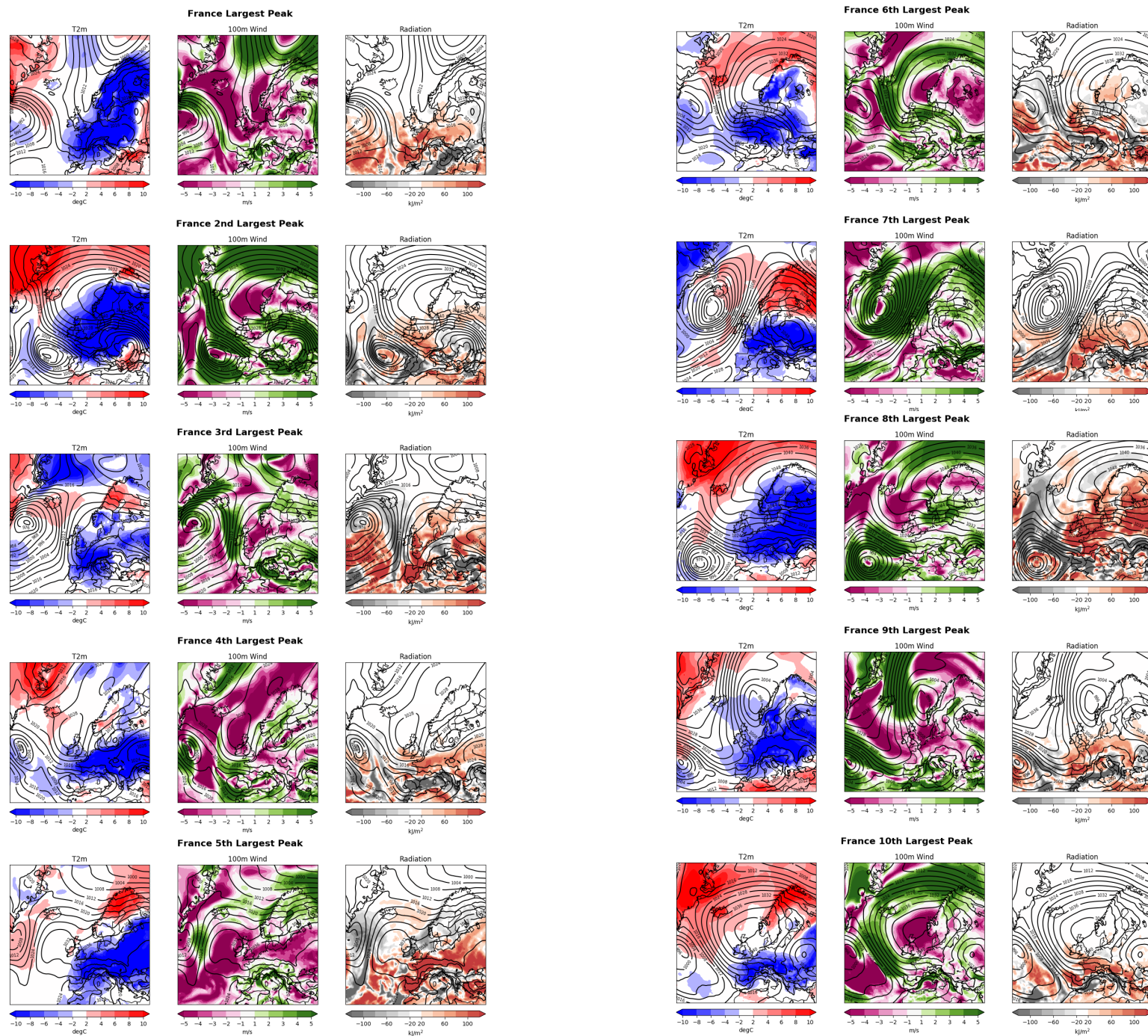
Europe		France		Germany		UK		Italy		Spain		Sweden		Romania	
Demand	DNR	Demand	DNR	Demand	DNR	Demand	DNR	Demand	DNR	Demand	DNR	Demand	DNR	Demand	DNR
<b>12 Jan87</b>	<b>8 Jan 85</b>	<b>8 Jan 85</b>	<b>16 Jan 85</b>	<b>13 Jan87</b>	7 Jan 95	12 Jan87	<b>27 Dec 95</b>	<b>4 Aug17</b>	<b>4 Aug 17</b>	<b>10 Aug12</b>	15 Feb 83	<b>10 Jan87</b>	<b>7 Jan 87</b>	<b>13 Jan85</b>	<b>13 Jan 85</b>
<b>8 Jan 85</b>	2 Jan 97	<b>12 Jan87</b>	<b>12 Jan 87</b>	<b>7 Jan 85</b>	<b>20 Jan 87</b>	<b>10 Jan82</b>	<b>20 Dec 10</b>	<b>21 Jul15</b>	<b>21 Jul 15</b>	20 Jul95	9 Jan 09	<b>9 Feb85</b>	<b>8 Feb 85</b>	24 Jan06	<b>14 Jan 80</b>
<b>3 Feb12</b>	<b>17 Jan 87</b>	<b>10 Feb86</b>	<b>10 Feb 86</b>	<b>1 Jan 97</b>	<b>19 Jan 85</b>	<b>28 Dec95</b>	10 Dec 81	<b>27 Jul83</b>	<b>27 Jul 83</b>	4 Aug03	2 Jan 89	<b>28 Jan99</b>	<b>28 Jan 99</b>	<b>31 Jan87</b>	<b>31 Jan 87</b>
<b>9 Feb86</b>	<b>9 Feb 86</b>	<b>29 Dec96</b>	<b>29 Dec 96</b>	<b>6 Feb12</b>	1 Jan 90	<b>20 Dec10</b>	<b>21 Feb 86</b>	<b>13 Aug03</b>	<b>13 Aug03</b>	7 Jul 15	12 Jan 85	<b>4 Feb12</b>	<b>4 Feb 12</b>	<b>25 Jan10</b>	<b>26 Dec 02</b>
29 Dec96	<b>4 Feb 12</b>	<b>11 Feb12</b>	<b>11 Feb 12</b>	9 Feb86	14 Dec 87	<b>8 Jan 10</b>	<b>8 Jan 10</b>	<b>29 Jul05</b>	<b>29 Jul 05</b>	4 Aug17	<b>(10 Aug12)</b>	<b>5 Jan 03</b>	<b>14 Dec 89</b>	2 Feb12	8 Jan 15
7 Feb91	30 Dec 92	<b>7 Feb91</b>	<b>3 Jan 93</b>	<b>19 Dec09</b>	<b>6 Jan 97</b>	28 Feb18	23 Nov93	<b>28 Jul13</b>	<b>28 Jul 13</b>	17 Jun17	11 Jan 92	<b>9 Feb80</b>	<b>4 Jan 03</b>	28 Dec96	<b>26 Jan 10</b>
28 Feb18	7 Jan 10	<b>3 Jan 93</b>	<b>7 Feb 91</b>	6 Feb91	20 Dec 07	29 Dec85	31 Dec 08	<b>16 Jul10</b>	<b>16 Jul 10</b>	24 Jul04	8 Dec 13	<b>14 Dec89</b>	<b>9 Feb 80</b>	1 Feb91	20 Jan 16
19 Dec09	12 Dec 12	27 Feb18	<b>19 Dec 09</b>	<b>9 Jan 03</b>	<b>4 Feb 12</b>	12 Feb85	31 Jan 87	9 Aug99	<b>22 Aug12</b>	20 Aug11	15 Jan 03	20 Dec81	<b>6 Jan 16</b>	<b>14 Jan80</b>	28 Feb 86
1 Mar05	21 Feb 81	<b>19 Dec09</b>	12 Jan 03	10 Jan82	<b>8 Jan 03</b>	2 Jan 80	<b>12 Jan 82</b>	<b>22 Aug11</b>	1 Jul 12	27 Jun12	15 Jan 91	<b>7 Jan 16</b>	5 Jan 81	19 Feb85	25 Dec 98
19 Feb85	29 Jan 98	15 Dec01	7 Jan 09	13 Feb85	<b>19 Dec 09</b>	<b>22 Feb86</b>	30 Dec 03	22 Aug12	19 Jul 07	10 Jul06	22 Dec 90	31 Dec01	26 Jan 84	<b>26 Dec02</b>	10 Feb 05
											(1 Jan 84)				

Table S1: Details of the peak demand events for Europe and six case study countries, chosen for their geographical diversity. Bold events are when demand peak and peak demand-net-renewables (DNR) occur during the same meteorological event. Red events are when peak demand and peak DNR occur on exactly the same day.



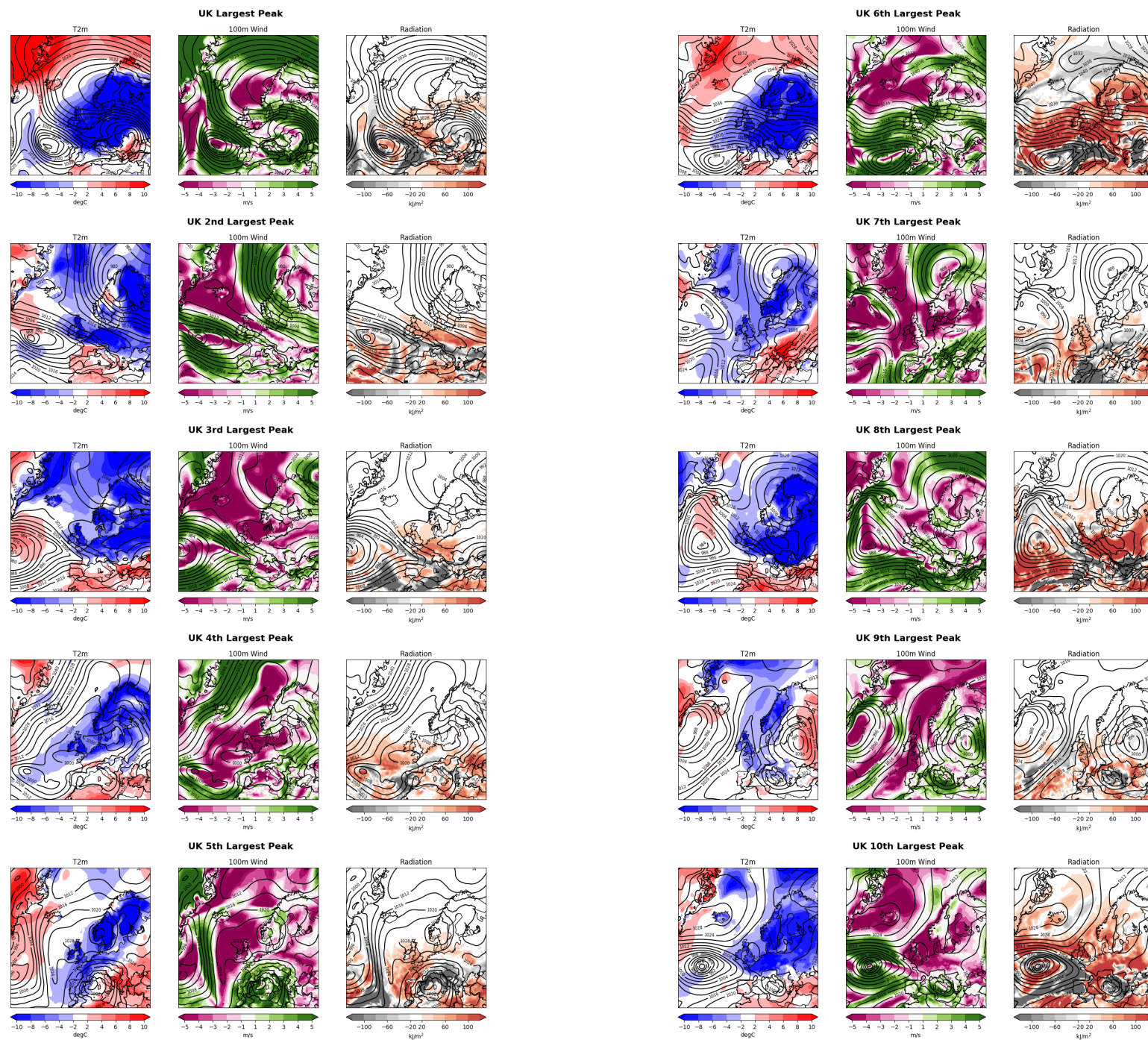
Supplementary Figure 1: Meteorological anomalies during the top 10 European peak demand events (dates given in Supplementary Table 1. Subplots show (left) 2m temperature (middle) 100m wind speed (right) surface solar radiation.





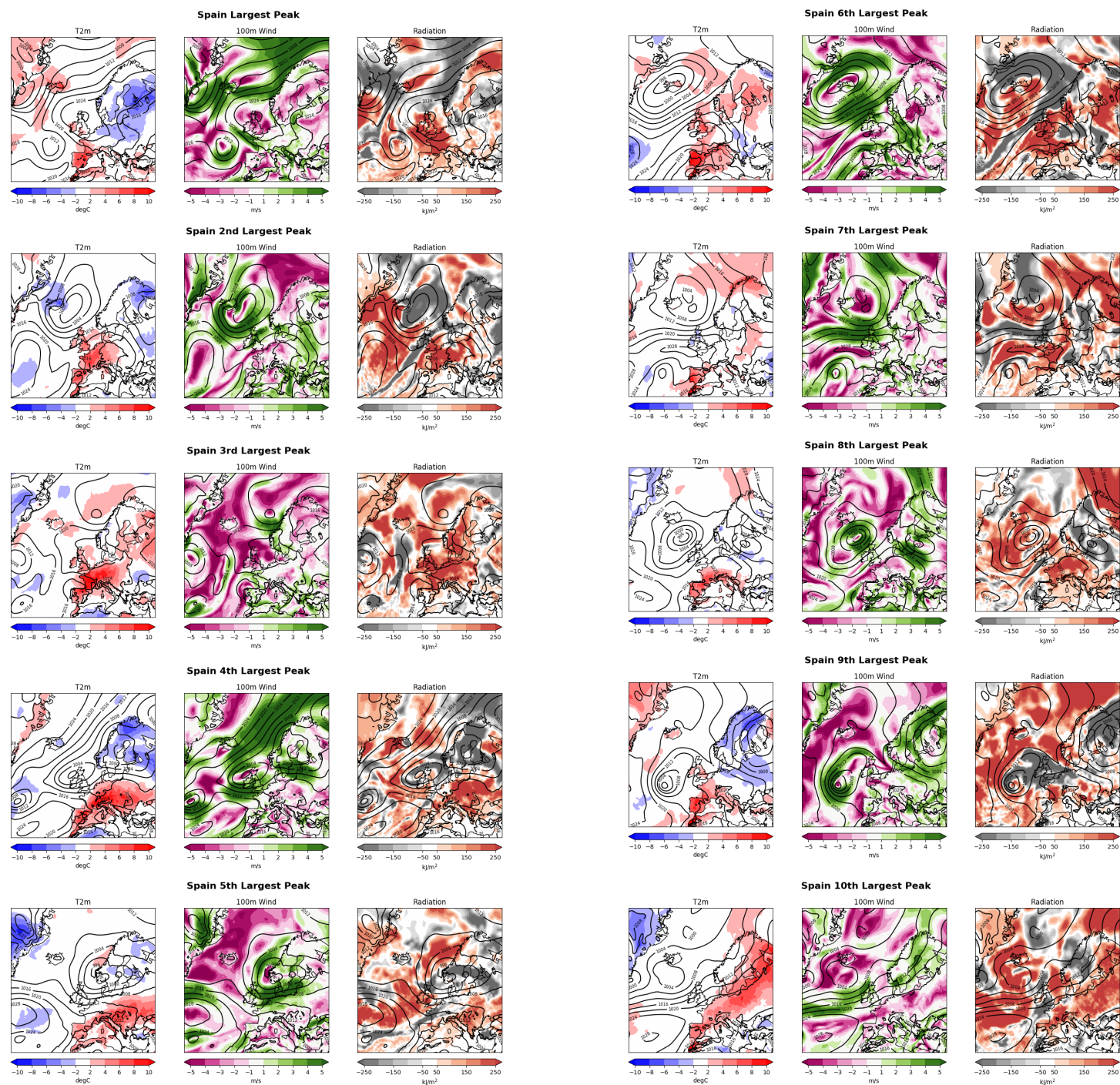
Supplementary Figure 2: Meteorological anomalies during the top 10 peak demand events for France (dates given in Supplementary Table 1. Subplots show (left) 2m temperature (middle) 100m wind speed (right) surface solar radiation.





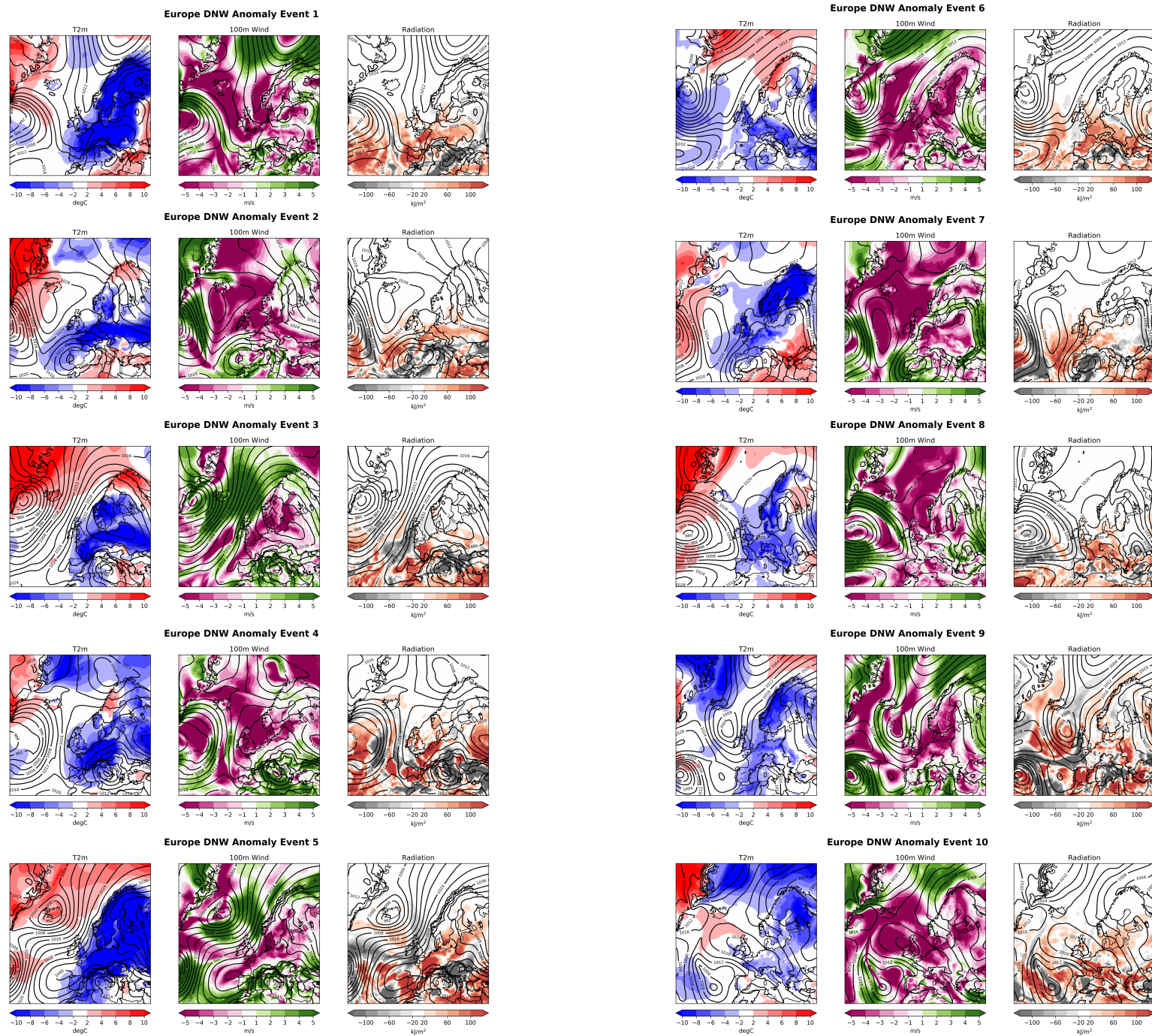
Supplementary Figure 3: Meteorological anomalies during the top 10 peak demand events for the United Kingdom (dates given in Supplementary Table 1. Subplots show (left) 2m temperature (middle) 100m wind speed (right) surface solar radiation.





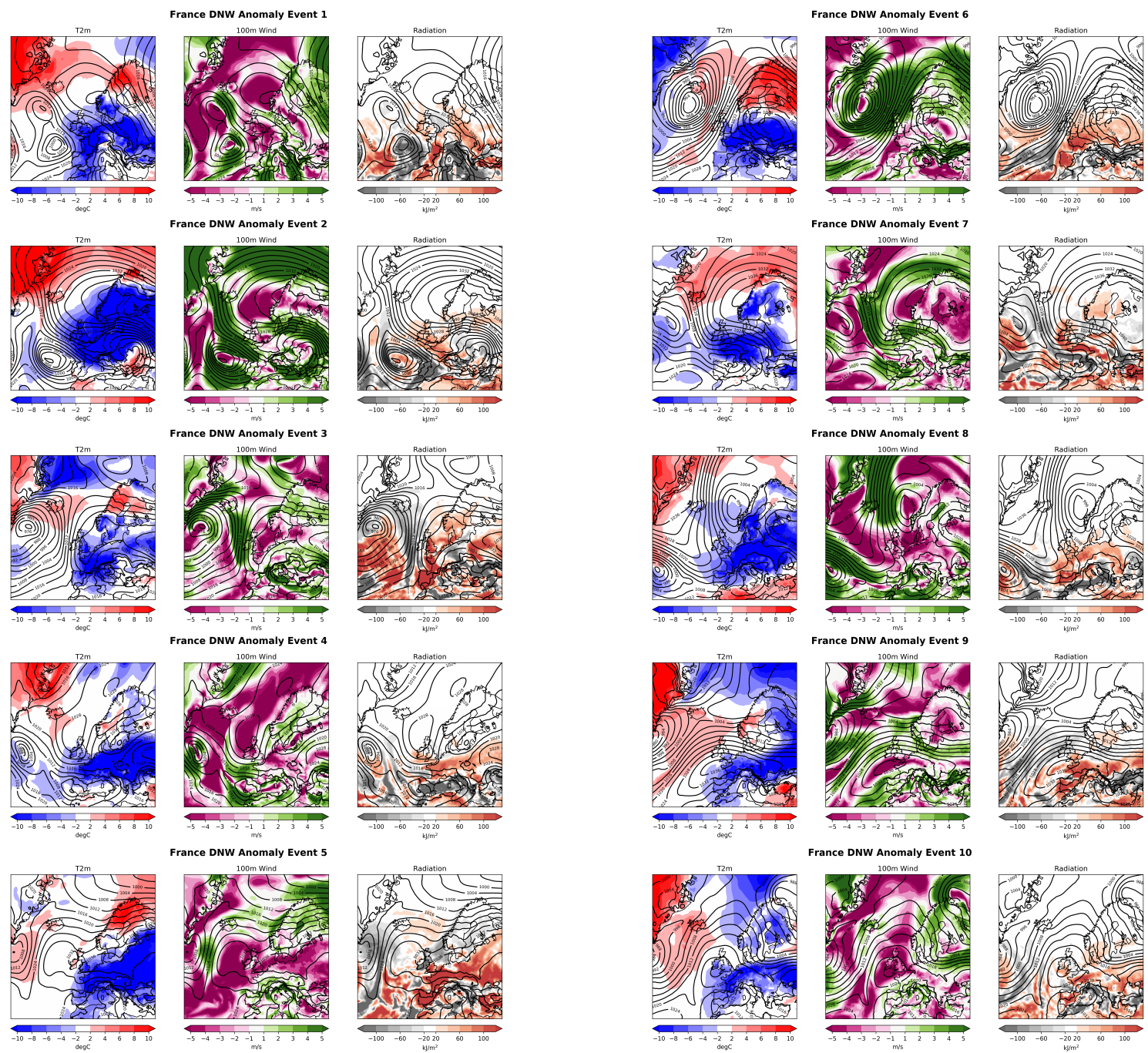
Supplementary Figure 4: Meteorological anomalies during the top 10 peak demand events for Spain (dates given in Supplementary Table 1). Subplots show (left) 2m temperature (middle) 100m wind speed (right) surface solar radiation.





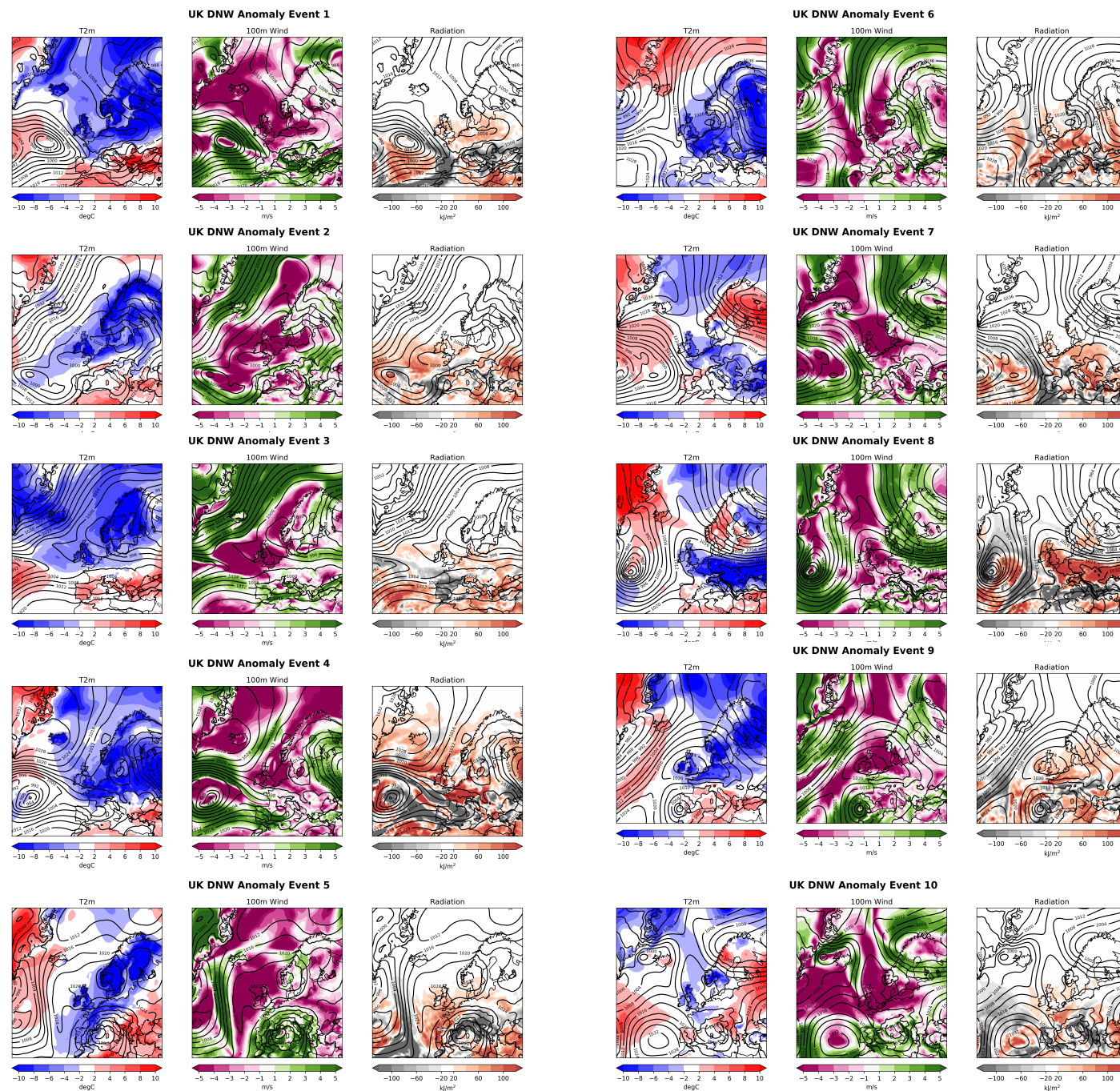
Supplementary Figure 5: Meteorological anomalies during the top 10 European peak demand-net-wind events (dates given in Supplementary Table 1. Subplots show (left) 2m temperature (middle) 100m wind speed (right) surface solar radiation.





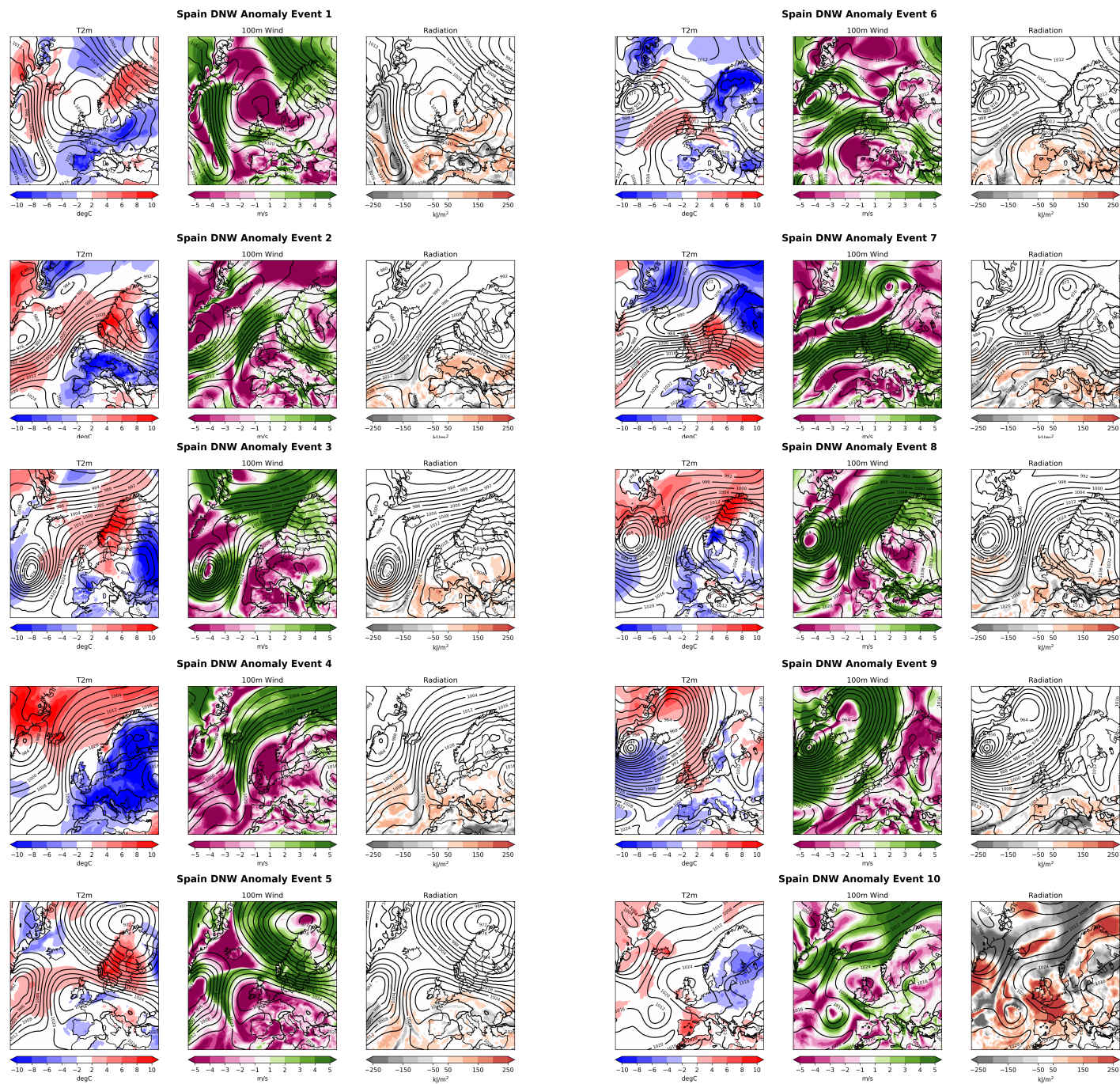
Supplementary Figure 6: Meteorological anomalies during the top 10 peak demand-net-wind events for France (dates given in Supplementary Table 1. Subplots show (left) 2m temperature (middle) 100m wind speed (right) surface solar radiation.



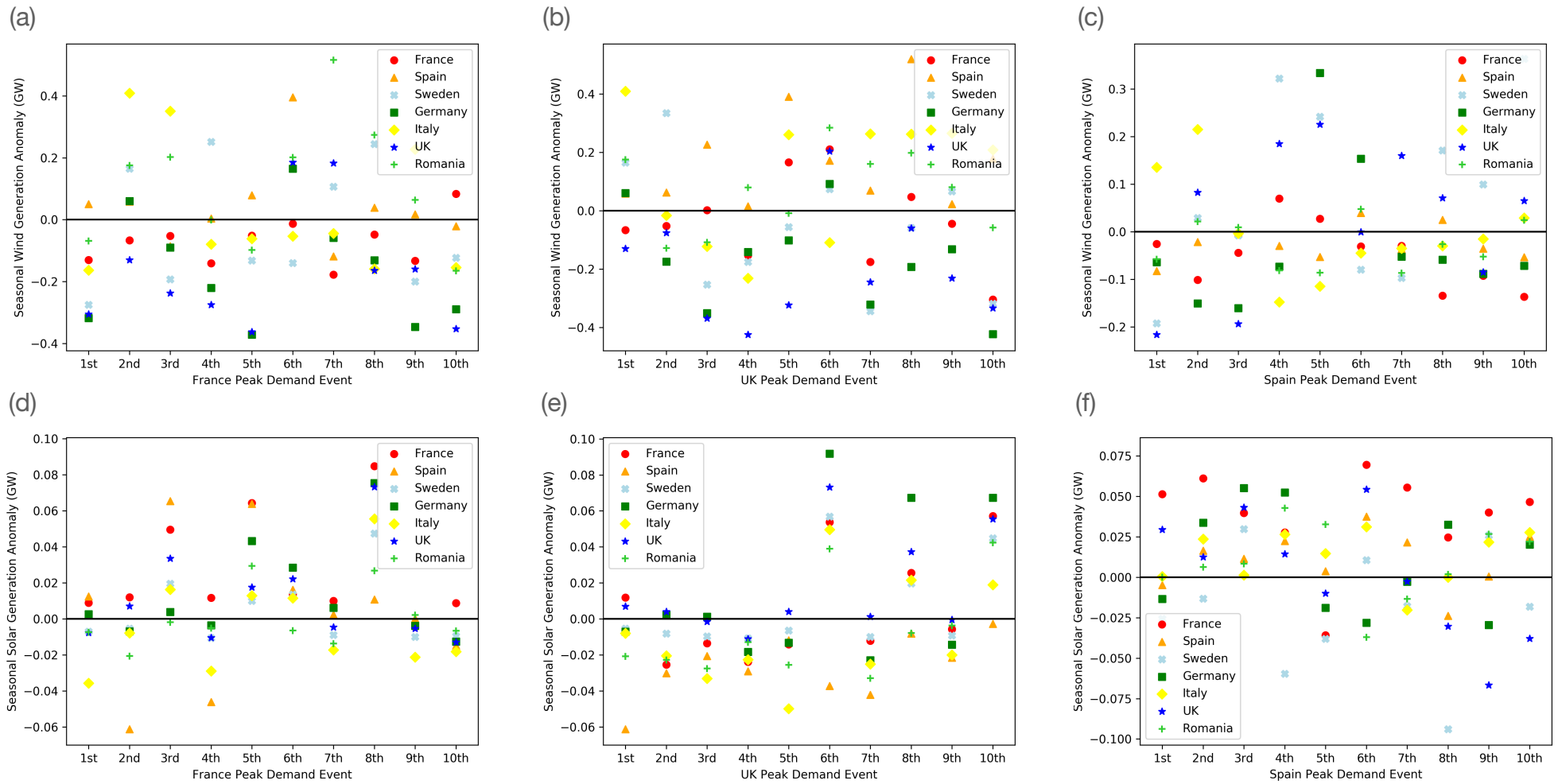


Supplementary Figure 7: Meteorological anomalies during the top 10 peak demand-net-wind events for the United Kingdom (dates given in Supplementary Table 1. Subplots show (left) 2m temperature (middle) 100m wind speed (right) surface solar radiation.





Supplementary Figure 8: Meteorological anomalies during the top 10 peak demand-net-wind events for Spain (dates given in Supplementary Table 1. Subplots show (left) 2m temperature (middle) 100m wind speed (right) surface solar radiation.



Supplementary Figure 9: Normalised Power anomalies during the top 10 peak demand-net-wind events for (a and d) France (b and e) United Kingdom (c and f) Spain. Note the different y-axis for Spain compared to France and the United Kingdom for both wind power (a-c) and solar power (d-f).