Model 1 Parameter Model 2 Model 3 -42.551*** -47.235***

19002.479

-36.432***

(0.810)

0.380***

(0.013)

7467.363

Time**2

Origin

Intercept (O)

Time (O)

Time**2 (O)

AIC

Intercept

Time

Time**2

Origin

Intercept (O)

Time (O) Time**2 (O)

AIC

Effects

Random effects

(variance)

Fixed effects (coefficients)

Random effects (variance)

p<0.1. ** p<0.05. *** p<0.01

Categories

RDI

-47.234*** -47.787*** -47.715*** -47.590*** Density Intercept (0.350)(0.384)(1.773)(0.319)(1.328)(1.371)0.308***

0.299*** 0.299*** 0.299*** 0.291*** 0.296*** Time (0.005)(0.005)(0.005)(0.028)(0.010)Fixed effects (coefficients)

-2.545

(0.115)

18555.411

-42.837***

(0.775)

0.380***

(0.012)

8.235***

(0.445)

7176.815

3.902

18474.086

-34.512***

(4.279)

0.380***

(0.011)

7.314

7167.298

CHILE

Model 5

2.883

0.020

18463.737

-34.079***

(5.215)

0.372***

(0.022)

8.949

0.032

7164.824

Model 6

(0.023)

-1.105e-4

(1.923e-4)

2.883

0.020

18465.407

-34.071

(NA)

0.372

(NA)

4.03e-6

(NA)

8.948

0.032

7166.823

Model 7

-47.794***

(1.395)

0.308***

(0.022)

-1.105e-4

(1.943e-4)

2.938

0.017

3.18e-5

18471.383

-34.059

0.372

4.33e-6

8.943

0.032

6.39e-59

NA

Model 4

0.061

18543.282

-36.432***

(0.733)

0.406***

(0.058)

0.097

7294.120