

Anexo 5: Resultado modelo estadístico
Monitoreo Contenido de Humedad del Suelo 2018

**Plan de Seguimiento Ambiental Biótico
Proyecto Cambios y Mejoras en la Operación
Minera del Salar de Atacama
Región de Antofagasta**

Preparado para
SQM Salar
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1. RESULTADO DEL MODELO ESTADISTICO

Se presentan los resultados generados para la evaluación de vigor-contenido de humedad y vigor-profundidad de la napa. (Figura 1-1)

```
. meologit vigor profundidad humedad|| year :
```

Fitting fixed-effects model:

```
Iteration 0: log likelihood = -6696.4439
Iteration 1: log likelihood = -6689.2586
Iteration 2: log likelihood = -6689.2563
Iteration 3: log likelihood = -6689.2563
```

Refining starting values:

```
Grid node 0: log likelihood = -6640.2192
```

Fitting full model:

```
Iteration 0: log likelihood = -6640.2192 (not concave)
Iteration 1: log likelihood = -6633.6703 (not concave)
Iteration 2: log likelihood = -6631.9325
Iteration 3: log likelihood = -6630.2467
Iteration 4: log likelihood = -6630.2461
```

```
Mixed-effects ologit regression
Number of obs      =       6,309
Group variable:    year
Number of groups   =          12
```

Obs per group:
min = 219
avg = 525.8
max = 569

```
Integration method: mvaghermite
Integration pts. =          7
```

```
Wald chi2(2)      =        4.79
Log likelihood = -6630.2461
Prob > chi2       =     0.0914
```

vigor		Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
profundidad		-.0000178	.0000118	-1.52	0.130	-.0000409 5.22e-06
humedad		.001718	.0011201	1.53	0.125	-.0004774 .0039134

```
-----+-----  
/cut1 | -.1281386 .0995024 -1.29 0.198 -.3231597 .0668825  
/cut2 | -.07901 .0994975 -0.79 0.427 -.2740214 .1160015  
/cut3 | .2493357 .0995461 2.50 0.012 .0542289 .4444424  
/cut4 | 3.679765 .1263781 29.12 0.000 3.432068 3.927461  
-----+-----  
year |  
var(_cons) | .1011726 .04518 .0421646 .2427607  
-----+-----  
LR test vs. ologit model: chibar2(01) = 118.02 Prob >= chibar2 = 0.0000
```

Figura 1-1. Modelo multinivel



Solutions
for human
progress