

RECOVERING CLIMATIC DATA FROM DOCUMENTARY SOURCES: A CASE STUDY OF THE CLIMATE IN SOUTHERN SPAIN FROM 1792 TO 1808

F.S. RODRIGO

Dep. Chemistry and Physics, University of Almería, Spain

frodrigo@ual.es

SUPPLEMENTARY MATERIAL

In this document are included the following Figures and Tables:

Figure S1. (a) Number of seasonal records in Seville, 1792-1808, and combined temperature-rainfall conditions for winter (b), spring (c), summer (d), and autumn (e). Years are indicated by the last two digits.

Figure S2. As Fig. S1, for Córdoba.

Figure S3. As Figure S1 for Jaén.

Figure S4. As Figure S1 for Granada.

Figure S5. As Figure S1 for Murcia.

Table S1. Reports dated from 18 to 20 January 1799 (issues 6-11, 1799, Figure 6a).

Table S2. Reports dated from 12 to 14 April 1793 (issues 8-11, vol. 2, 1793, Figure 7a).

Table S3. Reports dated from 15 to 17 July 1796 (issues 57-60, 1796, Figure 8a).

Table S4. Reports dated from 21 to 23 November 1794 (issues 94-99, 1794, Figure 9a).

Figure S1. (a) Number of seasonal records in Seville, 1792-1808, and combined temperature-rainfall conditions for winter (b), spring (c), summer (d), and autumn (e). Years are indicated by the last two digits.

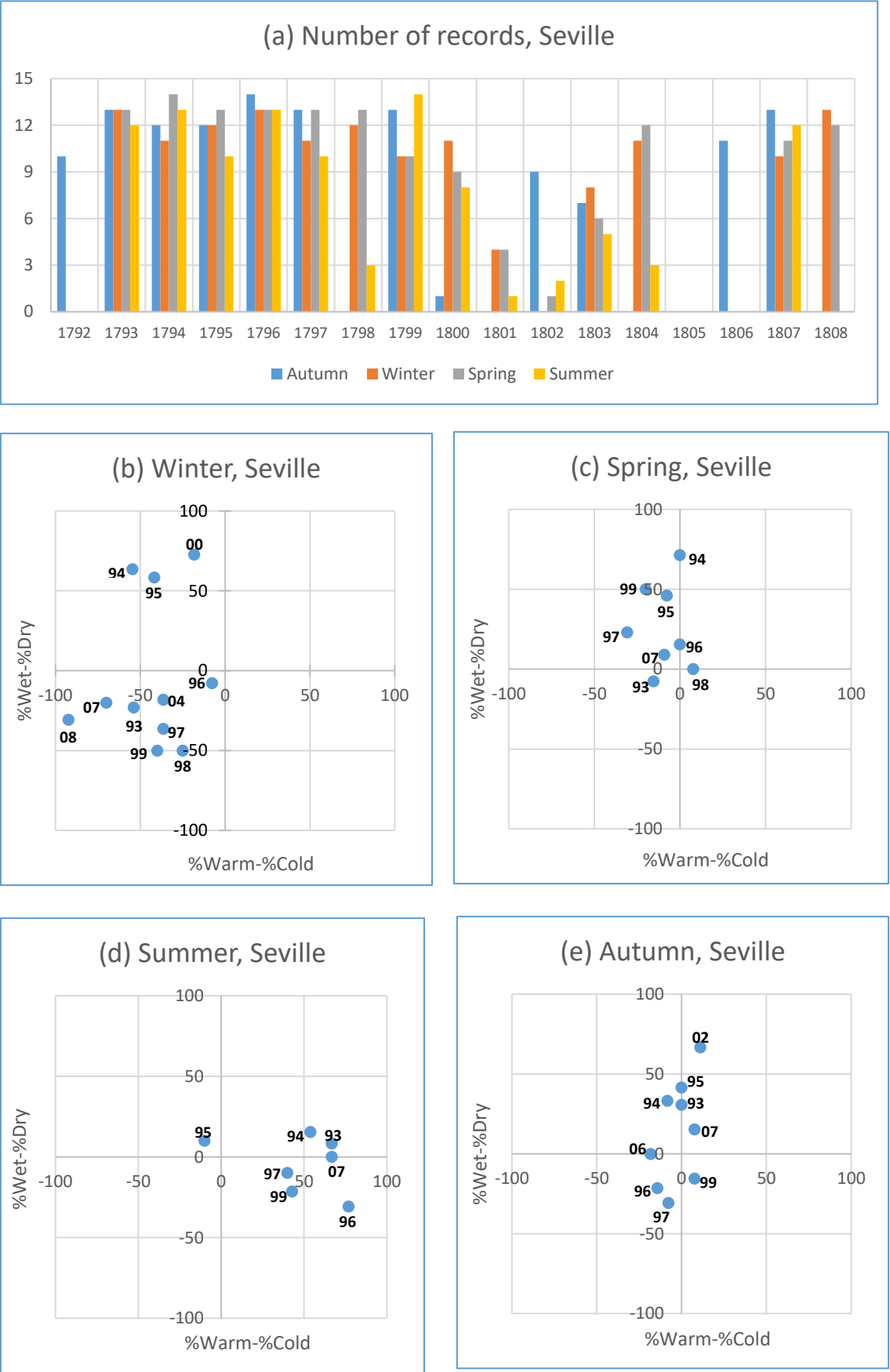


Figure S2. As Fig. S1, for Córdoba.

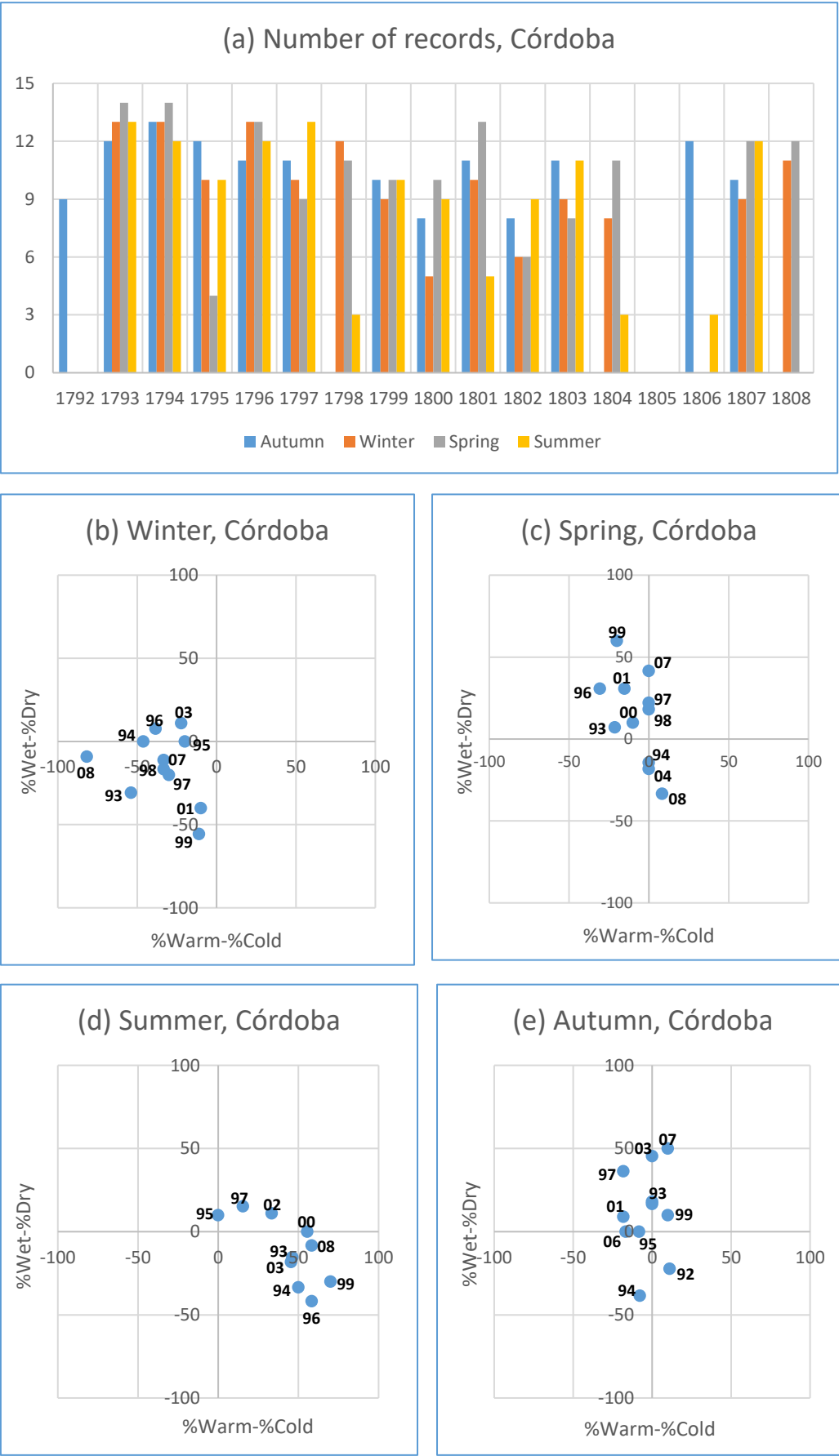


Figure S3. As Figure S1 for Jaén.

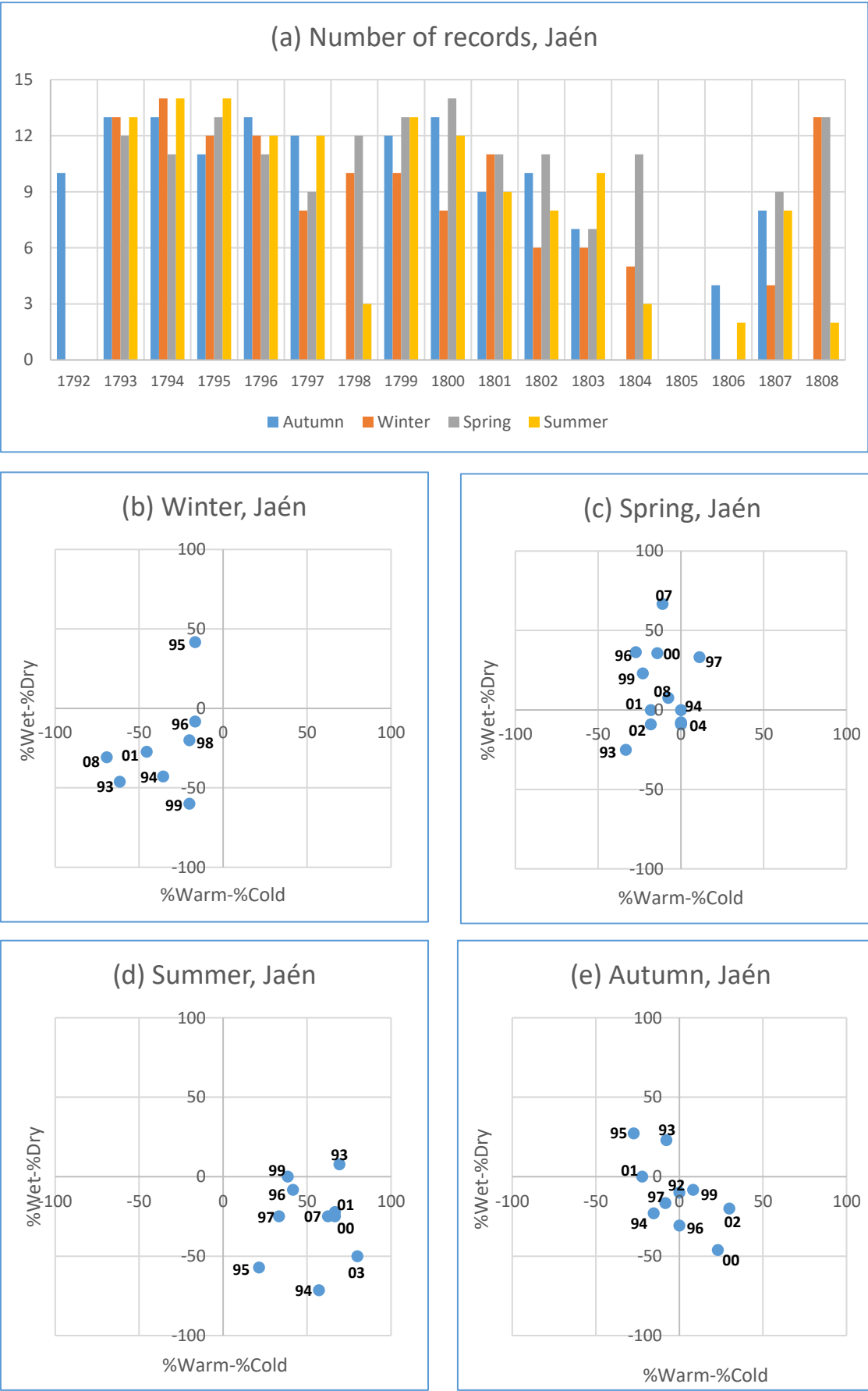


Figure S4. As Figure S1 for Granada.

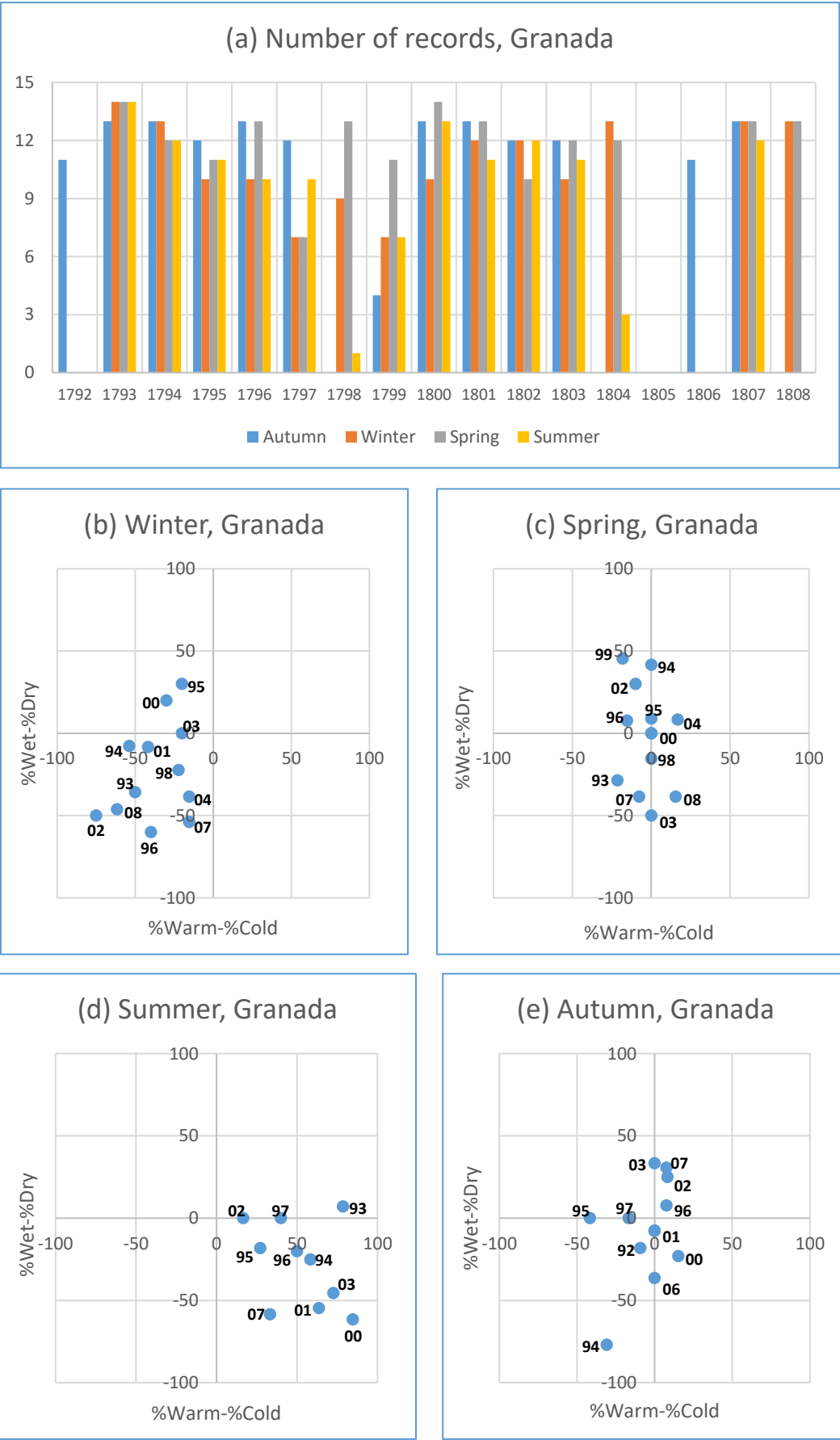


Figure S5. As Figure S1 for Murcia.

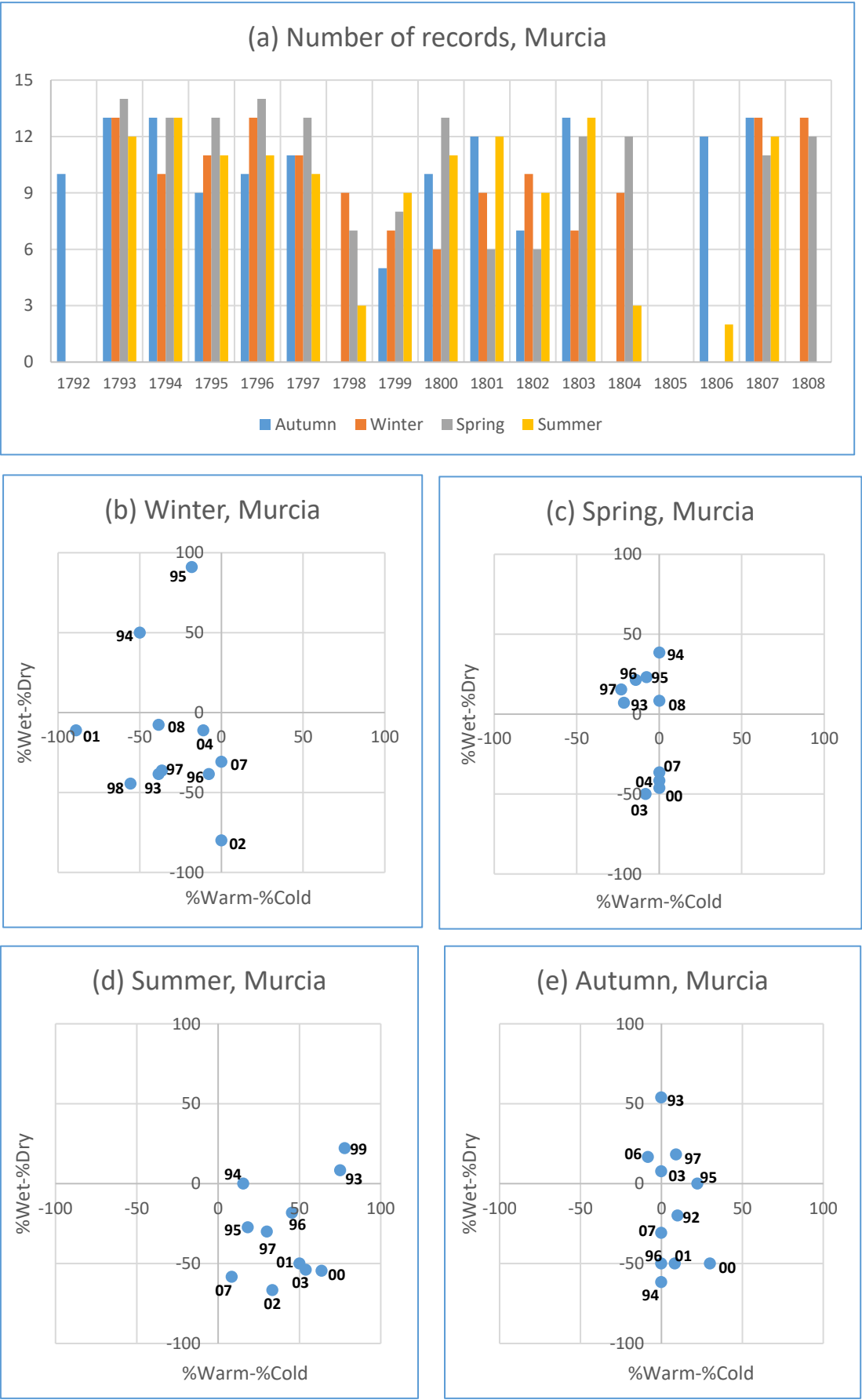


Table S1. Reports dated from 18 to 20 January 1799 (issues 6-11, 1799, Figure 6a).

Province	Date	Text (ancient Spanish)	Text (English)
Cuenca	18/01/1799	yela mucho	It freezes a lot
Catalonia	18/01/1799	Muy fr ío y yela bastante	Very cold and it freezes enough
Toledo	19/01/1799	despejado	Cloudless
Avila	19/01/1799	Contin úan los yelos	Ice continues
Segovia	19/01/1799	Hace fr ío con nieblas	It is cold with fog
Zamora	19/01/1799	Contin úan los yelos	Ice continues
Toro	19/01/1799	Contin úan los yelos	Ice continues
Soria	19/01/1799	Despejado con escarchas	Cloudless with frost
Oviedo	19/01/1799	Contin úan los frios	Cold continues
Galicia	19/01/1799	Hace un tiempo propio de la estacion	Weather typical of the season
Valencia	19/01/1799	Yela mucho	It freezes a lot
Seville	19/01/1799	Sereno y fr ío	Quiet and cold
Granada	19/01/1799	Caen grandes escarchas poco comunes en este pa ís	Great frosts, rare events in this country
Ja én	20/01/1799	Sereno y fr ío	Quiet and cold

Table S2. Reports dated from 12 to 14 April 1793 (issues 8-11, vol. 2, 1793, Figure 7a).

Province	Date	Text (ancient Spanish)	Text (English)
Madrid	12/04/1793	Ha llovido abundantemente	It has rained abundantly
Oviedo	12/04/1793	Siguen las lluvias y nieves favorables para los campos	Rain and snow favourable for fields continue
La Mancha	12/04/1793	Ha llovido abundantemente	It has rained abundantly
Cuenca	12/04/1793	Claro y templado	Clear and mild
Segovia	13/04/1793	Ha llovido y nevado bien, lo que ha sido muy provechoso	It has rained and snowed well, very beneficial for fields
Valladolid	13/04/1793	Ha llovido y nevado bien, lo que ha sido muy provechoso	It has rained and snowed well, very beneficial for fields
Extremadura	13/04/1793	Muy favorable	Very favourable
Murcia	13/04/1793	Siguen las rogativas para alcanzar el agua, que se necesita bastante	Rogations praying for water continue, it is quite necessary
Seville	13/04/1793	Ha llovido abundantemente	It has rained abundantly
Málaga	13/04/1793	Ha llovido abundantemente	It has rained abundantly
Avila	13/04/1793	Siguen las lluvias y nieves favorables para los campos	Rain and snow favourable for fields continue
Aragón	13/04/1793	Siguen las lluvias y nieves favorables para los campos	Rain and snow favourable for fields continue
Burgos	13/04/1793	Siguen las lluvias y nieves favorables para los campos	Rain and snow favourable for fields continue
Zamora	13/04/1793	Siguen las lluvias y nieves favorables para los campos	Rain and snow favourable for fields continue
Soria	13/04/1793	Siguen las lluvias y nieves favorables para los campos	Rain and snow favourable for fields continue
Toro	13/04/1793	Siguen las lluvias y nieves favorables para los campos	Rain and snow favourable for fields continue
Jaén	13/04/1793	Han continuado las nieves y lluvias	Snow and rain have continued
Granada	13/04/1793	Han continuado las nieves y lluvias	Snow and rain have continued
León	14/04/1793	Siguen las lluvias y nieves favorables para los campos	Rain and snow favourable for fields continue

Table S3. Reports dated from 15 to 17 July 1796 (issues 57-60, 1796, Figure 8a).

Province	Date	Text (ancient Spanish)	Text (English)
Burgos	15/07/1796	Sereno con vientos levantes	Quiet with east winds
La Mancha	15/07/1796	despejado	Cloudless
Granada	15/07/1796	Prosiguen los calores	Warm continues
Avila	16/07/1796	Caloroso y conveniente para las labores actuales del campo	Warm and convenient for field works
Segovia	16/07/1796	Caloroso y conveniente para las labores actuales del campo	Warm and convenient for field works
Salamanca	16/07/1796	Caloroso y conveniente para las labores actuales del campo	Warm and convenient for field works
Zamora	16/07/1796	Calores propios de la estacion	Warm typical of the season
Toro	16/07/1796	Calores propios de la estacion	Warm typical of the season
Valladolid	16/07/1796	Calores propios de la estacion	Warm typical of the season
Aragón	16/07/1796	Calores excesivos	Excessive warm
Valencia	16/07/1796	apacible	Mild
Toledo	17/07/1796	Sereno	Quiet
Córdoba	17/07/1796	Sereno y favorable para la recolección de frutos	Quiet and favourable for fruit harvesting

Table S4. Reports dated from 21 to 23 November 1794 (issues 94-99, 1794, Figure 9a).

Province	Date	Text (ancient Spanish)	Text (English)
Madrid	21/11/1794	Ha llovido copiosamente	It has rained copiously
La Mancha	21/11/1794	Ha llovido bastante para concluir la sementera	It has rained sufficient to finish the sowing
Segovia	22/11/1794	Ha serenado el tiempo despues de haber llovido	It has become quiet after rain
Murcia	22/11/1794	Seco y sereno	Dry and quiet
Zamora	22/11/1794	Est á el tiempo metido en aguas	Rainy
Salamanca	22/11/1794	Est á el tiempo metido en aguas	Rainy
Burgos	22/11/1794	Est á el tiempo metido en aguas	Rainy
Arag ón	22/11/1794	Continua la sequedad	Dryness continues
Seville	22/11/1794	Copiosa lluvia	Copious rain
Galicia	22/11/1794	Fr ó y lluvioso	Cold and rainy
Catalonia	22/11/1794	Vario y frio	Variable and cold
C órdoba	23/11/1794	Ha llovido y sigue lloviendo	It has rained, and the rain continues
Ja én	23/11/1794	Ha llovido abundantemente	It has rained abundantly
Granada	23/11/1794	Ha llovido abundantemente	It has rained abundantly