Econometrics assignment 5b

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|  |  |  |
| --- | --- | --- |
| **Variable** | *Ambient temperature* | *Water temperature* |
| **Average** | 10.48 | 12.30 |
| **Min** | -3.9 | 5.7 |
| **Max** | 21.1 | 19.6 |

* 2. Average hour of sunset in December: 16

Average hour of sunset in July: 21







As can be concluded from the graph above, a positive average treatment effect is found. The immediate effect is not significant but the latest event times show statistically significant effects. The graph shows evidence of darkness having a small but positive treatment effect for most event time dummies on spot detection rates.

Copy of our Do-file

\*CA5b Group 10

use "C:\Users\u1265889\Downloads\ca5b\_northsea.dta", clear

\*(1)

\*(a)

sum temp

sum watertemp

\*(b)

sum hour if eventtime==0 & month==12

sum hour if eventtime==0 & month==7

\*(2)

\*(b)

tab eventtime, gen(e)

tab year, gen(y)

tab month, gen(m)

forvalues i=1/13 {

label variable e`i' "`=`i'-7'"

}

xtreg spot e1-e4 e6-e13 e5 temp temp\_sq watertemp watertemp\_sq wind wind\_sq y1 m2-m12,fe i(grid\_id)

\*(c)

ssc install coefplot

coefplot, keep(e\*) nolabels coeflabels(,labsize(tiny)) vertical xline(5) levels(90) yline(0) ytitle(Difference in hourly spot detection rate) xtitle(event time) omitted order(e1 e2 e3 e4 e5 e6 e7 e8 e9 e10 e11 e12 e13)