Pasos principales para la producción de una animación temporal sobre coropletas en ArcMap

- 1. Todas las capas y ficheros a utilizar y crear deben colgar de una misma geodatabase
- 2. Partimos de un shape o capa cuya tabla de atributos presenta en filas los registros (las unidades espaciales) y en columnas los momentos (años, meses, días, horas...) sobre los que contamos con datos temáticos. Ver tabla 1

distrito	1g2001	2g2001	3q2001	4q2001	1g2002	2g2002	3q2002	4q2002
Centro	1857,4144161	1988,012989	2061,026117	2155,490358	2292,020333	2454,7341384	2522,9991258	2789,513118
Arganzuela	1920,4065754	1989,755278	1974,715394	2027,376614	2150,814674	0	0	0
Retiro	2152,3613762	2339,663009	2425,844466	2504,29639	2557,599188	2710,9616256	2847,4916005	3045,7406052
Salamanca	2437,7763321	2533,101994	2615,377352	2825,983454	2902,664673	3113,0704559	3272.9788512	3468,4224454
Chamartin	2523,6880155	2660.918525	2857,184513	3006,464859	2836,269959	3095,3028564	3160,7624334	3529,2063384
Tetuán	2063,8250195	2254,02672	2287,169543	2321,009574	2474,372011	2483,7233796	2783.9022971	3024,2324585
Chamberi	2264,7895663	2454,963165	2446,560838	2695,0643	2780,16175	2901,7295358	3180,4003065	3353,4006172
Fuencarral	2060,0987703	2056,771561	2047,430647	2174,193094	2432,290855	2562,2748721	2675,4264266	2807,2807175
Moncioa	2019,0706865	2127,120674	2295,493186	2250,874313	2643,631775	2679,1669739	2621,1884914	2831,5942747
Latina	1473,8692763	1527,705991	1572,561489	1644,905657	1757,122075	1862,7925347	2028,3117509	2168,5822731
Carabanchel	1358,5578797	1413.035307	1481,473522	1572,900122	1651,451615	1799,2032313	1837.5438407	2069,4577707
Usera	1292,1485869	1331,38942	1409,831744	1532,689239	1555,132523	1731,8733807	1897,3925969	2032,0522982
Puente Vallecas	1344,0800244	1423,236125	1474,970852	1530,818966	1599,083953	1698,2084553	1733,7436543	1980,6197734
Moratalaz	1672,7093552	1716,384593	1742,091779	1826,322199	1920,771017	1990,9062783	2061.0415394	2315,398753
Ciudad Lineal	2006,8859076	2073,373884	2254,543786	2277,058144	2372,442099	2495,8801582	2674,4912898	2818,5023593
Hortaleza	2098,271749	2148,775634	2104,167428	2192,89583	2179,803915	2445,3827702	2422.0043499	2757,7184663
Villaverde	1110,5403032	1179,849663	1279,486084	1342,856466	1340,051055	1436,3701473	1692,5976345	1736,5490647
Villa Vallecas	1270,6172733	1451,022816	1398,119069	1458,813431	1534,559513	1543,9108809	1822.5816517	1862,7925347
Vicálvaro	1505,9105236	1523,721208	1689,379122	1664,54353	1934,798069	2012,4144251	2062,911813	2040,4685295
San Blas	1666,2966095	1743,727282	1805,71341	1851,570893	1908,614239	1949,7602585	2226.5607556	2346,2582679
Baraiae	1661 8003057	1670 770674	1842 425115	1964 722448	2082 540686	2151 7408104	2542 6360080	2403 1343860

3. Transpose

Como primer paso es necesario transponer las columnas de la tabla. Empleamos para ello el comando "transpose fields".

input Table		
Distritos_precios		1 B
Fields To Transpose		
Field Name	Value	^
✓ 1q2017	1q2017	
✓ 2q2017	2q2017	
✓ 3q2017	3q2017	
✓ 4q2017	4q2017	
✓ 1q2018	1q2018	
2q2018	2q2018	
✓ 3q2018	3q2018	
2 4q2018	4q2018	
N		
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Check Selected Unch Dutput Table C:\Users\PATXI\Documents Fonspose Field Tiempo	eck Selected \ArcGE5\Default.gdb\Distritos_pi	reclos_Tra
Check Selected Unch Dutput Table C:\Users\PATXI\Documents Transpose Field Tiempo	eck Selected (ArcGES\Default.gdb)Distritos_pi	reclos_Tra
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Check Selected Unch Output Table C:\Users\PATXI\Documents Tanspose Field Tempo C: User Field Tempo C: User Field Precio Internet Fields (optional) Space	eck Selected \ArcGI5\Default.gdb\Distritos_pi	redos_Tra
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Check Selected Unch Output Table C: Users\PATXI\Documents franspose Field Tiempo Precio Precio FID Shape CODBDT GEOCODIGO DESBDT Nombre	eck Selected \ArcGt5\Default.gdb\Distritos_pi	rectos_Tra
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4. Resultado de *transpose fields*.

Table				□ ×
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Distritos_precios_	TransposeF4			×
OBJECTID *	GEOCODIGO	tiempo	preciook	<u>^</u>
<u>۱</u>	07901	2q2004	3430,054783	
2	07902	2q2004	3277,259691	
3	07903	2q2004	3629,020324	
4	07904	2q2004	4151,837703	
5	07905	2q2004	4180,421138	
6	07906	2q2004	3401,042346	
7	07907	2q2004	4066,367504	
8	07908	2q2004	3357,620143	
9	07909	2q2004	3574,261794	
10	07910	2q2004	2532,250484	
11	07911	2q2004	2620,571581	
12	07912	2q2004	2545,303803	
13	07913	2q2004	2531,864514	
14	07914	2q2004	2798,046585	
15	07915	2q2004	3300,178751	
16	07916	2q2004	3210,29903	
17	07917	2q2004	2398,336252	
18	07918	2q2004	2375,563468	
19	07919	2q2004	2721,069496	
20	07920	2q2004	2968,700438	
21	07921	2q2004	2975,727584	
22	07901	3q2005	3841,284459	
23	07902	3q2005	3595,214614	
24	07903	3q2005	4011,976376	
25	07904	3q2005	4544,033118	
26	07905	3q2005	4423,761058	
27	07906	3q2005	3748,082432	
28	07907	3q2005	4436,230625	
29	07908	3q2005	3471,739871	
	07909	3q2005	3853,98329	
31	07910	3a2005	2967.623351	

5. Query table 1. Debemos crear una tabla query para poder relacionar la tabla resultado de la transposición con la capa de las unidades espaciales. Es importante señalar el campo que permitirá unir ambas (en este caso geocodigo)

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4	۰.	Or				
	()	Not.				
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distritos Distritos	gdb2 G	EOCODI Is_Transp	GO" = coseF4.GEOCO	DIGO1		
Clear		Venity	Help		Load	Save

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- 6. Seguidamente debemos convertir el campo "tiempo" en formato fecha

7. En las propiedades de la capa, indicamos que el campo "tiempo" es efectivamente un campo de tiempo

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Time propercies	- 1 F - 1				
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Time Step Interval:	2,00	Months	¥.		
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	🗌 Data cha	anges frequently so cal	culate time extent	automatically.	
Advanced settings					
Time Zone:	none			~	
	Values a	re adjusted for dayligh	t savings		
Time Offset:	0,00	Years	~		
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8. Creamos la animación de tiempo



9. Finalmente insertamos el calendario dinámico para poder conocer el momento de cada cambio temporal



10. Visualizamos la película creada y la exportamos a formato .AVI

Es necesario que en el gestor de animación, el valor de tiempo concuerde con los intervalos de tiempo del campo "tiempo"



El resultado de la animación puede verse en https://youtu.be/bQCbUE63U3o