FACULTAT D´ODONTOLOGÍA

UNIVERSITAT DE BARCELONA

DEPARTAMENT D´ODONTOESTOMATOLOGIA

TESIS DOCTORAL

EVALUACIÓN DE LA ACTIVIDAD OSTEOBLÁSTICA EN LA INTERFASE DE IMPLANTES DENTARIOS CON DIFERENTES SUPERFICIES MEDIANTE GAMMAGRAFÍA ÓSEA CON Tc^{99} MDF. ESTUDIO EN UN MODELO ANIMAL

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10.- ANEXOS

ANEXO 1: OUTPUT SAS

Modelo 1.

```
PROC MIXED DATA=DADES;
CLASS tip_implant localización t;
MODEL g_planar = tip_implant|localización|t /OUTP=RES1;
Repeated t / subject =id type=ar(1) group=localización;
random intercept / subject=id ;
LSMEANS tip_implant /pdiff;
LSMEANS tip_implant*t /pdiff;
LSMEANS localización*tip_implant /pdiff;
LSMEANS localización*tip_implant*t /slice=t pdiff;
ods output lsmeans=X1;
ods output diffs=X2;
RUN;
```

```
Model1: Gammagrafia G-Planar

The Mixed Procedure

Model Information

Data Set                     WORK.DADES
Dependent Variable           g_planar
Covariance Structures        Variance Components,
                             Autoregressive
Subject Effects              id, id
Group Effect                 localitzacio
Estimation Method            REML
Residual Variance Method     None
Fixed Effects SE Method      Model-Based
Degrees of Freedom Method    Containment


Class Level Information

 Class           Levels    Values

 tip_implant          2    a b
 localización         2    femur tibia
 t                    5    0 1 2 3 4


Dimensions

 Covariance Parameters             5
 Columns in X                     54
 Columns in Z Per Subject          1
 Subjects                         12
 Max Obs Per Subject              10
 Observations Used               120
 Observations Not Used             0
 Total Observations              120


Iteration History

Iteration    Evaluations    -2 Res Log Like       Criterion

        0              1        52.02936602
        1              3        47.51714411      0.00804090
        2              1        46.90853641      0.00030005
        3              1        46.88743890      0.00000055
        4              1        46.88740152      0.00000000

Convergence criteria met.

Covariance Parameter Estimates

  Cov Parm      Subject    Group                 Estimate
```

Intercept	id		0.002477
Variance	id	localización femur	0.07750
AR(1)	id	localización femur	0.2565
Variance	id	localización tibia	0.05496
AR(1)	id	localización tibia	-0.04273

Fit Statistics

Res Log Likelihood	-23.4
Akaike's Information Criterion	-28.4
Schwarz's Bayesian Criterion	-29.7
-2 Res Log Likelihood	46.9

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
tip_implant	1	90	4.46	0.0375
localización	1	90	6.29	0.0139
tip_impla*localización	1	90	0.00	0.9820
t	4	90	16.85	<.0001
tip_implant*t	4	90	1.61	0.1789
localización*t	4	90	0.71	0.5881
tip_impl*localización*t	4	90	0.86	0.4903

Least Squares Means

Effect	tip_implant	localitzacio	t	Estimate	Standard Error	DF	t Value	Pr > |t|
tip_implant	a			1.1742	0.04007	90	29.30	<.0001
tip_implant	b			1.2859	0.04007	90	32.09	<.0001
tip_implant*t	a		0	1.0794	0.07567	90	14.26	<.0001
tip_implant*t	a		1	1.4208	0.07567	90	18.78	<.0001
tip_implant*t	a		2	1.1725	0.07567	90	15.50	<.0001
tip_implant*t	a		3	1.1379	0.07567	90	15.04	<.0001
tip_implant*t	a		4	1.0606	0.07567	90	14.02	<.0001
tip_implant*t	b		0	1.0547	0.07567	90	13.94	<.0001
tip_implant*t	b		1	1.7315	0.07567	90	22.88	<.0001
tip_implant*t	b		2	1.3107	0.07567	90	17.32	<.0001
tip_implant*t	b		3	1.1990	0.07567	90	15.85	<.0001
tip_implant*t	b		4	1.1337	0.07567	90	14.98	<.0001
tip_impla*localizac	a	femur		1.1085	0.06557	90	16.91	<.0001
tip_impla*localizac	a	tibia		1.2399	0.04608	90	26.91	<.0001
tip_impla*localizac	b	femur		1.2189	0.06557	90	18.59	<.0001
tip_impla*localizac	b	tibia		1.3530	0.04608	90	29.36	<.0001
tip_impl*localiza*t	a	femur	0	1.1164	0.1155	90	9.67	<.0001
tip_impl*localiza*t	a	femur	1	1.2638	0.1155	90	10.95	<.0001
tip_impl*localiza*t	a	femur	2	1.1279	0.1155	90	9.77	<.0001
tip_impl*localiza*t	a	femur	3	1.0489	0.1155	90	9.09	<.0001
tip_impl*localiza*t	a	femur	4	0.9858	0.1155	90	8.54	<.0001
tip_impl*localiza*t	a	tibia	0	1.0423	0.09784	90	10.65	<.0001
tip_impl*localiza*t	a	tibia	1	1.5778	0.09784	90	16.13	<.0001
tip_impl*localiza*t	a	tibia	2	1.2171	0.09784	90	12.44	<.0001
tip_impl*localiza*t	a	tibia	3	1.2269	0.09784	90	12.54	<.0001
tip_impl*localiza*t	a	tibia	4	1.1353	0.09784	90	11.60	<.0001
tip_impl*localiza*t	b	femur	0	0.9199	0.1155	90	7.97	<.0001
tip_impl*localiza*t	b	femur	1	1.6213	0.1155	90	14.04	<.0001
tip_impl*localiza*t	b	femur	2	1.3055	0.1155	90	11.31	<.0001
tip_impl*localiza*t	b	femur	3	1.1560	0.1155	90	10.01	<.0001
tip_impl*localiza*t	b	femur	4	1.0918	0.1155	90	9.46	<.0001
tip_impl*localiza*t	b	tibia	0	1.1894	0.09784	90	12.16	<.0001
tip_impl*localiza*t	b	tibia	1	1.8418	0.09784	90	18.82	<.0001
tip_impl*localiza*t	b	tibia	2	1.3159	0.09784	90	13.45	<.0001
tip_impl*localiza*t	b	tibia	3	1.2421	0.09784	90	12.70	<.0001
tip_impl*localiza*t	b	tibia	4	1.1756	0.09784	90	12.02	<.0001

Differences of Least Squares Means

Model 1: Gammografia G-Planar

Effect	tip_implant	localización	t	_tip_implant	_localización	_t	Estimate	Standard Error	DF	t Value	Pr > |t|
tip_implant	a		_	b		_	-0.1117	0.05290	90	-2.11	0.0375
tip_implant*t	a		0	a		1	-0.3414	0.09786	90	-3.49	0.0008
tip_implant*t	a		0	a		2	-0.09313	0.1030	90	-0.90	0.3682
tip_implant*t	a		0	a		3	-0.05856	0.1045	90	-0.56	0.5768
tip_implant*t	a		0	a		4	0.01879	0.1049	90	0.18	0.8583
tip_implant*t	a		0	b		0	0.02470	0.1051	90	0.24	0.8147
tip_implant*t	a		0	b		1	-0.6522	0.1051	90	-6.21	<.0001
tip_implant*t	a		0	b		2	-0.2314	0.1051	90	-2.20	0.0302
tip_implant*t	a		0	b		3	-0.1197	0.1051	90	-1.14	0.2577
tip_implant*t	a		0	b		4	-0.05435	0.1051	90	-0.52	0.6062
tip_implant*t	a		1	a		2	0.2483	0.09786	90	2.54	0.0129
tip_implant*t	a		1	a		3	0.2829	0.1030	90	2.75	0.0073
tip_implant*t	a		1	a		4	0.3602	0.1045	90	3.45	0.0009
tip_implant*t	a		1	b		0	0.3661	0.1051	90	3.48	0.0008
tip_implant*t	a		1	b		1	-0.3108	0.1051	90	-2.96	0.0040
tip_implant*t	a		1	b		2	0.1100	0.1051	90	1.05	0.2977
tip_implant*t	a		1	b		3	0.2217	0.1051	90	2.11	0.0376
tip_implant*t	a		1	b		4	0.2871	0.1051	90	2.73	0.0076
tip_implant*t	a		2	a		3	0.03458	0.09786	90	0.35	0.7247
tip_implant*t	a		2	a		4	0.1119	0.1030	90	1.09	0.2800
tip_implant*t	a		2	b		0	0.1178	0.1051	90	1.12	0.2650
tip_implant*t	a		2	b		1	-0.5591	0.1051	90	-5.32	<.0001
tip_implant*t	a		2	b		2	-0.1382	0.1051	90	-1.32	0.1916
tip_implant*t	a		2	b		3	-0.02654	0.1051	90	-0.25	0.8011

tip_implant*t	a		2	b		4	0.03878	0.1051	90	0.37	0.7129
tip_implant*t	a		3	a		4	0.07735	0.09786	90	0.79	0.4314
tip_implant*t	a		3	b		0	0.08326	0.1051	90	0.79	0.4302
tip_implant*t	a		3	b		1	-0.5936	0.1051	90	-5.65	<.0001
tip_implant*t	a		3	b		2	-0.1728	0.1051	90	-1.64	0.1035
tip_implant*t	a		3	b		3	-0.06112	0.1051	90	-0.58	0.5622
tip_implant*t	a		3	b		4	0.004208	0.1051	90	0.04	0.9681
tip_implant*t	a		4	b		0	0.005908	0.1051	90	0.06	0.9553
tip_implant*t	a		4	b		1	-0.6710	0.1051	90	-6.39	<.0001
tip_implant*t	a		4	b		2	-0.2502	0.1051	90	-2.38	0.0194
tip_implant*t	a		4	b		3	-0.1385	0.1051	90	-1.32	0.1909
tip_implant*t	a		4	b		4	-0.07314	0.1051	90	-0.70	0.4881
tip_implant*t	b		0	b		1	-0.6769	0.09786	90	-6.92	<.0001
tip_implant*t	b		0	b		2	-0.2561	0.1030	90	-2.49	0.0147
tip_implant*t	b		0	b		3	-0.1444	0.1045	90	-1.38	0.1707
tip_implant*t	b		0	b		4	-0.07905	0.1049	90	-0.75	0.4532
tip_implant*t	b		1	b		2	0.4208	0.09786	90	4.30	<.0001
tip_implant*t	b		1	b		3	0.5325	0.1030	90	5.17	<.0001
tip_implant*t	b		1	b		4	0.5978	0.1045	90	5.72	<.0001
tip_implant*t	b		2	b		3	0.1117	0.09786	90	1.14	0.2567
tip_implant*t	b		2	b		4	0.1770	0.1030	90	1.72	0.0890
tip_implant*t	b		3	b		4	0.06533	0.09786	90	0.67	0.5062
tip_impla*localizac.	a	femur	_	a	tibia	_	-0.1313	0.08014	90	-1.64	0.1048
tip_impla*localizac.	a	femur	_	b	femur	_	-0.1104	0.09273	90	-1.19	0.2371
tip_impla*localizac.	a	femur	_	b	tibia	_	-0.2444	0.07481	90	-3.27	0.0015
tip_impla*localizac.	a	tibia	_	b	femur	_	0.02098	0.07481	90	0.28	0.7798
tip_impla*localizac.	a	tibia	_	b	tibia	_	-0.1131	0.06517	90	-1.74	0.0862
tip_impla*localizac.	b	femur	_	b	tibia	_	-0.1341	0.08014	90	-1.67	0.0979
tip_impl*localiza*t.	a	femur	0	a	femur	1	-0.1474	0.1386	90	-1.06	0.2904
tip_impl*localiza*t.	a	femur	0	a	femur	2	-0.01150	0.1553	90	-0.07	0.9412
tip_impl*localiza*t.	a	femur	0	a	femur	3	0.06748	0.1594	90	0.42	0.6730
tip_impl*localiza*t.	a	femur	0	a	femur	4	0.1306	0.1604	90	0.81	0.4176
tip_impl*localiza*t.	a	femur	0	a	tibia	0	0.07407	0.1513	90	0.49	0.6257
tip_impl*localiza*t.	a	femur	0	a	tibia	1	-0.4614	0.1513	90	-3.05	0.0030
tip_impl*localiza*t.	a	femur	0	a	tibia	2	-0.1007	0.1513	90	-0.67	0.5075
tip_impl*localiza*t.	a	femur	0	a	tibia	3	-0.1105	0.1513	90	-0.73	0.4670
tip_impl*localiza*t.	a	femur	0	a	tibia	4	-0.01895	0.1513	90	-0.13	0.9006
tip_impl*localiza*t.	a	femur	0	b	femur	0	0.1965	0.1633	90	1.20	0.2320
tip_impl*localiza*t.	a	femur	0	b	femur	1	-0.5049	0.1633	90	-3.09	0.0026
tip_impl*localiza*t.	a	femur	0	b	femur	2	-0.1891	0.1633	90	-1.16	0.2497
tip_impl*localiza*t.	a	femur	0	b	femur	3	-0.03958	0.1633	90	-0.24	0.8090
tip_impl*localiza*t.	a	femur	0	b	femur	4	0.02457	0.1633	90	0.15	0.8807
tip_impl*localiza*t.	a	femur	0	b	tibia	0	-0.07300	0.1486	90	-0.49	0.6244
tip_impl*localiza*t.	a	femur	0	b	tibia	1	-0.7254	0.1486	90	-4.88	<.0001
tip_impl*localiza*t.	a	femur	0	b	tibia	2	-0.1995	0.1486	90	-1.34	0.1827
tip_impl*localiza*t.	a	femur	0	b	tibia	3	-0.1257	0.1486	90	-0.85	0.3998
tip_impl*localiza*t.	a	femur	0	b	tibia	4	-0.05920	0.1486	90	-0.40	0.6912
tip_impl*localiza*t.	a	femur	1	a	femur	2	0.1359	0.1386	90	0.98	0.3294
tip_impl*localiza*t.	a	femur	1	a	femur	3	0.2149	0.1553	90	1.38	0.1700
tip_impl*localiza*t.	a	femur	1	a	femur	4	0.2780	0.1594	90	1.74	0.0845
tip_impl*localiza*t.	a	femur	1	a	tibia	0	0.2215	0.1513	90	1.46	0.1468
tip_impl*localiza*t.	a	femur	1	a	tibia	1	-0.3140	0.1513	90	-2.07	0.0409
tip_impl*localiza*t.	a	femur	1	a	tibia	2	0.04670	0.1513	90	0.31	0.7583
tip_impl*localiza*t.	a	femur	1	a	tibia	3	0.03687	0.1513	90	0.24	0.8081
tip_impl*localiza*t.	a	femur	1	a	tibia	4	0.1285	0.1513	90	0.85	0.3982
tip_impl*localiza*t.	a	femur	1	b	femur	0	0.3439	0.1633	90	2.11	0.0380
tip_impl*localiza*t.	a	femur	1	b	femur	1	-0.3575	0.1633	90	-2.19	0.0311
tip_impl*localiza*t.	a	femur	1	b	femur	2	-0.04175	0.1633	90	-0.26	0.7988
tip_impl*localiza*t.	a	femur	1	b	femur	3	0.1078	0.1633	90	0.66	0.5107
tip_impl*localiza*t.	a	femur	1	b	femur	4	0.1720	0.1633	90	1.05	0.2950
tip_impl*localiza*t.	a	femur	1	b	tibia	0	0.07440	0.1486	90	0.50	0.6178
tip_impl*localiza*t.	a	femur	1	b	tibia	1	-0.5780	0.1486	90	-3.89	0.0002
tip_impl*localiza*t.	a	femur	1	b	tibia	2	-0.05213	0.1486	90	-0.35	0.7265
tip_impl*localiza*t.	a	femur	1	b	tibia	3	0.02170	0.1486	90	0.15	0.8842
tip_impl*localiza*t.	a	femur	1	b	tibia	4	0.08820	0.1486	90	0.59	0.5543
tip_impl*localiza*t.	a	femur	2	a	femur	3	0.07898	0.1386	90	0.57	0.5702
tip_impl*localiza*t.	a	femur	2	a	femur	4	0.1421	0.1553	90	0.91	0.3628
tip_impl*localiza*t.	a	femur	2	a	tibia	0	0.08557	0.1513	90	0.57	0.5732
tip_impl*localiza*t.	a	femur	2	a	tibia	1	-0.4499	0.1513	90	-2.97	0.0038
tip_impl*localiza*t.	a	femur	2	a	tibia	2	-0.08920	0.1513	90	-0.59	0.5570
tip_impl*localiza*t.	a	femur	2	a	tibia	3	-0.09903	0.1513	90	-0.65	0.5145
tip_impl*localiza*t.	a	femur	2	a	tibia	4	-0.00745	0.1513	90	-0.05	0.9608
tip_impl*localiza*t.	a	femur	2	b	femur	0	0.2080	0.1633	90	1.27	0.2060
tip_impl*localiza*t.	a	femur	2	b	femur	1	-0.4934	0.1633	90	-3.02	0.0033
tip_impl*localtza*t.	a	femur	2	b	femur	2	-0.1776	0.1633	90	-1.09	0.2795
tip_impl*localiza*t.	a	femur	2	b	femur	3	-0.02808	0.1633	90	-0.17	0.8638
tip_impl*localiza*t.	a	femur	2	b	femur	4	0.03607	0.1633	90	0.22	0.8257
tip_impl*localiza*t.	a	femur	2	b	tibia	0	-0.06150	0.1486	90	-0.41	0.6799
tip_impl*localiza*t.	a	femur	2	b	tibia	1	-0.7139	0.1486	90	-4.80	<.0001
tip_impl*localiza*t.	a	femur	2	b	tibia	2	-0.1880	0.1486	90	-1.27	0.2089
tip_impl*localiza*t.	a	femur	2	b	tibia	3	-0.1142	0.1486	90	-0.77	0.4441
tip_impl*localiza*t.	a	femur	2	b	tibia	4	-0.04770	0.1486	90	-0.32	0.7489
tip_impl*localiza*t.	a	femur	3	a	femur	4	0.06312	0.1386	90	0.46	0.6499
tip_impl*localiza*t.	a	femur	3	a	tibia	0	0.006583	0.1513	90	0.04	0.9654
tip_impl*localiza*t.	a	femur	3	a	tibia	1	-0.5289	0.1513	90	-3.49	0.0007
tip_impl*localiza*t.	a	femur	3	a	tibia	2	-0.1682	0.1513	90	-1.11	0.2694
tip_impl*localiza*t.	a	femur	3	a	tibia	3	-0.1780	0.1513	90	-1.18	0.2426
tip_impl*localiza*t.	a	femur	3	a	tibia	4	-0.08643	0.1513	90	-0.57	0.5693
tip_impl*localiza*t.	a	femur	3	b	femur	0	0.1290	0.1633	90	0.79	0.4316
tip_impl*localiza*t.	a	femur	3	b	femur	1	-0.5724	0.1633	90	-3.51	0.0007
tip_impl*localiza*t.	a	femur	3	b	femur	2	-0.2566	0.1633	90	-1.57	0.1195
tip_impl*localiza*t.	a	femur	3	b	femur	3	-0.1071	0.1633	90	-0.66	0.5137
tip_impl*localiza*t.	a	femur	3	b	femur	4	-0.04292	0.1633	90	-0.26	0.7933
tip_impl*localiza*t.	a	femur	3	b	tibia	0	-0.1405	0.1486	90	-0.95	0.3469
tip_impl*localitza*t	a	femur	3	b	tibia	1	-0.7929	0.1486	90	-5.34	<.0001
tip_impl*localitza*t	a	femur	3	b	tibia	2	-0.2670	0.1486	90	-1.80	0.0757
tip_impl*localitza*t	a	femur	3	b	tibia	3	-0.1932	0.1486	90	-1.30	0.1968
tip_impl*localitza*t	a	femur	3	b	tibia	4	-0.1267	0.1486	90	-0.85	0.3961
tip_impl*localitza*t	a	femur	4	a	tibia	0	-0.05653	0.1513	90	-0.37	0.7096
tip_impl*localitza*t	a	femur	4	a	tibia	1	-0.5920	0.1513	90	-3.91	0.0002
tip_impl*localitza*t	a	femur	4	a	tibia	2	-0.2313	0.1513	90	-1.53	0.1299
tip_impl*localitza*t	a	femur	4	a	tibia	3	-0.2411	0.1513	90	-1.59	0.1146
tip_impl*localitza*t	a	femur	4	a	tibia	4	-0.1495	0.1513	90	-0.99	0.3257
tip_impl*localitza*t	a	femur	4	b	femur	0	0.06587	0.1633	90	0.40	0.6876
tip_impl*localitza*t	a	femur	4	b	femur	1	-0.6355	0.1633	90	-3.89	0.0002
tip_impl*localitza*t	a	femur	4	b	femur	2	-0.3198	0.1633	90	-1.96	0.0533
tip_impl*localitza*t	a	femur	4	b	femur	3	-0.1702	0.1633	90	-1.04	0.3000
tip_impl*localitza*t	a	femur	4	b	femur	4	-0.1060	0.1633	90	-0.65	0.5177
tip_impl*localitza*t	a	femur	4	b	tibia	0	-0.2036	0.1486	90	-1.37	0.1740
tip_impl*localitza*t	a	femur	4	b	tibia	1	-0.8560	0.1486	90	-5.76	<.0001
tip_impl*localitza*t	a	femur	4	b	tibia	2	-0.3301	0.1486	90	-2.22	0.0288
tip_impl*localitza*t	a	femur	4	b	tibia	3	-0.2563	0.1486	90	-1.73	0.0880
tip_impl*localitza*t	a	femur	4	b	tibia	4	-0.1898	0.1486	90	-1.28	0.2047
tip_impl*localitza*t	a	tibia	0	a	tibia	1	-0.5354	0.1382	90	-3.87	0.0002

tip_impl*localitza*t	a	tibia	0	a	tibia	2	-0.1748	0.1352	90	-1.29	0.1995
tip_impl*localitza*t	a	tibia	0	a	tibia	3	-0.1846	0.1354	90	-1.36	0.1760
tip_impl*localitza*t	a	tibia	0	a	tibia	4	-0.09302	0.1353	90	-0.69	0.4937
tip_impl*localitza*t	a	tibia	0	b	femur	0	0.1224	0.1486	90	0.82	0.4122
tip_impl*localitza*t	a	tibia	0	b	femur	1	-0.5790	0.1486	90	-3.90	0.0002
tip_impl*localitza*t	a	tibia	0	b	femur	2	-0.2632	0.1486	90	-1.77	0.0799
tip_impl*localitza*t	a	tibia	0	b	femur	3	-0.1137	0.1486	90	-0.76	0.4463
tip_impl*localitza*t	a	tibia	0	b	femur	4	-0.04950	0.1486	90	-0.33	0.7398
tip_impl*localitza*t	a	tibia	0	b	tibia	0	-0.1471	0.1384	90	-1.06	0.2907
tip_impl*localitza*t	a	tibia	0	b	tibia	1	-0.7995	0.1384	90	-5.78	<.0001
tip_impl*localitza*t	a	tibia	0	b	tibia	2	-0.2736	0.1384	90	-1.98	0.0511
tip_impl*localitza*t	a	tibia	0	b	tibia	3	-0.1998	0.1384	90	-1.44	0.1523
tip_impl*localitza*t	a	tibia	0	b	tibia	4	-0.1333	0.1384	90	-0.96	0.3381
tip_impl*localitza*t	a	tibia	1	a	tibia	2	0.3607	0.1382	90	2.61	0.0106
tip_impl*localitza*t	a	tibia	1	a	tibia	3	0.3508	0.1352	90	2.59	0.0111
tip_impl*localitza*t	a	tibia	1	a	tibia	4	0.4424	0.1354	90	3.27	0.0015
tip_impl*localitza*t	a	tibia	1	b	femur	0	0.6578	0.1486	90	4.43	<.0001
tip_impl*localitza*t	a	tibia	1	b	femur	1	-0.04352	0.1486	90	-0.29	0.7703
tip_impl*localitza*t	a	tibia	1	b	femur	2	0.2722	0.1486	90	1.83	0.0702
tip_impl*localitza*t	a	tibia	1	b	femur	3	0.4218	0.1486	90	2.84	0.0056
tip_impl*localitza*t	a	tibia	1	b	femur	4	0.4859	0.1486	90	3.27	0.0015
tip_impl*localitza*t	a	tibia	1	b	tibia	0	0.3884	0.1384	90	2.81	0.0061
tip_impl*localitza*t	a	tibia	1	b	tibia	1	-0.2641	0.1384	90	-1.91	0.0595
tip_impl*localitza*t	a	tibia	1	b	tibia	2	0.2618	0.1384	90	1.89	0.0617
tip_impl*localitza*t	a	tibia	1	b	tibia	3	0.3357	0.1384	90	2.43	0.0173
tip_impl*localitza*t	a	tibia	1	b	tibia	4	0.4022	0.1384	90	2.91	0.0046
tip_impl*localitza*t	a	tibia	2	a	tibia	3	-0.00983	0.1382	90	-0.07	0.9434
tip_impl*localitza*t	a	tibia	2	a	tibia	4	0.08175	0.1352	90	0.60	0.5470
tip_impl*localitza*t	a	tibia	2	b	femur	0	0.2972	0.1486	90	2.00	0.0485
tip_impl*localitza*t	a	tibia	2	b	femur	1	-0.4042	0.1486	90	-2.72	0.0078
tip_impl*localitza*t	a	tibia	2	b	femur	2	-0.08845	0.1486	90	-0.60	0.5531
tip_impl*localitza*t	a	tibia	2	b	femur	3	0.06112	0.1486	90	0.41	0.6818
tip_impl*localitza*t	a	tibia	2	b	femur	4	0.1253	0.1486	90	0.84	0.4014
tip_impl*localitza*t	a	tibia	2	b	tibia	0	0.02770	0.1384	90	0.20	0.8418
tip_impl*localitza*t	a	tibia	2	b	tibia	1	-0.6247	0.1384	90	-4.51	<.0001
tip_impl*localitza*t	a	tibia	2	b	tibia	2	-0.09883	0.1384	90	-0.71	0.4769
tip_impl*localitza*t	a	tibia	2	b	tibia	3	-0.02500	0.1384	90	-0.18	0.8570
tip_impl*localitza*t	a	tibia	2	b	tibia	4	0.04150	0.1384	90	0.30	0.7649
tip_impl*localitza*t	a	tibia	3	a	tibia	4	0.09158	0.1382	90	0.66	0.5093
tip_impl*localitza*t	a	tibia	3	b	femur	0	0.3070	0.1486	90	2.07	0.0417
tip_impl*localitza*t	a	tibia	3	b	femur	1	-0.3944	0.1486	90	-2.65	0.0094
tip_impl*localitza*t	a	tibia	3	b	femur	2	-0.07862	0.1486	90	-0.53	0.5980
tip_impl*localitza*t	a	tibia	3	b	femur	3	0.07095	0.1486	90	0.48	0.6341
tip_impl*localitza*t	a	tibia	3	b	femur	4	0.1351	0.1486	90	0.91	0.3656
tip_impl*localitza*t	a	tibia	3	b	tibia	0	0.03753	0.1384	90	0.27	0.7868
tip_impl*localitza*t	a	tibia	3	b	tibia	1	-0.6149	0.1384	90	-4.44	<.0001
tip_impl*localitza*t	a	tibia	3	b	tibia	2	-0.08900	0.1384	90	-0.64	0.5217
tip_impl*localitza*t	a	tibia	3	b	tibia	3	-0.01517	0.1384	90	-0.11	0.9130
tip_impl*localitza*t	a	tibia	3	b	tibia	4	0.05133	0.1384	90	0.37	0.7115
tip_impl*localitza*t	a	tibia	4	b	femur	0	0.2154	0.1486	90	1.45	0.1506
tip_impl*localitza*t	a	tibia	4	b	femur	1	-0.4859	0.1486	90	-3.27	0.0015
tip_impl*localitza*t	a	tibia	4	b	femur	2	-0.1702	0.1486	90	-1.15	0.2550
tip_impl*localitza*t	a	tibia	4	b	femur	3	-0.02063	0.1486	90	-0.14	0.8899
tip_impl*localitza*t	a	tibia	4	b	femur	4	0.04352	0.1486	90	0.29	0.7703
tip_impl*localitza*t	a	tibia	4	b	tibia	0	-0.05405	0.1384	90	-0.39	0.6970
tip_impl*localitza*t	a	tibia	4	b	tibia	1	-0.7065	0.1384	90	-5.11	<.0001
tip_impl*localitza*t	a	tibia	4	b	tibia	2	-0.1806	0.1384	90	-1.31	0.1952
tip_impl*localitza*t	a	tibia	4	b	tibia	3	-0.1068	0.1384	90	-0.77	0.4424
tip_impl*localitza*t	a	tibia	4	b	tibia	4	-0.04025	0.1384	90	-0.29	0.7718
tip_impl*localitza*t	b	femur	0	b	femur	1	-0.7013	0.1386	90	-5.06	<.0001
tip_impl*localitza*t	b	femur	0	b	femur	2	-0.3856	0.1553	90	-2.48	0.0149
tip_impl*localitza*t	b	femur	0	b	femur	3	-0.2360	0.1594	90	-1.48	0.1420
tip_impl*localitza*t	b	femur	0	b	femur	4	-0.1719	0.1604	90	-1.07	0.2866
tip_impl*localitza*t	b	femur	0	b	tibia	0	-0.2695	0.1513	90	-1.78	0.0783
tip_impl*localitza*t	b	femur	0	b	tibia	1	-0.9219	0.1513	90	-6.09	<.0001
tip_impl*localitza*t	b	femur	0	b	tibia	2	-0.3960	0.1513	90	-2.62	0.0104
tip_impl*localitza*t	b	femur	0	b	tibia	3	-0.3222	0.1513	90	-2.13	0.0360
tip_impl*localitza*t	b	femur	0	b	tibia	4	-0.2557	0.1513	90	-1.69	0.0946
tip_impl*localitza*t	b	femur	1	b	femur	2	0.3157	0.1386	90	2.28	0.0251
tip_impl*localitza*t	b	femur	1	b	femur	3	0.4653	0.1553	90	3.00	0.0035
tip_impl*localitza*t	b	femur	1	b	femur	4	0.5295	0.1594	90	3.32	0.0013
tip_impl*localitza*t	b	femur	1	b	tibia	0	0.4319	0.1513	90	2.85	0.0054
tip_impl*localitza*t	b	femur	1	b	tibia	1	-0.2205	0.1513	90	-1.46	0.1485
tip_impl*localitza*t	b	femur	1	b	tibia	2	0.3053	0.1513	90	2.02	0.0466
tip_impl*localitza*t	b	femur	1	b	tibia	3	0.3792	0.1513	90	2.51	0.0140
tip_impl*localitza*t	b	femur	1	b	tibia	4	0.4457	0.1513	90	2.95	0.0041
tip_impl*localitza*t	b	femur	2	b	femur	3	0.1496	0.1386	90	1.08	0.2834
tip_impl*localitza*t	b	femur	2	b	femur	4	0.2137	0.1553	90	1.38	0.1723
tip_impl*localitza*t	b	femur	2	b	tibia	0	0.1161	0.1513	90	0.77	0.4448
tip_impl*localitza*t	b	femur	2	b	tibia	1	-0.5363	0.1513	90	-3.54	0.0006
tip_impl*localitza*t	b	femur	2	b	tibia	2	-0.01038	0.1513	90	-0.07	0.9454
tip_impl*localitza*t	b	femur	2	b	tibia	3	0.06345	0.1513	90	0.42	0.6760
tip_impl*localitza*t	b	femur	2	b	tibia	4	0.1300	0.1513	90	0.86	0.3928
tip_impl*localitza*t	b	femur	3	b	femur	4	0.06415	0.1386	90	0.46	0.6446
tip_impl*localitza*t	b	femur	3	b	tibia	0	-0.03342	0.1513	90	-0.22	0.8257
tip_impl*localitza*t	b	femur	3	b	tibia	1	-0.6858	0.1513	90	-4.53	<.0001
tip_impl*localitza*t	b	femur	3	b	tibia	2	-0.1600	0.1513	90	-1.06	0.2934
tip_impl*localitza*t	b	femur	3	b	tibia	3	-0.08612	0.1513	90	-0.57	0.5707
tip_impl*localitza*t	b	femur	3	b	tibia	4	-0.01962	0.1513	90	-0.13	0.8972
tip_impl*localitza*t	b	femur	4	b	tibia	0	-0.09757	0.1513	90	-0.64	0.5207
tip_impl*localitza*t	b	femur	4	b	tibia	1	-0.7500	0.1513	90	-4.96	<.0001
tip_impl*localitza*t	b	femur	4	b	tibia	2	-0.2241	0.1513	90	-1.48	0.1421
tip_impl*localitza*t	b	femur	4	b	tibia	3	-0.1503	0.1513	90	-0.99	0.3234
tip_impl*localitza*t	b	femur	4	b	tibia	4	-0.08377	0.1513	90	-0.55	0.5813
tip_impl*localitza*t	b	tibia	0	b	tibia	1	-0.6524	0.1382	90	-4.72	<.0001
tip_impl*localitza*t	b	tibia	0	b	tibia	2	-0.1265	0.1352	90	-0.94	0.3519
tip_impl*localitza*t	b	tibia	0	b	tibia	3	-0.05270	0.1354	90	-0.39	0.6979
tip_impl*localitza*t	b	tibia	0	b	tibia	4	0.01380	0.1353	90	0.10	0.9190
tip_impl*localitza*t	b	tibia	1	b	tibia	2	0.5259	0.1382	90	3.80	0.0003
tip_impl*localitza*t	b	tibia	1	b	tibia	3	0.5997	0.1352	90	4.43	<.0001
tip_impl*localitza*t	b	tibia	1	b	tibia	4	0.6662	0.1354	90	4.92	<.0001
tip_impl*localitza*t	b	tibia	2	b	tibia	3	0.07383	0.1382	90	0.53	0.5945
tip_impl*localitza*t	b	tibia	2	b	tibia	4	0.1403	0.1352	90	1.04	0.3022
tip_impl*localitza*t	b	tibia	3	b	tibia	4	0.06650	0.1382	90	0.48	0.6316

Tests of Effect Slices

Effect	t	DF	DF	F Value	Pr > F
tip_impl*localizac*t	0	3	90	1.12	0.3463
tip_impl*localizac*t	1	3	90	5.07	0.0027
tip_impl*localizac*t	2	3	90	0.66	0.5792
tip_impl*localizac*t	3	3	90	0.68	0.5690
tip_impl*localizac*t	4	3	90	0.58	0.6266

Modelo 2.

```
PROC MIXED DATA=DADES;
CLASS tip_implant localización t;
MODEL pin_hole = tip_implant|localización|t /OUTP=RES2;
Repeated t / subject =id type=arh(1) group=localización;
random intercept / subject=id ;
LSMEANS tip_implant /pdiff;
LSMEANS tip_implant*t /pdiff;
LSMEANS localización*tip_implant /pdiff;
LSMEANS localización*tip_implant*t /slice=t pdiff;
ods output lsmeans=X3;
ods output diffs=X4;
RUN;
```

Model2: Gammagrafia Pin Hole

The Mixed Procedure

Model Information

Data Set	WORK.DADES
Dependent Variable	pin_hole
Covariance Structures	Variance Components, Heterogeneous Autoregressive
Subject Effects	id, id
Group Effect	localización
Estimation Method	REML
Residual Variance Method	None
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information

Class	Levels	Values
tip_implant	2	a b
localización	2	femur tibia
t	5	0 1 2 3 4

Dimensions

Covariance Parameters	13
Columns in X	54
Columns in Z Per Subject	1
Subjects	12
Max Obs Per Subject	10
Observations Used	120
Observations Not Used	0
Total Observations	120

Iteration History

Iteration	Evaluations	-2 Res Log Like	Criterion

0	1	195.98684235	
1	4	151.96896040	.
2	1	126.86103414	.
3	1	118.06849353	.
4	1	116.26849017	0.00409909
5	1	116.11947745	0.00007675
6	1	116.11683513	0.00000006
7	1	116.11683309	0.00000000

Convergence criteria met.

Covariance Parameter Estimates

Cov Parm	Subject	Group	Estimate
Intercept	id		0
Var(1)	id	localización femur	0.1382
Var(2)	id	localización femur	0.7106
Var(3)	id	localización femur	0.3112
Var(4)	id	localización femur	0.07610
Var(5)	id	localización femur	0.06598
ARH(1)	id	localización femur	0.4691
Var(1)	id	localización tibia	0.02258
Var(2)	id	localización tibia	1.3609
Var(3)	id	localización tibia	0.1842
Var(4)	id	localización tibia	0.07563
Var(5)	id	localización tibia	0.06447
ARH(1)	id	localización tibia	0.1376

Fit Statistics

Res Log Likelihood	-58.1
Akaike's Information Criterion	-70.1
Schwarz's Bayesian Criterion	-73.0
-2 Res Log Likelihood	116.1

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
tip_implant	1	90	5.12	0.0260
localitzacio	1	90	15.94	0.0001
tip_impla*localización	1	90	0.04	0.8474
t	4	90	26.04	<.0001
tip_implant*t	4	90	2.61	0.0409
localización*t	4	90	2.19	0.0763
tip_impl*localización*t	4	90	0.63	0.6432

Least Squares Means

Effect	tip_implant	localización	t	Estimate	Standard Error	DF	t Value	Pr > |t|
tip_implant	a			1.9322	0.08704	90	22.20	<.0001
tip_implant	b			2.2108	0.08704	90	25.40	<.0001
tip_implant*t	a		0	1.5519	0.08185	90	18.96	<.0001
tip_implant*t	a		1	2.5592	0.2938	90	8.71	<.0001
tip_implant*t	a		2	2.1374	0.1437	90	14.88	<.0001
tip_implant*t	a		3	1.8310	0.07951	90	23.03	<.0001
tip_implant*t	a		4	1.5816	0.07373	90	21.45	<.0001
tip_implant*t	b		0	1.5049	0.08185	90	18.39	<.0001
tip_implant*t	b		1	3.6794	0.2938	90	12.52	<.0001
tip_implant*t	b		2	2.3007	0.1437	90	16.01	<.0001
tip_implant*t	b		3	1.9860	0.07951	90	24.98	<.0001
tip_implant*t	b		4	1.5832	0.07373	90	21.47	<.0001
tip_impla*localizac.	a	femur		1.6984	0.1311	90	12.95	<.0001
tip_impla*localizac.	a	tibia		2.1661	0.1145	90	18.92	<.0001
tip_impla*localizac.	b	femur		1.9533	0.1311	90	14.89	<.0001
tip_impla*localizac.	b	tibia		2.4684	0.1145	90	21.56	<.0001
tip_impl*localiza*t.	a	femur	0	1.3512	0.1518	90	8.90	<.0001
tip_impl*localiza*t.	a	femur	1	2.4314	0.3441	90	7.06	<.0001
tip_impl*localiza*t.	a	femur	2	2.0078	0.2277	90	8.82	<.0001
tip_impl*localiza*t.	a	femur	3	1.5207	0.1126	90	13.50	<.0001
tip_impl*localiza*t.	a	femur	4	1.1811	0.1049	90	11.26	<.0001
tip_impl*localiza*t.	a	tibia	0	1.7527	0.06135	90	28.57	<.0001
tip_impl*localiza*t.	a	tibia	1	2.6871	0.4763	90	5.64	<.0001
tip_impl*localiza*t.	a	tibia	2	2.2670	0.1752	90	12.94	<.0001
tip_impl*localiza*t.	a	tibia	3	2.1414	0.1123	90	19.07	<.0001
tip_impl*localiza*t.	a	tibia	4	1.9822	0.1037	90	19.12	<.0001
tip_impl*localiza*t.	b	femur	0	1.4262	0.1518	90	9.40	<.0001
tip_impl*localiza*t.	b	femur	1	3.3145	0.3441	90	9.63	<.0001
tip_impl*localiza*t.	b	femur	2	2.0660	0.2277	90	9.07	<.0001
tip_impl*localiza*t.	b	femur	3	1.6550	0.1126	90	14.70	<.0001
tip_impl*localiza*t.	b	femur	4	1.3046	0.1049	90	12.44	<.0001
tip_impl*localiza*t.	b	tibia	0	1.5836	0.06135	90	25.81	<.0001
tip_impl*localiza*t.	b	tibia	1	4.0444	0.4763	90	8.49	<.0001
tip_impl*localiza*t.	b	tibia	2	2.5354	0.1752	90	14.47	<.0001
tip_impl*localiza*t.	b	tibia	3	2.3170	0.1123	90	20.64	<.0001
tip_impl*localiza*t.	b	tibia	4	1.8618	0.1037	90	17.96	<.0001

Differences of Least Squares Means

Effect	_tip_ implant	localización	t	_tip_ implant	_localitzacio	_t	Estimate	Standard Error	DF	t Value	Pr > |t|
tip_implant	a		_	b		_	-0.2786	0.1231	90	-2.26	0.0260
tip_implant*t	a		0	a		1	-1.0073	0.2806	90	-3.59	0.0005
tip_implant*t	a		0	a		2	-0.5855	0.1531	90	-3.82	0.0002
tip_implant*t	a		0	a		3	-0.2791	0.1101	90	-2.53	0.0130
tip_implant*t	a		0	a		4	-0.02968	0.1084	90	-0.27	0.7849
tip_implant*t	a		0	b		0	0.04699	0.1157	90	0.41	0.6857
tip_implant*t	a		0	b		1	-2.1275	0.3050	90	-6.98	<.0001
tip_implant*t	a		0	b		2	-0.7487	0.1653	90	-4.53	<.0001
tip_implant*t	a		0	b		3	-0.4341	0.1141	90	-3.80	0.0003
tip_implant*t	a		0	b		4	-0.03128	0.1102	90	-0.28	0.7771
tip_implant*t	a		1	a		2	0.4218	0.2878	90	1.47	0.1462
tip_implant*t	a		1	a		3	0.7282	0.2964	90	2.46	0.0159
tip_implant*t	a		1	a		4	0.9776	0.2997	90	3.26	0.0016
tip_implant*t	a		1	b		0	1.0543	0.3050	90	3.46	0.0008
tip_implant*t	a		1	b		1	-1.1202	0.4155	90	-2.70	0.0084
tip_implant*t	a		1	b		2	0.2585	0.3270	90	0.79	0.4313
tip_implant*t	a		1	b		3	0.5732	0.3044	90	1.88	0.0629
tip_implant*t	a		1	b		4	0.9760	0.3029	90	3.22	0.0018
tip_implant*t	a		2	a		3	0.3064	0.1400	90	2.19	0.0312
tip_implant*t	a		2	a		4	0.5558	0.1526	90	3.64	0.0005
tip_implant*t	a		2	b		0	0.6325	0.1653	90	3.83	0.0002
tip_implant*t	a		2	b		1	-1.5420	0.3270	90	-4.72	<.0001
tip_implant*t	a		2	b		2	-0.1633	0.2032	90	-0.80	0.4237
tip_implant*t	a		2	b		3	0.1514	0.1642	90	0.92	0.3590
tip_implant*t	a		2	b		4	0.5542	0.1615	90	3.43	0.0009
tip_implant*t	a		3	a		4	0.2494	0.09048	90	2.76	0.0071
tip_implant*t	a		3	b		0	0.3261	0.1141	90	2.86	0.0053
tip_implant*t	a		3	b		1	-1.8484	0.3044	90	-6.07	<.0001
tip_implant*t	a		3	b		2	-0.4696	0.1642	90	-2.86	0.0053
tip_implant*t	a		3	b		3	-0.1550	0.1124	90	-1.38	0.1716
tip_implant*t	a		3	b		4	0.2478	0.1084	90	2.29	0.0246
tip_implant*t	a		4	b		0	0.07667	0.1102	90	0.70	0.4882
tip_implant*t	a		4	b		1	-2.0978	0.3029	90	-6.93	<.0001
tip_implant*t	a		4	b		2	-0.7191	0.1615	90	-4.45	<.0001
tip_implant*t	a		4	b		3	-0.4044	0.1084	90	-3.73	0.0003
tip_implant*t	a		4	b		4	-0.00161	0.1043	90	-0.02	0.9877
tip_implant*t	b		0	b		1	-2.1745	0.2806	90	-7.75	<.0001
tip_implant*t	b		0	b		2	-0.7957	0.1531	90	-5.20	<.0001
tip_implant*t	b		0	b		3	-0.4811	0.1101	90	-4.37	<.0001
tip_implant*t	b		0	b		4	-0.07827	0.1084	90	-0.72	0.4721
tip_implant*t	b		1	b		2	1.3788	0.2878	90	4.79	<.0001
tip_implant*t	b		1	b		3	1.6934	0.2964	90	5.71	<.0001
tip_implant*t	b		1	b		4	2.0962	0.2997	90	6.99	<.0001
tip_implant*t	b		2	b		3	0.3147	0.1400	90	2.25	0.0270
tip_implant*t	b		2	b		4	0.7175	0.1526	90	4.70	<.0001
tip_implant*t	b		3	b		4	0.4028	0.09048	90	4.45	<.0001
tip_impla*localitzac	a	femur	_	a	tibia	_	-0.4676	0.1741	90	-2.69	0.0086
tip_impla*localitzac	a	femur	_	b	femur	_	-0.2549	0.1855	90	-1.37	0.1728
tip_impla*localitzac	a	femur	_	b	tibia	_	-0.7700	0.1741	90	-4.42	<.0001
tip_impla*localitzac	a	tibia	_	b	femur	_	0.2128	0.1741	90	1.22	0.2248
tip_impla*localitzac	a	tibia	_	b	tibia	_	-0.3024	0.1619	90	-1.87	0.0651
tip_impla*localitzac	b	femur	_	b	tibia	_	-0.5152	0.1741	90	-2.96	0.0039
tip_impl*localitza*t	a	femur	0	a	femur	1	-1.0802	0.3041	90	-3.55	0.0006
tip_impl*localitza*t	a	femur	0	a	femur	2	-0.6566	0.2443	90	-2.69	0.0086
tip_impl*localitza*t	a	femur	0	a	femur	3	-0.1695	0.1794	90	-0.94	0.3472
tip_impl*localitza*t	a	femur	0	a	femur	4	0.1701	0.1802	90	0.94	0.3477
tip_impl*localitza*t	a	femur	0	a	tibia	0	-0.4015	0.1637	90	-2.45	0.0161
tip_impl*localitza*t	a	femur	0	a	tibia	1	-1.3359	0.4999	90	-2.67	0.0089
tip_impl*localitza*t	a	femur	0	a	tibia	2	-0.9158	0.2318	90	-3.95	0.0002
tip_impl*localitza*t	a	femur	0	a	tibia	3	-0.7902	0.1888	90	-4.19	<.0001
tip_impl*localitza*t	a	femur	0	a	tibia	4	-0.6310	0.1838	90	-3.43	0.0009
tip_impl*localitza*t	a	femur	0	b	femur	0	-0.07503	0.2146	90	-0.35	0.7275
tip_impl*localitza*t	a	femur	0	b	femur	1	-1.9633	0.3761	90	-5.22	<.0001
tip_impl*localitza*t	a	femur	0	b	femur	2	-0.7148	0.2737	90	-2.61	0.0106
tip_impl*localitza*t	a	femur	0	b	femur	3	-0.3038	0.1890	90	-1.61	0.1114
tip_impl*localitza*t	a	femur	0	b	femur	4	0.04657	0.1845	90	0.25	0.8013
tip_impl*localitza*t	a	femur	0	b	tibia	0	-0.2324	0.1637	90	-1.42	0.1591
tip_impl*localitza*t	a	femur	0	b	tibia	1	-2.6932	0.4999	90	-5.39	<.0001
tip_impl*localitza*t	a	femur	0	b	tibia	2	-1.1842	0.2318	90	-5.11	<.0001
tip_impl*localitza*t	a	femur	0	b	tibia	3	-0.9658	0.1888	90	-5.12	<.0001
tip_impl*localitza*t	a	femur	0	b	tibia	4	-0.5106	0.1838	90	-2.78	0.0067
tip_impl*localitza*t	a	femur	1	a	femur	2	0.4236	0.3111	90	1.36	0.1767
tip_impl*localitza*t	a	femur	1	a	femur	3	0.9106	0.3377	90	2.70	0.0084
tip_impl*localitza*t	a	femur	1	a	femur	4	1.2503	0.3493	90	3.58	0.0006
tip_impl*localitza*t	a	femur	1	a	tibia	0	0.6787	0.3496	90	1.94	0.0553
tip_impl*localitza*t	a	femur	1	a	tibia	1	-0.2557	0.5876	90	-0.44	0.6645
tip_impl*localitza*t	a	femur	1	a	tibia	2	0.1643	0.3862	90	0.43	0.6715
tip_impl*localitza*t	a	femur	1	a	tibia	3	0.2900	0.3620	90	0.80	0.4252
tip_impl*localitza*t	a	femur	1	a	tibia	4	0.4492	0.3594	90	1.25	0.2146
tip_impl*localitza*t	a	femur	1	b	femur	0	1.0051	0.3761	90	2.67	0.0089
tip_impl*localitza*t	a	femur	1	b	femur	1	-0.8831	0.4867	90	-1.81	0.0729
tip_impl*localitza*t	a	femur	1	b	femur	2	0.3654	0.4127	90	0.89	0.3783
tip_impl*localitza*t	a	femur	1	b	femur	3	0.7763	0.3621	90	2.14	0.0347
tip_impl*localitza*t	a	femur	1	b	femur	4	1.1267	0.3598	90	3.13	0.0023
tip_impl*localitza*t	a	femur	1	b	tibia	0	0.8477	0.3496	90	2.43	0.0173
tip_impl*localitza*t	a	femur	1	b	tibia	1	-1.6130	0.5876	90	-2.75	0.0073
tip_impl*localitza*t	a	femur	1	b	tibia	2	-0.1040	0.3862	90	-0.27	0.7883
tip_impl*localitza*t	a	femur	1	b	tibia	3	0.1144	0.3620	90	0.32	0.7527
tip_impl*localitza*t	a	femur	1	b	tibia	4	0.5696	0.3594	90	1.58	0.1165
tip_impl*localitza*t	a	femur	2	a	femur	3	0.4870	0.2012	90	2.42	0.0175
tip_impl*localitza*t	a	femur	2	a	femur	4	0.8267	0.2288	90	3.61	0.0005
tip_impl*localitza*t	a	femur	2	a	tibia	0	0.2551	0.2359	90	1.08	0.2823
tip_impl*localitza*t	a	femur	2	a	tibia	1	-0.6793	0.5279	90	-1.29	0.2015
tip_impl*localitza*t	a	femur	2	a	tibia	2	-0.2593	0.2873	90	-0.90	0.3693
tip_impl*localitza*t	a	femur	2	a	tibia	3	-0.1336	0.2539	90	-0.53	0.6001
tip_impl*localitza*t	a	femur	2	a	tibia	4	0.02560	0.2502	90	0.10	0.9187
tip_impl*localitza*t	a	femur	2	b	femur	0	0.5815	0.2737	90	2.12	0.0363
tip_impl*localitza*t	a	femur	2	b	femur	1	-1.3067	0.4127	90	-3.17	0.0021
tip_impl*localitza*t	a	femur	2	b	femur	2	-0.05822	0.3221	90	-0.18	0.8570
tip_impl*localitza*t	a	femur	2	b	femur	3	0.3527	0.2541	90	1.39	0.1685
tip_impl*localitza*t	a	femur	2	b	femur	4	0.7031	0.2507	90	2.80	0.0062
tip_impl*localitza*t	a	femur	2	b	tibia	0	0.4241	0.2359	90	1.80	0.0755
tip_impl*localitza*t	a	femur	2	b	tibia	1	-2.0366	0.5279	90	-3.86	0.0002
tip_impl*localitza*t	a	femur	2	b	tibia	2	-0.5276	0.2873	90	-1.84	0.0696
tip_impl*localitza*t	a	femur	2	b	tibia	3	-0.3092	0.2539	90	-1.22	0.2265
tip_impl*localitza*t	a	femur	2	b	tibia	4	0.1460	0.2502	90	0.58	0.5611
tip_impl*localitza*t	a	femur	3	a	femur	4	0.3397	0.1122	90	3.03	0.0032
tip_impl*localitza*t	a	femur	3	a	tibia	0	-0.2319	0.1282	90	-1.81	0.0739
tip_impl*localitza*t	a	femur	3	a	tibia	1	-1.1664	0.4894	90	-2.38	0.0193

tip_impl*localitza*t	a	femur	3	a	tibia	2	-0.7463	0.2083	90	-3.58	0.0006
tip_impl*localitza*t	a	femur	3	a	tibia	3	-0.6206	0.1590	90	-3.90	0.0002
tip_impl*localitza*t	a	femur	3	a	tibia	4	-0.4614	0.1531	90	-3.01	0.0033
tip_impl*localitza*t	a	femur	3	b	femur	0	0.09448	0.1890	90	0.50	0.6183
tip_impl*localitza*t	a	femur	3	b	femur	1	-1.7938	0.3621	90	-4.95	<.0001
tip_impl*localitza*t	a	femur	3	b	femur	2	-0.5453	0.2541	90	-2.15	0.0346
tip_impl*localitza*t	a	femur	3	b	femur	3	-0.1343	0.1593	90	-0.84	0.4013
tip_impl*localitza*t	a	femur	3	b	femur	4	0.2161	0.1539	90	1.40	0.1637
tip_impl*localitza*t	a	femur	3	b	tibia	0	-0.06292	0.1282	90	-0.49	0.6249
tip_impl*localitza*t	a	femur	3	b	tibia	1	-2.5237	0.4894	90	-5.16	<.0001
tip_impl*localitza*t	a	femur	3	b	tibia	2	-1.0147	0.2083	90	-4.87	<.0001
tip_impl*localitza*t	a	femur	3	b	tibia	3	-0.7963	0.1590	90	-5.01	<.0001
tip_impl*localitza*t	a	femur	3	b	tibia	4	-0.3411	0.1531	90	-2.23	0.0284
tip_impl*localitza*t	a	femur	4	a	tibia	0	-0.5716	0.1215	90	-4.70	<.0001
tip_impl*localitza*t	a	femur	4	a	tibia	1	-1.5060	0.4877	90	-3.09	0.0027
tip_impl*localitza*t	a	femur	4	a	tibia	2	-1.0860	0.2042	90	-5.32	<.0001
tip_impl*localitza*t	a	femur	4	a	tibia	3	-0.9603	0.1536	90	-6.25	<.0001
tip_impl*localitza*t	a	femur	4	a	tibia	4	-0.8011	0.1475	90	-5.43	<.0001
tip_impl*localitza*t	a	femur	4	b	femur	0	-0.2452	0.1845	90	-1.33	0.1872
tip_impl*localitza*t	a	femur	4	b	femur	1	-2.1334	0.3598	90	-5.93	<.0001
tip_impl*localitza*t	a	femur	4	b	femur	2	-0.8849	0.2507	90	-3.53	0.0007
tip_impl*localitza*t	a	femur	4	b	femur	3	-0.4740	0.1539	90	-3.08	0.0027
tip_impl*localitza*t	a	femur	4	b	femur	4	-0.1236	0.1483	90	-0.83	0.4069
tip_impl*localitza*t	a	femur	4	b	tibia	0	-0.4026	0.1215	90	-3.31	0.0013
tip_impl*localitza*t	a	femur	4	b	tibia	1	-2.8633	0.4877	90	-5.87	<.0001
tip_impl*localitza*t	a	femur	4	b	tibia	2	-1.3543	0.2042	90	-6.63	<.0001
tip_impl*localitza*t	a	femur	4	b	tibia	3	-1.1359	0.1536	90	-7.39	<.0001
tip_impl*localitza*t	a	femur	4	b	tibia	4	-0.6807	0.1475	90	-4.62	<.0001
tip_impl*localitza*t	a	tibia	0	a	tibia	1	-0.9344	0.4717	90	-1.98	0.0507
tip_impl*localitza*t	a	tibia	0	a	tibia	2	-0.5144	0.1845	90	-2.79	0.0065
tip_impl*localitza*t	a	tibia	0	a	tibia	3	-0.3887	0.1278	90	-3.04	0.0031
tip_impl*localitza*t	a	tibia	0	a	tibia	4	-0.2295	0.1204	90	-1.91	0.0599
tip_impl*localitza*t	a	tibia	0	b	femur	0	0.3264	0.1637	90	1.99	0.0492
tip_impl*localitza*t	a	tibia	0	b	femur	1	-1.5618	0.3496	90	-4.47	<.0001
tip_impl*localitza*t	a	tibia	0	b	femur	2	-0.3133	0.2359	90	-1.33	0.1874
tip_impl*localitza*t	a	tibia	0	b	femur	3	0.09763	0.1282	90	0.76	0.4485
tip_impl*localitza*t	a	tibia	0	b	femur	4	0.4480	0.1215	90	3.69	0.0004
tip_impl*localitza*t	a	tibia	0	b	tibia	0	0.1690	0.08676	90	1.95	0.0545
tip_impl*localitza*t	a	tibia	0	b	tibia	1	-2.2917	0.4802	90	-4.77	<.0001
tip_impl*localitza*t	a	tibia	0	b	tibia	2	-0.7827	0.1856	90	-4.22	<.0001
tip_impl*localitza*t	a	tibia	0	b	tibia	3	-0.5643	0.1279	90	-4.41	<.0001
tip_impl*localitza*t	a	tibia	0	b	tibia	4	-0.1091	0.1205	90	-0.91	0.3673
tip_impl*localitza*t	a	tibia	1	a	tibia	2	0.4200	0.4843	90	0.87	0.3881
tip_impl*localitza*t	a	tibia	1	a	tibia	3	0.5457	0.4872	90	1.12	0.2657
tip_impl*localitza*t	a	tibia	1	a	tibia	4	0.7049	0.4871	90	1.45	0.1514
tip_impl*localitza*t	a	tibia	1	b	femur	0	1.2608	0.4999	90	2.52	0.0134
tip_impl*localitza*t	a	tibia	1	b	femur	1	-0.6274	0.5876	90	-1.07	0.2885
tip_impl*localitza*t	a	tibia	1	b	femur	2	0.6211	0.5279	90	1.18	0.2425
tip_impl*localitza*t	a	tibia	1	b	femur	3	1.0321	0.4894	90	2.11	0.0377
tip_impl*localitza*t	a	tibia	1	b	femur	4	1.3824	0.4877	90	2.83	0.0057
tip_impl*localitza*t	a	tibia	1	b	tibia	0	1.1034	0.4802	90	2.30	0.0239
tip_impl*localitza*t	a	tibia	1	b	tibia	1	-1.3573	0.6735	90	-2.02	0.0469
tip_impl*localitza*t	a	tibia	1	b	tibia	2	0.1517	0.5075	90	0.30	0.7657
tip_impl*localitza*t	a	tibia	1	b	tibia	3	0.3701	0.4893	90	0.76	0.4514
tip_impl*localitza*t	a	tibia	1	b	tibia	4	0.8253	0.4874	90	1.69	0.0939
tip_impl*localitza*t	a	tibia	2	a	tibia	3	0.1257	0.1947	90	0.65	0.5201
tip_impl*localitza*t	a	tibia	2	a	tibia	4	0.2849	0.2019	90	1.41	0.1616
tip_impl*localitza*t	a	tibia	2	b	femur	0	0.8408	0.2318	90	3.63	0.0005
tip_impl*localitza*t	a	tibia	2	b	femur	1	-1.0474	0.3862	90	-2.71	0.0080
tip_impl*localitza*t	a	tibia	2	b	femur	2	0.2011	0.2873	90	0.70	0.4859
tip_impl*localitza*t	a	tibia	2	b	femur	3	0.6120	0.2083	90	2.94	0.0042
tip_impl*localitza*t	a	tibia	2	b	femur	4	0.9624	0.2042	90	4.71	<.0001
tip_impl*localitza*t	a	tibia	2	b	tibia	0	0.6834	0.1856	90	3.68	0.0004
tip_impl*localitza*t	a	tibia	2	b	tibia	1	-1.7773	0.5075	90	-3.50	0.0007
tip_impl*localitza*t	a	tibia	2	b	tibia	2	-0.2683	0.2478	90	-1.08	0.2817
tip_impl*localitza*t	a	tibia	2	b	tibia	3	-0.04993	0.2081	90	-0.24	0.8109
tip_impl*localitza*t	a	tibia	2	b	tibia	4	0.4053	0.2036	90	1.99	0.0495
tip_impl*localitza*t	a	tibia	3	a	tibia	4	0.1592	0.1419	90	1.12	0.2650
tip_impl*localitza*t	a	tibia	3	b	femur	0	0.7151	0.1888	90	3.79	0.0003
tip_impl*localitza*t	a	tibia	3	b	femur	1	-1.1731	0.3620	90	-3.24	0.0017
tip_impl*localitza*t	a	tibia	3	b	femur	2	0.07538	0.2539	90	0.30	0.7672
tip_impl*localitza*t	a	tibia	3	b	femur	3	0.4863	0.1590	90	3.06	0.0029
tip_impl*localitza*t	a	tibia	3	b	femur	4	0.8367	0.1536	90	5.45	<.0001
tip_impl*localitza*t	a	tibia	3	b	tibia	0	0.5577	0.1279	90	4.36	<.0001
tip_impl*localitza*t	a	tibia	3	b	tibia	1	-1.9030	0.4893	90	-3.89	0.0002
tip_impl*localitza*t	a	tibia	3	b	tibia	2	-0.3940	0.2081	90	-1.89	0.0615
tip_impl*localitza*t	a	tibia	3	b	tibia	3	-0.1756	0.1588	90	-1.11	0.2717
tip_impl*localitza*t	a	tibia	3	b	tibia	4	0.2796	0.1528	90	1.83	0.0706
tip_impl*localitza*t	a	tibia	4	b	femur	0	0.5559	0.1838	90	3.02	0.0032
tip_impl*localitza*t	a	tibia	4	b	femur	1	-1.3323	0.3594	90	-3.71	0.0004
tip_impl*localitza*t	a	tibia	4	b	femur	2	-0.08382	0.2502	90	-0.33	0.7384
tip_impl*localitza*t	a	tibia	4	b	femur	3	0.3271	0.1531	90	2.14	0.0353
tip_impl*localitza*t	a	tibia	4	b	femur	4	0.6775	0.1475	90	4.59	<.0001
tip_impl*localitza*t	a	tibia	4	b	tibia	0	0.3985	0.1205	90	3.31	0.0013
tip_impl*localitza*t	a	tibia	4	b	tibia	1	-2.0622	0.4874	90	-4.23	<.0001
tip_impl*localitza*t	a	tibia	4	b	tibia	2	-0.5532	0.2036	90	-2.72	0.0079
tip_impl*localitza*t	a	tibia	4	b	tibia	3	-0.3348	0.1528	90	-2.19	0.0310
tip_impl*localitza*t	a	tibia	4	b	tibia	4	0.1204	0.1466	90	0.82	0.4138
tip_impl*localitza*t	b	femur	0	b	femur	1	-1.8882	0.3041	90	-6.21	<.0001
tip_impl*localitza*t	b	femur	0	b	femur	2	-0.6397	0.2443	90	-2.62	0.0104
tip_impl*localitza*t	b	femur	0	b	femur	3	-0.2288	0.1794	90	-1.28	0.2055
tip_impl*localitza*t	b	femur	0	b	femur	4	0.1216	0.1802	90	0.67	0.5016
tip_impl*localitza*t	b	femur	0	b	tibia	0	-0.1574	0.1637	90	-0.96	0.3388
tip_impl*localitza*t	b	femur	0	b	tibia	1	-2.6181	0.4999	90	-5.24	<.0001
tip_impl*localitza*t	b	femur	0	b	tibia	2	-1.1091	0.2318	90	-4.79	<.0001
tip_impl*localitza*t	b	femur	0	b	tibia	3	-0.8907	0.1888	90	-4.72	<.0001
tip_impl*localitza*t	b	femur	0	b	tibia	4	-0.4355	0.1838	90	-2.37	0.0199
tip_impl*localitza*t	b	femur	1	b	femur	2	1.2485	0.3111	90	4.01	0.0001
tip_impl*localitza*t	b	femur	1	b	femur	3	1.6595	0.3377	90	4.91	<.0001
tip_impl*localitza*t	b	femur	1	b	femur	4	2.0098	0.3493	90	5.75	<.0001
tip_impl*localitza*t	b	femur	1	b	tibia	0	1.7308	0.3496	90	4.95	<.0001
tip_impl*localitza*t	b	femur	1	b	tibia	1	-0.7299	0.5876	90	-1.24	0.2174
tip_impl*localitza*t	b	femur	1	b	tibia	2	0.7791	0.3862	90	2.02	0.0466
tip_impl*localitza*t	b	femur	1	b	tibia	3	0.9975	0.3620	90	2.76	0.0071
tip_impl*localitza*t	b	femur	1	b	tibia	4	1.4527	0.3594	90	4.04	0.0001
tip_impl*localitza*t	b	femur	2	b	femur	3	0.4110	0.2012	90	2.04	0.0440
tip_impl*localitza*t	b	femur	2	b	femur	4	0.7613	0.2288	90	3.33	0.0013
tip_impl*localitza*t	b	femur	2	b	tibia	0	0.4823	0.2359	90	2.04	0.0438
tip_impl*localitza*t	b	femur	2	b	tibia	1	-1.9784	0.5279	90	-3.75	0.0003
tip_impl*localitza*t	b	femur	2	b	tibia	2	-0.4694	0.2873	90	-1.63	0.1058
tip_impl*localitza*t	b	femur	2	b	tibia	3	-0.2510	0.2539	90	-0.99	0.3256
tip_impl*localitza*t	b	femur	2	b	tibia	4	0.2042	0.2502	90	0.82	0.4167
tip_impl*localitza*t	b	femur	3	b	femur	4	0.3504	0.1122	90	3.12	0.0024
tip_impl*localitza*t	b	femur	3	b	tibia	0	0.07138	0.1282	90	0.56	0.5792
tip_impl*localitza*t	b	femur	3	b	tibia	1	-2.3894	0.4894	90	-4.88	<.0001
tip_impl*localitza*t	b	femur	3	b	tibia	2	-0.8804	0.2083	90	-4.23	<.0001

tip_impl*localitza*t	b	femur	3	b	tibia	3	-0.6620	0.1590	90	-4.16	<.0001
tip_impl*localitza*t	b	femur	3	b	tibia	4	-0.2068	0.1531	90	-1.35	0.1801
tip_impl*localitza*t	b	femur	4	b	tibia	0	-0.2790	0.1215	90	-2.30	0.0240
tip_impl*localitza*t	b	femur	4	b	tibia	1	-2.7397	0.4877	90	-5.62	<.0001
tip_impl*localitza*t	b	femur	4	b	tibia	2	-1.2307	0.2042	90	-6.03	<.0001
tip_impl*localitza*t	b	femur	4	b	tibia	3	-1.0123	0.1536	90	-6.59	<.0001
tip_impl*localitza*t	b	femur	4	b	tibia	4	-0.5571	0.1475	90	-3.78	0.0003
tip_impl*localitza*t	b	tibia	0	b	tibia	1	-2.4607	0.4717	90	-5.22	<.0001
tip_impl*localitza*t	b	tibia	0	b	tibia	2	-0.9517	0.1845	90	-5.16	<.0001
tip_impl*localitza*t	b	tibia	0	b	tibia	3	-0.7333	0.1278	90	-5.74	<.0001
tip_impl*localitza*t	b	tibia	0	b	tibia	4	-0.2781	0.1204	90	-2.31	0.0232
tip_impl*localitza*t	b	tibia	1	b	tibia	2	1.5090	0.4843	90	3.12	0.0025
tip_impl*localitza*t	b	tibia	1	b	tibia	3	1.7274	0.4872	90	3.55	0.0006
tip_impl*localitza*t	b	tibia	1	b	tibia	4	2.1826	0.4871	90	4.48	<.0001
tip_impl*localitza*t	b	tibia	2	b	tibia	3	0.2184	0.1947	90	1.12	0.2648
tip_impl*localitza*t	b	tibia	2	b	tibia	4	0.6736	0.2019	90	3.34	0.0012
tip_impl*localitza*t	b	tibia	3	b	tibia	4	0.4552	0.1419	90	3.21	0.0019

Tests of Effect Slices

Effect	t	Num DF	Den DF	F Value	Pr > F
tip_impl*localiza*t	0	3	90	3.25	0.0255
tip_impl*localiza*t	1	3	90	2.92	0.0383
tip_impl*localiza*t	2	3	90	1.47	0.2270
tip_impl*localiza*t	3	3	90	11.49	<.0001
tip_impl*localiza*t	4	3	90	14.60	<.0001

ANEXO 2: ESTUDIO DE LA CORRELACION ENTRE PORCENTAJE DE CONTACTO - TIPO DE SUPERFICIE – ACTIVIDAD GAMMAGRAFICA.

---------- Tipo=A t=0 ----------

The CORR Procedure

3 Variables: Porcentaje g_planar pin_hole

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Porcentaje	10	47.61100	17.02919	476.11000	20.24000	78.96000
g_planar	12	1.07935	0.22264	12.95220	0.84760	1.63370
pin_hole	12	1.55193	0.28489	18.62310	1.00480	1.88570

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	Porcentaje	g_planar	pin_hole
Porcentaje	1.00000	0.28624	0.07329
		0.4227	0.8405
	10	10	10
g_planar	0.28624	1.00000	-0.22583
	0.4227		0.4803
	10	12	12
pin_hole	0.07329	-0.22583	1.00000
	0.8405	0.4803	
	10	12	12

---------- Tipo=A t=1 ----------

The CORR Procedure

3 Variables: Porcentaje g_planar pin_hole

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Porcentaje	10	47.61100	17.02919	476.11000	20.24000	78.96000
g_planar	12	1.42077	0.30228	17.04920	0.87160	1.88950
pin_hole	12	2.55921	0.76560	30.71050	1.51320	4.01880

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	Porcentaje	g_planar	pin_hole
Porcentaje	1.00000	0.46141	0.30268
		0.1795	0.3953
	10	10	10
g_planar	0.46141	1.00000	0.36493
	0.1795		0.2435
	10	12	12
pin_hole	0.30268	0.36493	1.00000
	0.3953	0.2435	
	10	12	12

---------- Tipo=A t=2 ----------

The CORR Procedure

3 Variables: Porcentaje g_planar pin_hole

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Porcentaje	10	47.61100	17.02919	476.11000	20.24000	78.96000
g_planar	12	1.17248	0.17400	14.06980	0.91360	1.49640
pin_hole	12	2.13739	0.43506	25.64870	1.39790	2.85290

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	Porcentaje	g_planar	pin_hole
Porcentaje	1.00000	0.22918	0.24008
		0.5242	0.5041
	10	10	10
g_planar	0.22918	1.00000	0.27746
	0.5242		0.3826
	10	12	12
pin_hole	0.24008	0.27746	1.00000
	0.5041	0.3826	
	10	12	12

---------- Tipo=A t=3 ----------

The CORR Procedure

3 Variables: Porcentaje g_planar pin_hole

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Porcentaje	10	47.61100	17.02919	476.11000	20.24000	78.96000
g_planar	12	1.13791	0.26168	13.65490	0.82130	1.64840
pin_hole	12	1.83103	0.41736	21.97240	1.28160	2.68620

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	Porcentaje	g_planar	pin_hole
Porcentaje	1.00000	-0.17417	0.04824
		0.6304	0.8947
	10	10	10
g_planar	-0.17417	1.00000	0.47985
	0.6304		0.1144
	10	12	12
pin_hole	0.04824	0.47985	1.00000
	0.8947	0.1144	
	10	12	12

---------- Tipo=A t=4 ----------

The CORR Procedure

3 Variables: Porcentaje g_planar pin_hole

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Porcentaje	10	47.61100	17.02919	476.11000	20.24000	78.96000
g_planar	12	1.06056	0.15185	12.72670	0.75040	1.23830
pin_hole	12	1.58160	0.50220	18.97920	0.91730	2.65040

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	Porcentaje	g_planar	pin_hole
Porcentaje	1.00000	0.46281	0.33758
		0.1780	0.3401
	10	10	10
g_planar	0.46281	1.00000	0.36419
	0.1780		0.2445
	10	12	12
pin_hole	0.33758	0.36419	1.00000
	0.3401	0.2445	
	10	12	12

---------- Tipo=B t=0 ----------

The CORR Procedure

3 Variables: Porcentaje g_planar pin_hole

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Porcentaje	10	61.77300	18.20246	617.73000	38.22000	95.28000
g_planar	12	1.05465	0.32060	12.65580	0.73430	1.89720
pin_hole	12	1.50493	0.31364	18.05920	0.87490	1.83030

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	Porcentaje	g_planar	pin_hole
Porcentaje	1.00000	-0.03224	0.18858
		0.9295	0.6018
	10	10	10
g_planar	-0.03224	1.00000	0.02962
	0.9295		0.9272
	10	12	12
pin_hole	0.18858	0.02962	1.00000
	0.6018	0.9272	
	10	12	12

---------- Tipo=B t=1 ----------

The CORR Procedure

3 Variables: Porcentaje g_planar pin_hole

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Porcentaje	10	61.77300	18.20246	617.73000	38.22000	95.28000
g_planar	12	1.73153	0.38902	20.77840	1.12540	2.45500
pin_hole	12	3.67943	1.14683	44.15310	2.21030	6.31100

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	Porcentaje	g_planar	pin_hole
Porcentaje	1.00000	-0.12093	0.69274
		0.7393	0.0264
	10	10	10
g_planar	-0.12093	1.00000	0.24065
	0.7393		0.4512
	10	12	12
pin_hole	0.69274	0.24065	1.00000
	0.0264	0.4512	
	10	12	12

---------- Tipo=B t=2 ----------

The CORR Procedure

3 Variables: Porcentaje g_planar pin_hole

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Porcentaje	10	61.77300	18.20246	617.73000	38.22000	95.28000
g_planar	12	1.31073	0.31821	15.72870	0.89260	1.97590
pin_hole	12	2.30067	0.62738	27.60800	1.44250	3.41510

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	Porcentaje	g_planar	pin_hole
Porcentaje	1.00000	0.00617	-0.22996
		0.9865	0.5227
	10	10	10
g_planar	0.00617	1.00000	0.66760
	0.9865		0.0177
	10	12	12
pin_hole	-0.22996	0.66760	1.00000
	0.5227	0.0177	
	10	12	12

---------- Tipo=B t=3 ----------

The CORR Procedure

3 Variables: Porcentaje g_planar pin_hole

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Porcentaje	10	61.77300	18.20246	617.73000	38.22000	95.28000
g_planar	12	1.19903	0.22650	14.38830	0.92660	1.60460
pin_hole	12	1.98599	0.44837	23.83190	1.22050	2.71380

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	Porcentaje	g_planar	pin_hole
Porcentaje	1.00000	0.46515 0.1755	-0.08412 0.8173
	10	10	10
g_planar	0.46515 0.1755	1.00000	0.34984 0.2650
	10	12	12
pin_hole	-0.08412 0.8173	0.34984 0.2650	1.00000
	10	12	12

---------- Tipo=B t=4 ----------

The CORR Procedure

3 Variables: Porcentaje g_planar pin_hole

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Porcentaje	10	61.77300	18.20246	617.73000	38.22000	95.28000
g_planar	12	1.13370	0.19680	13.60440	0.79000	1.48160
pin_hole	12	1.58321	0.35448	18.99850	1.01970	1.94990

Pearson Correlation Coefficients
Prob > |r| under H0: Rho=0
Number of Observations

	Porcentaje	g_planar	pin_hole
Porcentaje	1.00000	0.06557 0.8572	-0.16596 0.6468
	10	10	10
g_planar	0.06557 0.8572	1.00000	0.22188 0.4883
	10	12	12
pin_hole	-0.16596 0.6468	0.22188 0.4883	1.00000
	10	12	12