TIME USE DATA CLEANING AND MANAGEMENT:

USER-WRITTEN STATA COMMANDS

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### TIME DIARY DATA MANAGEMENT



Time diaries provide a highly accurate account of the activities individuals are engaging in (+information on secondary activities, co-presence, location, and enjoyment)



Time diaries measure the occurrence, duration, and mode of our daily activities



Yet, most of the time diary data potential remains untapped

# INTRODUCING

timeuse

New Stata Package – **timeuse** -, is a set of *user-written commands*, aiming at making time use data management more accessible.

type:

ssc install timeuse

#### TIMEUSE

- Converts the complex calendar- or episode- level file in a new file where each row represents a person's day.
- Derived variables of broad interest such as the total time devoted to the activities, number of times the person engages in the activity during the day, as well as the timing of those activities, are now readily available.

In short, **timeuse** produces a customised and simple to use dataset, that allows researchers with no prior time use experience to *extract ready-to-use information*.

# TIMEUSE

# Example

Using the example dataset "diary", we produce a diary-level file that will give us the amount of time devoted to each of the categories of 'primary' activity.

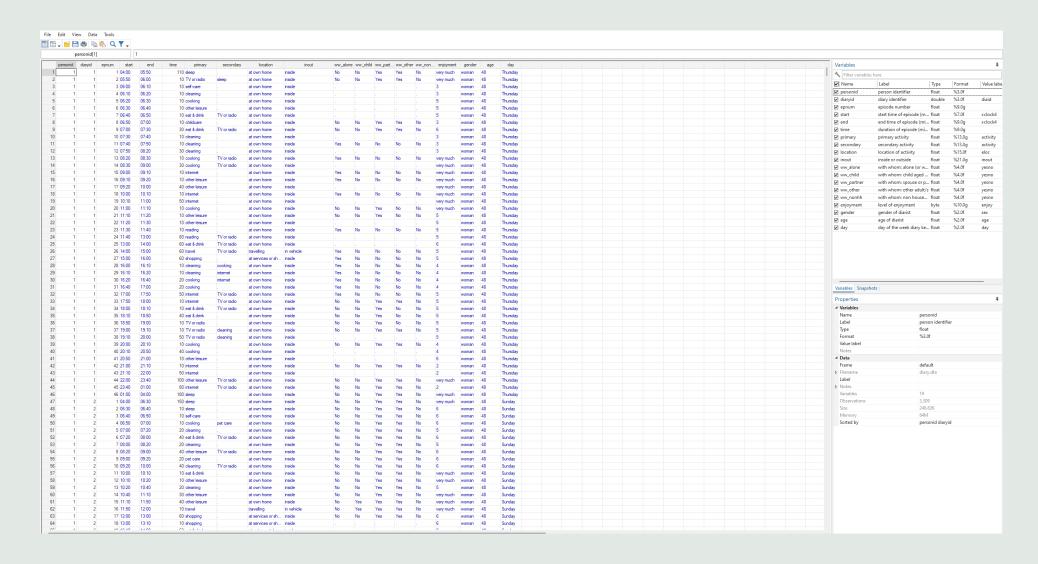
### Syntax

net get timeuse

use diary, clear

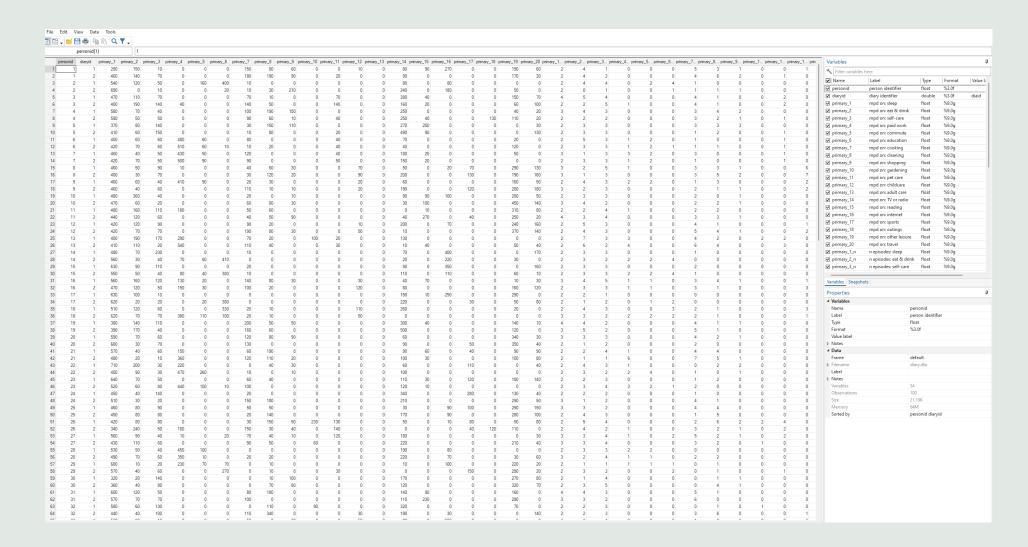
timeuse primary, diaryid (personid diaryid)

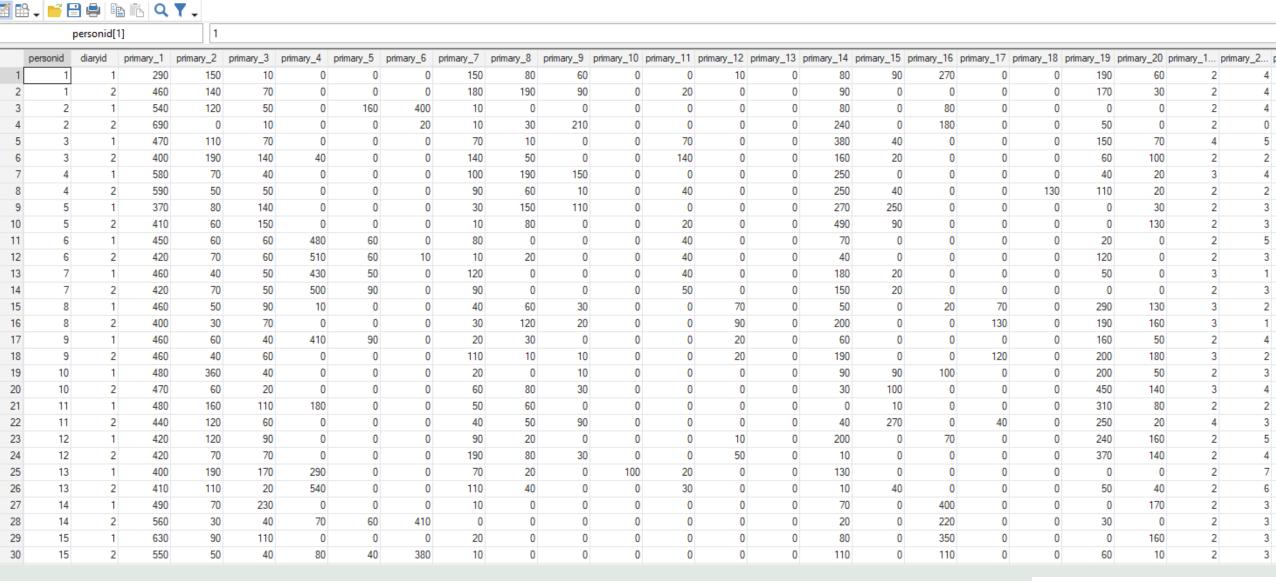
#### before:



	personid	diaryid	epnum start	end	time	primary	secondary	location	inout	ww_alone	ww_child	ww_part	ww_other	ww_non	enjoyment	gender	age	day
1	1	1	1 04:00	05:50	110	sleep		at own home	inside	No	No	Yes	Yes	No	very much	woman	48	Thursday
2	1	1	2 05:50	06:00	10	TV or radio	sleep	at own home	inside	No	No	Yes	Yes	No	very much	woman	48	Thursday
3	1	1	3 06:00	06:10	10	self-care		at own home	inside						3	woman	48	Thursday
4	1	1	4 06:10	06:20	10	cleaning		at own home	inside						3	woman	48	Thursday
5	1	1	5 06:20	06:30	10	cooking		at own home	inside						5	woman	48	Thursday
6	1	1	6 06:30	06:40	10	other leisure		at own home	inside						5	woman	48	Thursday
7	1	1	7 06:40	06:50	10	eat & drink	TV or radio	at own home	inside						5	woman	48	Thursday
8	1	1	8 06:50	07:00	10	childcare		at own home	inside	No	No	Yes	Yes	No	3	woman	48	Thursday
9	1	1		07:30		eat & drink	TV or radio	at own home	inside	No	No	Yes	Yes	No	6	woman	48	Thursday
10	1	1		07:40		cleaning		at own home	inside						3	woman		Thursday
11	1	1		07:50		cleaning		at own home	inside	Yes	No	No	No	No	3	woman	48	Thursday
12	1	1		08:20		cleaning		at own home	inside						3	woman		Thursday
13	1	1		08:30		cooking	TV or radio	at own home	inside	Yes	No	No	No	No	very much	woman		Thursday
14	1	1		09:00		cooking	TV or radio	at own home	inside						very much	woman		Thursday
15	1	1		09:10		internet		at own home	inside	Yes	No	No	No	No	very much	woman		Thursday
16	1	1		09:20		other leisure		at own home	inside	Yes	No	No	No	No	very much	woman		Thursday
17	1	1		10:00		other leisure		at own home	inside						very much	woman		Thursday
18	1	1		10:10		internet		at own home	inside	Yes	No	No	No	No	very much	woman		Thursday
19	1	1		11:00		internet		at own home	inside	M-	Ma	V	Ma	M-	very much	woman		Thursday
20	1	1		11:10		cooking		at own home	inside	No No	No	Yes	No No	No No	very much	woman	48	Thursday
21	1	1		11:20		other leisure		at own home	inside	No	No	Yes	No	No	5	woman	48	Thursday
22	1	1		11:30		other leisure		at own home	inside	· Van	No	No	No	No	5	woman	48	Thursday
23	1	1		11:40 13:00		reading	TV or radio	at own home	inside	Yes	No	No	No	No	5	woman		Thursday
24 25	1	1		14:00		reading	TV or radio	at own home	inside						6	woman		Thursday
26	1	1		15:00		eat & drink	TV or radio	at own home	in vehicle	Von	No	No	No	No	5	woman		Thursday
27	1	1		16:00		travel	TV or radio	travelling at services or sh	inside	Yes Yes	No No	No No	No No	No	5	woman		Thursday
28	1	1		16:10		shopping cleaning	cooking	at own home	inside	Yes	No	No	No	No	4	woman		Thursday
29	1	1		16:20		cleaning	internet	at own home	inside	Yes	No	No	No	No	4	woman		Thursday
30	1	1		16:40		cooking	internet	at own home	inside	Yes	No	No	No	No	4	woman	48	Thursday
31	1	1		17:00		cooking		at own home	inside	Yes	No	No	No	No	4	woman		Thursday
32	1	1		17:50		internet	TV or radio	at own home	inside	Yes	No	No	No	No	5	woman	48	Thursday
33	1	1		18:00		internet	TV or radio	at own home	inside	No	No	Yes	Yes	No	5	woman		Thursday
34	1	1		18:10		eat & drink	TV or radio	at own home	inside	No	No	Yes	No	No	5	woman		Thursday
35	1	1		18:50		eat & drink		at own home	inside	No	No	Yes	No	No	5	woman		Thursday
36	1	1		19:00		TV or radio		at own home	inside	No	No	Yes	No	No	5	woman		Thursday
37	1	1		19:10		TV or radio	cleaning	at own home	inside	No	No	Yes	Yes	No	5	woman	48	Thursday
38	1	1		20:00		TV or radio	cleaning	at own home	inside						5	woman		Thursday
39	1	1		20:10		cooking		at own home	inside	No	No	Yes	Yes	No	4	woman		Thursday
40	1	1		20:50		cooking		at own home	inside						4	woman		Thursday
41	1	1		21:00		other leisure		at own home	inside						6	woman		Thursday
42	1	1		21:10		internet		at own home	inside	No	No	Yes	Yes	No	2	woman		Thursday
43	1	1		22:00		internet		at own home	inside						2	woman		Thursday
44	1	1		23:40		other leisure	TV or radio	at own home	inside	No	No	Yes	Yes	No	very much	woman		Thursday
45	1			01:00		internet	TV or radio	at own home	inside	No	No	Yes	Yes	No	2	woman		Thursday
46	1			04:00		sleep		at own home	inside	No	No	Yes	Yes	No	very much			Thursday

### after:





After - ZOOMED IN

Data Tools

View



#### TIMEUSEX

- Converts an episode file in long format —where each row represents an episode of activity— into a diary-level file that summarizes the time use information for the selected activity.
- The new file will contain variables with the following information:
- 1) total time spent on the activity
- 2) number of times the diarist engages in the activity on that day
- 3) timing and duration for the different episodes of activity
- For *timeusex* to produce the desired results, the diary should cover an entire 24-hour period, and the episodes of activity should be non-overlapping and contain no gaps between them\*.

<sup>\*</sup> In other words, all diaries should start at minute 0, end at minute 1440, and the end of one episode should coincide exactly with the start of the next episode. It may be a good idea to run **epichecks** before using this program, because if there were any errors in 'start' and/or 'end,' the program may not produce the desired results.

### **TIMEUSEX**

### Example

Using the example dataset "diary", we produce a diary-level file where each row of data represents a day- with detailed information for *eating*.

### Syntax

net get timeuse

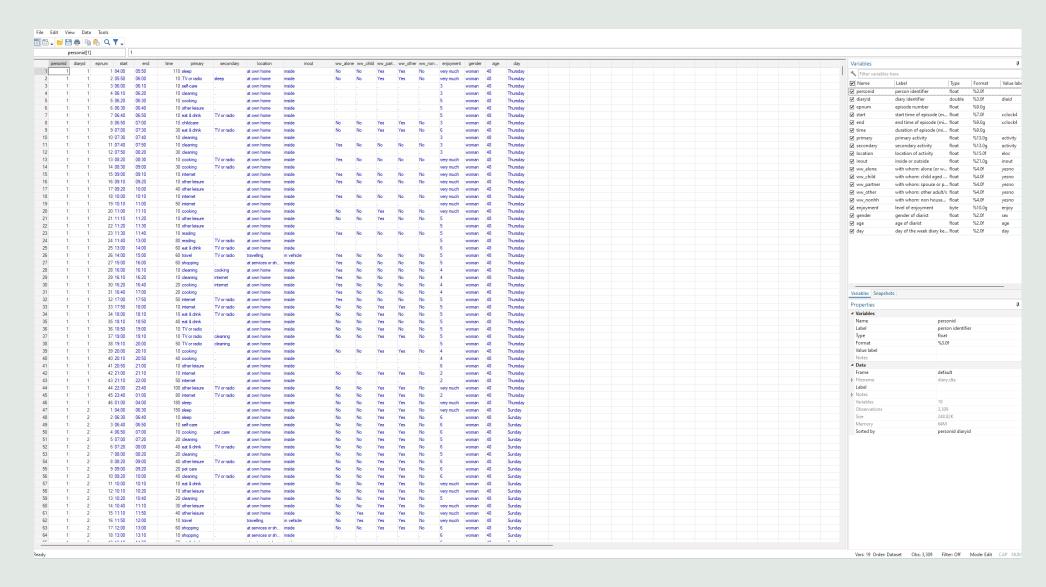
use diary, clear

gen eating=0

replace eating=1 if primary==2 | secondary==2

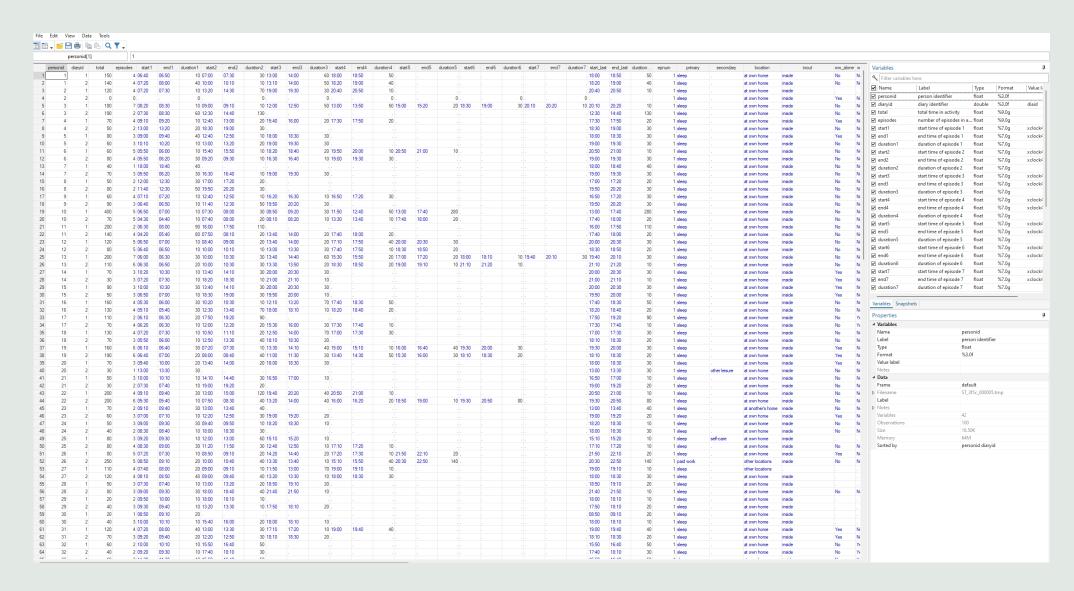
timeusex eating, diaryid(personid diaryid) diaryst(4)

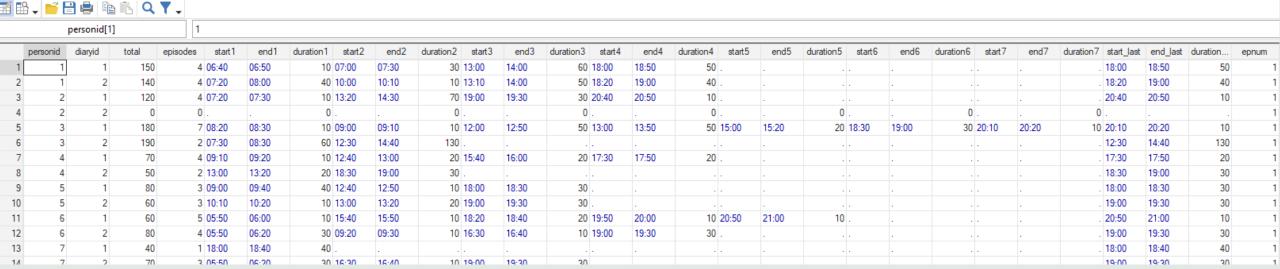
### before:

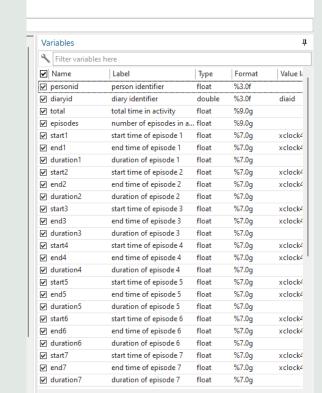


File Edit View Data personid[1] epnum start secondary location inout ww\_alone ww\_child ww\_part... ww\_other ww\_non. gender day personid diaryid end time primary enjoyment age 1 04:00 05:50 110 sleep at own home inside No Yes Yes No 48 Thursday very much woman 48 2 2 05:50 06:00 10 TV or radio sleep inside No No Yes Yes No Thursday at own home very much woman 3 3 06:00 06:10 10 self-care inside 48 Thursday at own home woman 06:20 48 4 4 06:10 10 cleaning at own home inside woman Thursday 5 06:20 06:30 10 cooking inside 5 48 at own home woman Thursday 6 06:30 06:40 5 48 1 10 other leisure at own home inside woman Thursday 5 7 06:40 06:50 10 eat & drink TV or radio inside 48 Thursday at own home woman 8 06:50 07:00 10 childcare No No Yes Yes No 3 48 Thursday at own home inside woman 9 No No 6 9 07:00 07:30 30 eat & drink TV or radio at own home inside No Yes Yes woman 48 Thursday 10 10 07:30 07:40 10 cleaning inside 48 Thursday at own home woman 11 11 07:40 07:50 10 cleaning No No No 3 48 at own home inside Yes No woman Thursday 12 3 12 07:50 08:20 48 30 cleaning at own home inside woman Thursday 13 1 13 08:20 08:30 10 cooking TV or radio Yes No No No No 48 inside Thursday at own home very much woman 14 1 14 08:30 09:00 30 cooking TV or radio at own home inside woman 48 Thursday very much 15 1 15 09:00 09:10 No No No 48 10 internet at own home inside Yes No very much woman Thursday 16 16 09:10 09:20 10 other leisure No No No No 48 inside Yes Thursday at own home very much woman 17 1 10:00 48 17 09:20 40 other leisure at own home inside very much woman Thursday 18 48 18 10:00 10:10 10 internet at own home inside Yes No No No No very much woman Thursday 19 1 19 10:10 11:00 50 internet at own home inside 48 Thursday very much woman 20 20 11:00 11:10 No No No No 48 Thursday 10 cooking at own home inside Yes very much woman 21 No No No 48 21 11:10 11:20 10 other leisure at own home inside No Yes 5 Thursday woman 22 22 11:20 11:30 10 other leisure 5 48 inside Thursday at own home woman 23 Thursday 23 11:30 11:40 10 reading at own home inside Yes No No No No woman 48 5 24 24 11:40 13:00 80 reading TV or radio at own home inside 48 Thursday woman 25 25 13:00 14:00 6 48 60 eat & drink TV or radio at own home inside woman Thursday 26 15:00 60 travel No 5 48 26 14:00 TV or radio travelling in vehicle Yes No No No Thursday woman 27 5 27 15:00 16:00 60 shopping Yes No No No No 48 Thursday at services or sh... inside woman 28 16:10 No No 48 28 16:00 10 cleaning cooking Yes No No 4 Thursday at own home inside woman 29 29 16:10 16:20 10 cleaning internet inside Yes No No No No 48 Thursday at own home woman 30 1 30 16:20 16:40 20 cooking internet at own home inside Yes No No No No woman 48 Thursday 31 48 1 17:00 31 16:40 20 cooking at own home inside Yes No No No No 4 woman Thursday 32 17:50 5 1 32 17:00 50 internet TV or radio inside No No No 48 Thursday at own home Yes No woman 33 33 17:50 18:00 10 internet No Yes No 5 48 TV or radio at own home inside No Yes woman Thursday 34 34 18:00 18:10 10 eat & drink No No No 5 48 TV or radio at own home inside No Yes Thursday woman 35 35 18:10 18:50 40 eat & drink inside No No Yes No No 5 48 Thursday at own home woman 36 36 18:50 19:00 10 TV or radio No No No No 5 48 at own home inside Yes woman Thursday 37 37 19:00 No No No 5 48 19:10 10 TV or radio cleaning at own home inside Yes Yes woman Thursday 38 38 19:10 20:00 50 TV or radio 5 48 cleaning at own home inside woman Thursday 39 39 20:00 20:10 No No Yes No 48 10 cooking at own home inside Yes 4 woman Thursday 40 40 20:10 20:50 40 cooking inside 48 Thursday at own home woman 41 41 20:50 21:00 10 other leisure 6 48 at own home inside woman Thursday 42 42 21:00 21:10 No No 2 48 10 internet at own home inside Νo Yes Yes woman Thursday 2 43 1 22:00 48 43 21:10 50 internet at own home inside woman Thursday 44 44 22:00 23:40 TV or radio 48 100 other leisure inside No No Yes Yes No woman Thursday at own home very much 45 45 23:40 01:00 80 internet TV or radio at own home inside No No Yes Yes No 2 woman 48 Thursday 46 46 01:00 04:00 No No No 48 180 sleep at own home inside Yes Yes very much woman Thursday

### after:







File Edit

View Data

### SEQUENCE

- Converts a time use file in calendar long format where each row represents a time interval of constant duration in a person's day—into an episode-level file.
- In the episode file, each row represents an episode of activity, a period of time during which there is no change in any of the variables specified in the syntax.

#### Variables that need to exist:

- ✓ var1 to var30: variable/s used to define the episode of activity. These variables are usually the activity, and the other diary fields such as location, copresence, etc. Up to 30 variables can be specified to define the episodes of activity. The variables need to be numeric; strings are not allowed.
- ✓ diaryid(string): the names of the variable or variables that when considered jointly uniquely identify the diary.
- ✓ diaryst(n): diary start time, a number is expected, e.g., 4 if the diary starts at 4 am or 0 if the diary starts at midnight. A 24-hour clock is used.
- ✓ tslot: variable indicating the number of time slot for each row of data. The time slots are the intervals of time into which the day is divided. For example, in a diary organise into 10-minute time slots, 144 time slots are expected, taking values from 1 to 144. Before creating the episodes, the program will check that all diaries have the same number of time slots and that they have the expected values. If this variable is called something other than "tslot", simply rename it before running the program.

# SEQUENCE

# Example

Using the example dataset "calendar", we convert it into an episode file. In this example the episodes are defined by the primary activity only.

Note how the number of episodes drops when fewer variables are used to define the episodes. The diary starts at 4:00 am and the diaries are uniquely identified by the variables 'personid' and 'diaryid'.

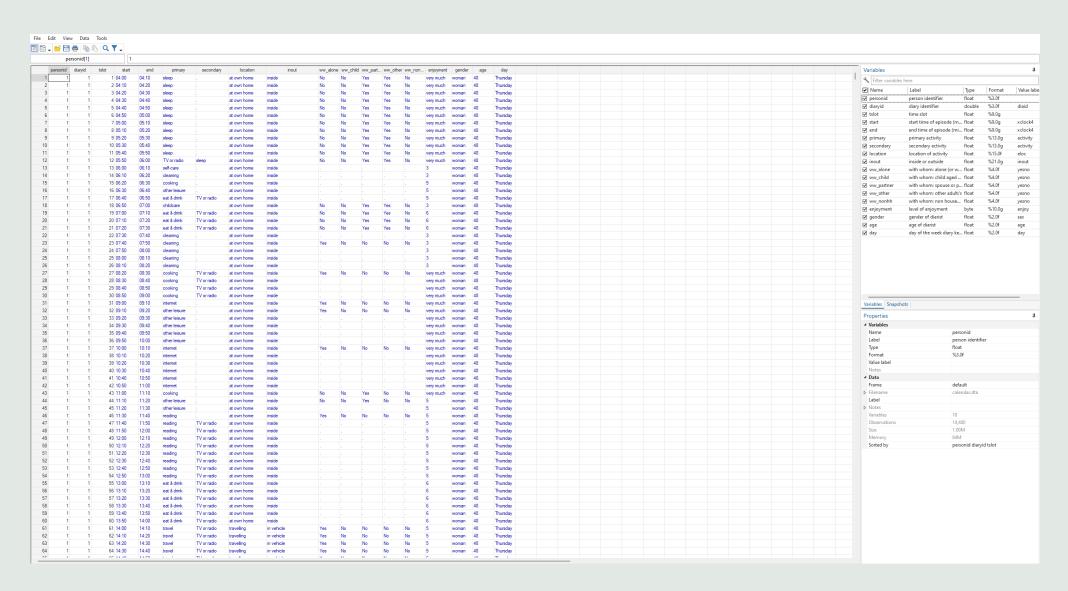
# Syntax

net get timeuse

use calendar, clear

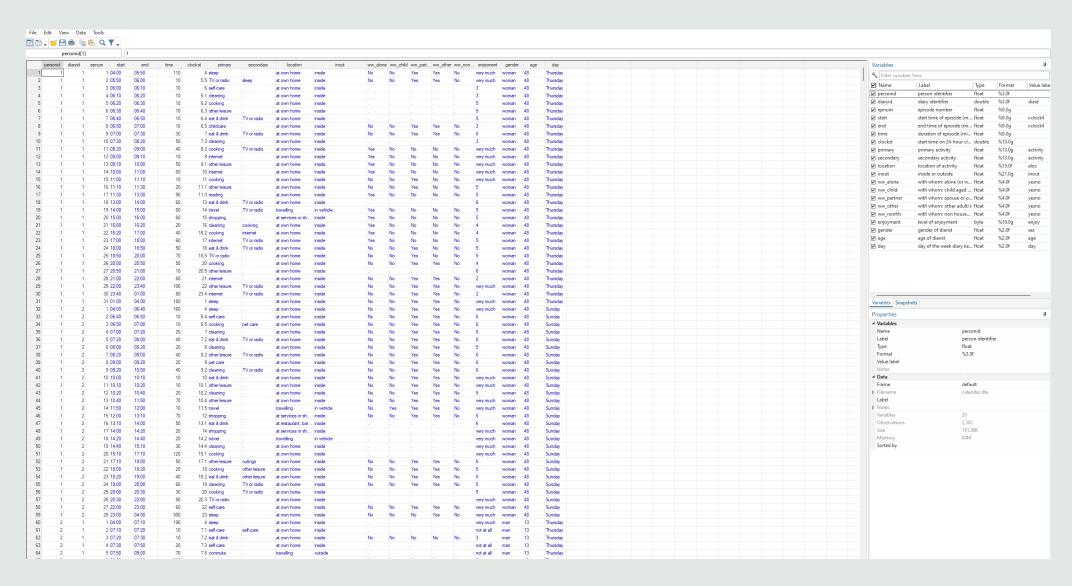
sequence primary, diaryid(personid diaryid) diaryst(4)

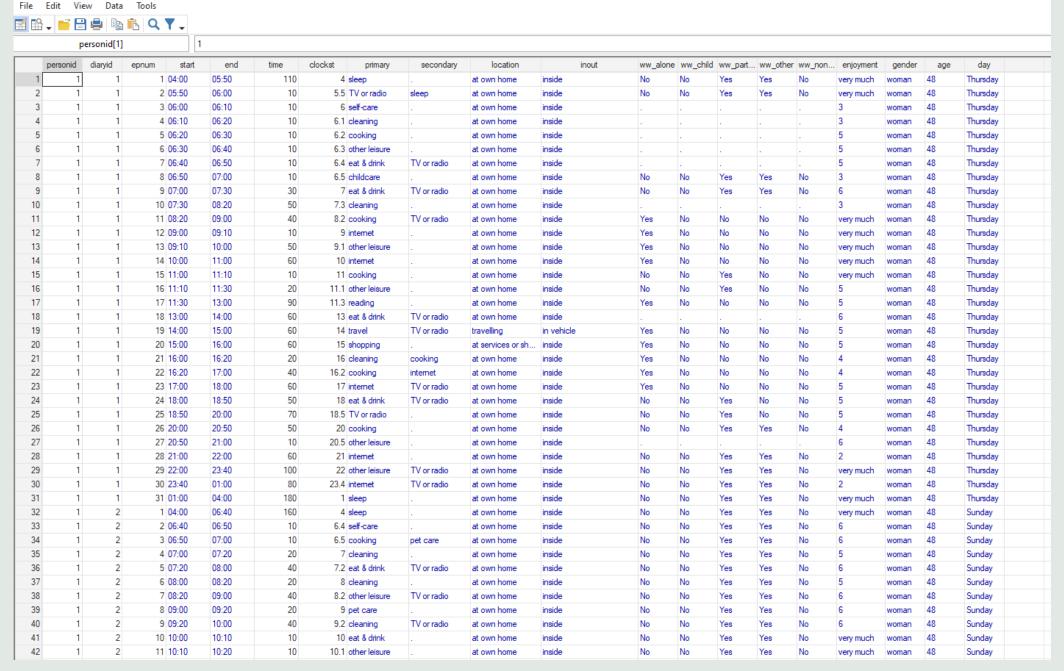
#### before:



File Edit View Data Tools personid[1] tslot personid diaryid start end primary secondary location inout ww\_alone ww\_child ww\_part... ww\_other ww\_non... enjoyment day 1 04:00 04:10 sleep at own home inside No No Yes Yes No very much 48 Thursday woman 2 04:10 04:20 sleep No No Yes Yes No 48 Thursday at own home inside very much woman 3 04:20 04:30 sleep at own home inside No No Yes Yes No very much woman 48 Thursday 4 04:30 04:40 sleep at own home inside No No Yes Yes No very much 48 Thursday woman 5 04:40 04:50 sleep at own home inside No No Yes Yes No very much Thursday woman 6 04:50 05:00 No at own home No Yes Yes No 48 Thursday sleep inside very much woman 7 05:00 05:10 sleep at own home inside No No Yes Yes No 48 Thursday very much woman 8 05:10 05:20 sleep No No Yes Yes No 48 Thursday at own home inside very much woman 9 05:20 05:30 sleep at own home inside No No Yes Yes No very much 48 Thursday 10 10 05:30 05:40 sleep at own home inside No Yes Yes No very much Thursday woman 11 11 05:40 05:50 sleep at own home inside No No Yes Yes No very much 48 Thursday woman Yes 12 12 05:50 06:00 TV or radio No Yes No 48 No Thursday sleep at own home inside very much woman 13 13 06:00 06:10 self-care at own home inside woman 48 Thursday 14 06:10 14 06:20 cleaning at own home inside woman 48 Thursday 15 15 06:20 06:30 cooking at own home inside woman 48 Thursday 16 16 06:30 06:40 other leisure at own home inside 48 Thursday woman 17 17 06:40 06:50 eat & drink TV or radio at own home inside 5 48 Thursday woman 18 18 06:50 07:00 No No 48 childcare inside No Yes Yes Thursday at own home woman 19 No No 19 07:00 07:10 eat & drink TV or radio at own home inside No Yes Yes woman 48 Thursday 20 20 07:10 07:20 eat & drink TV or radio at own home inside No No Yes Yes No woman Thursday 21 21 07:20 07:30 eat & drink TV or radio at own home inside No No Yes Yes No 6 woman 48 Thursday 22 22 07:30 07:40 3 48 cleaning at own home inside Thursday woman 23 23 07:40 07:50 cleaning at own home inside Yes No No No 3 woman 48 Thursday 24 24 07:50 48 08:00 cleaning at own home inside woman Thursday 25 25 08:00 08:10 cleaning at own home inside woman Thursday 26 26 08:10 08:20 cleaning at own home inside 48 Thursday woman 27 27 08:20 08:30 cooking TV or radio at own home inside Yes No No No very much woman 48 Thursday 28 28 08:30 08:40 48 cooking TV or radio at own home inside very much woman Thursday 29 29 08:40 08:50 cooking TV or radio at own home inside very much woman 48 Thursday 30 30 08:50 09:00 cooking TV or radio at own home inside Thursday verv much woman 31 31 09:00 09:10 internet at own home inside Yes No No No No very much woman 48 Thursday No 32 32 09:10 09:20 No No other leisure at own home inside Yes No 48 Thursday very much woman 33 33 09:20 09:30 other leisure at own home inside very much woman 48 Thursday 34 34 09:30 09:40 other leisure at own home inside very much woman 48 Thursday 35 35 09:40 09:50 other leisure at own home inside very much woman Thursday 36 36 09:50 10:00 other leisure at own home 48 Thursday inside verv much woman 37 37 10:00 10:10 internet at own home inside Yes No No No very much woman 48 Thursday 38 38 10:10 10:20 internet at own home inside very much woman 48 Thursday 39 39 10:20 10:30 internet at own home inside very much woman 48 Thursday 40 40 10:30 10:40 internet at own home inside very much woman Thursday 41 10:50 41 10:40 internet at own home inside very much woman 48 Thursday 42 42 10:50 11:00 48 internet at own home Thursday inside very much woman 43 43 11:00 11:10 cooking at own home inside No Yes No No very much woman 48 Thursday No 5 44 44 11:10 No No 11:20 other leisure at own home inside Yes woman 48 Thursday 45 45 11:20 11:30 other leisure at own home inside woman 48 Thursday 46 46 11:30 11:40 Yes No No No No 48 Thursday reading at own home inside woman 47 47 11:40 11:50 5 reading TV or radio at own home inside woman 48 Thursday 48 48 11:50 12:00 5 48 reading TV or radio at own home inside woman Thursday 49 49 12:00 12:10 reading TV or radio at own home inside woman 48 Thursday 50 50 12:10 12:20 reading TV or radio at own home inside Thursday woman 51 51 12:20 12:30 reading TV or radio at own home inside woman 48 Thursday 52 52 12:30 12:40 48 Thursday reading TV or radio at own home inside woman

### after:





### SEQUENCEX

- Converts an episode file in long format —where each row represents an episode of activity—into another episode file defined by different variables.
- A new episode will be defined any time there is a change in any of the variables specified in the syntax.

In short, the new episode file will be a simplified version of the original one and will most likely contain fewer episodes than the original.

# SEQUENCEX

### Example

Using the example dataset "diary", we convert it into long format, where each row represents an episode of activity. In this example the episodes are defined by the primary activity only.

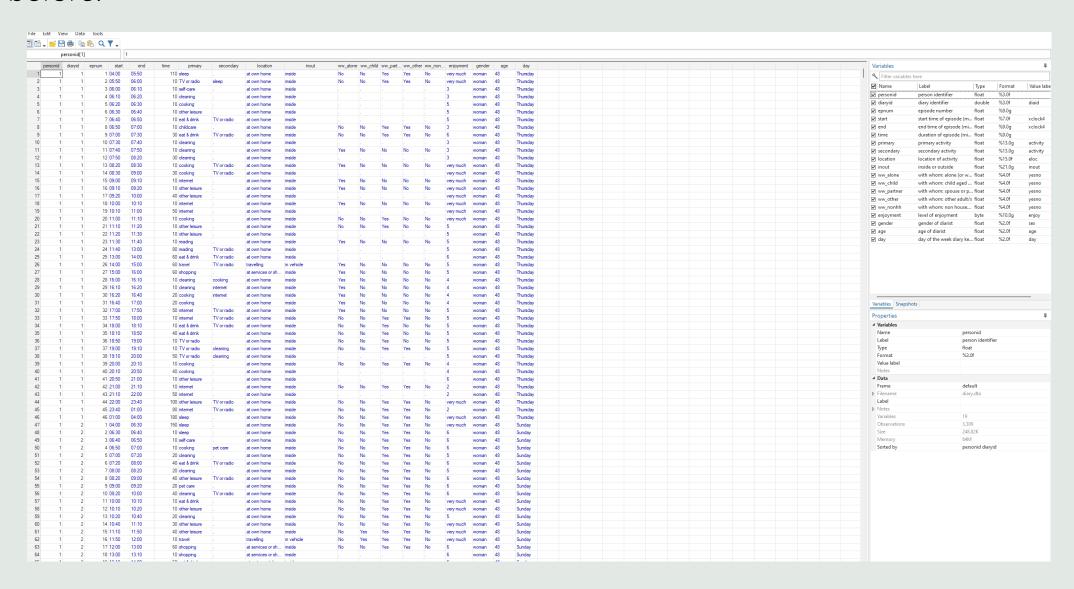
### Syntax

net get timeuse

use diary, clear

sequencex primary, diaryid(personid diaryid) diaryst(4)

### before:



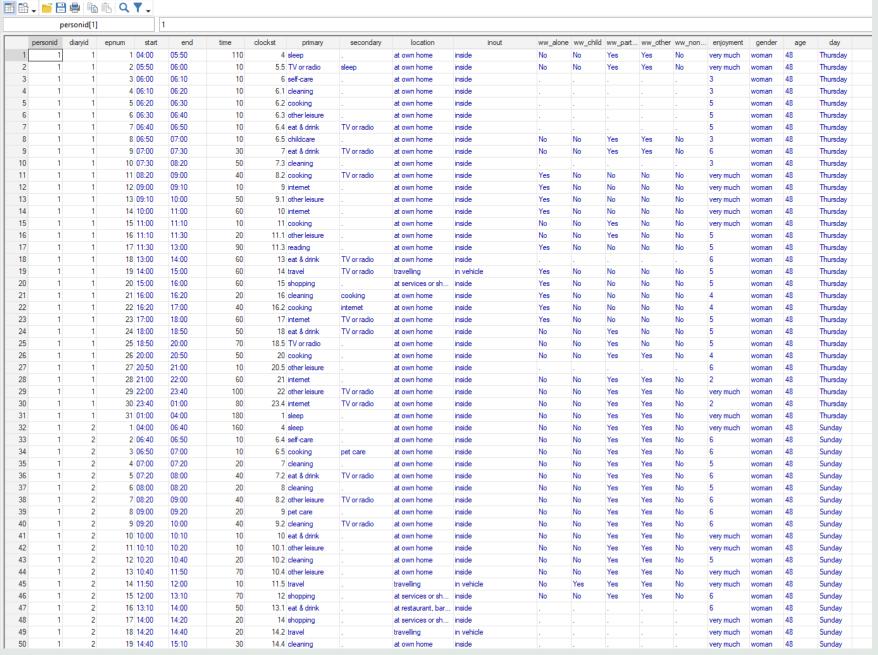
File Edit View Data lools

personid[1]

personid																
	diaryid	epnum start	end	time primary	secondary	location	inout	ww_alone	ww_child	ww_part	ww_other	ww_non	enjoyment	gender	age	day
1	I	1 1 04:00	05:50	110 sleep		at own home	inside	No	No	Yes	Yes	No	very much	woman	48	Thursday
1	I	1 2 05:50	06:00	10 TV or radio	sleep	at own home	inside	No	No	Yes	Yes	No	very much	woman	48	Thursday
1	I	1 3 06:00	06:10	10 self-care		at own home	inside						3	woman	48	Thursday
1	I	1 4 06:10	06:20	10 cleaning		at own home	inside						3	woman	48	Thursday
1	I	1 5 06:20	06:30	10 cooking		at own home	inside						5	woman	48	Thursday
1	I	1 6 06:30	06:40	10 other leisure		at own home	inside						5	woman	48	Thursday
1	1	1 7 06:40	06:50	10 eat & drink	TV or radio	at own home	inside						5	woman	48	Thursday
1	ı	1 8 06:50	07:00	10 childcare		at own home	inside	No	No	Yes	Yes	No	3	woman	48	Thursday
1	ı	1 9 07:00	07:30	30 eat & drink	TV or radio	at own home	inside	No	No	Yes	Yes	No	6	woman	48	Thursday
1	ı	1 10 07:30	07:40	10 cleaning		at own home	inside						3	woman	48	Thursday
1	1	1 11 07:40	07:50	10 cleaning		at own home	inside	Yes	No	No	No	No	3	woman	48	Thursday
1	1	1 12 07:50	08:20	30 cleaning		at own home	inside						3	woman	48	Thursday
1		1 13 08:20	08:30	10 cooking	TV or radio	at own home	inside	Yes	No	No	No	No No	very much	woman	48	Thursday
1		1 14 08:30	09:00	30 cooking	TV or radio	at own home	inside						very much	woman	48	Thursday
1		1 15 09:00	09:10	10 internet	1 - 5. 70010	at own home	inside	Yes	No No	No No	No	No No	very much	woman	48	Thursday
1		1 16 09:10	09:20	10 other leisure		at own home	inside		No	No	No	No	very much	woman	48	Thursday
1		1 17 09:20	10:00	40 other leisure		at own home	inside	169	140	140	140	140			48	Thursday
1				40 other leisure 10 internet				· V	No	No	No	No	very much	woman	48	-
1			10:10			at own home	inside	Yes	No	No	No	No	very much	woman		Thursday
			11:00	50 internet		at own home	inside	N-	· M=	V	N-	· M-	very much	woman	48 48	Thursday
1			11:10	10 cooking		at own home	inside	No	No	Yes	No	No	very much	woman		Thursday
1		1 21 11:10	11:20	10 other leisure		at own home	inside	No	No	Yes	No	No	5	woman	48	Thursday
1		1 22 11:20	11:30	10 other leisure		at own home	inside						5	woman	48	Thursday
1		1 23 11:30	11:40	10 reading		at own home	inside	Yes	No	No	No	No	5	woman	48	Thursday
1		1 24 11:40	13:00	80 reading	TV or radio	at own home	inside						5	woman	48	Thursday
1		1 25 13:00	14:00	60 eat & drink	TV or radio	at own home	inside						6	woman	48	Thursday
1		1 26 14:00	15:00	60 travel	TV or radio	travelling	in vehicle		No	No	No	No	5	woman	48	Thursday
1	1	1 27 15:00	16:00	60 shopping		at services or sh	inside	Yes	No	No	No	No	5	woman	48	Thursday
1	I	1 28 16:00	16:10	10 cleaning	cooking	at own home	inside	Yes	No	No	No	No	4	woman	48	Thursday
1	I	1 29 16:10	16:20	10 cleaning	internet	at own home	inside	Yes	No	No	No	No	4	woman	48	Thursday
1	I	1 30 16:20	16:40	20 cooking	internet	at own home	inside	Yes	No	No	No	No	4	woman	48	Thursday
1	I	1 31 16:40	17:00	20 cooking		at own home	inside	Yes	No	No	No	No	4	woman	48	Thursday
1	I	1 32 17:00	17:50	50 internet	TV or radio	at own home	inside	Yes	No	No	No	No	5	woman	48	Thursday
1	I	1 33 17:50	18:00	10 internet	TV or radio	at own home	inside	No	No	Yes	Yes	No	5	woman	48	Thursday
1	1	1 34 18:00	18:10	10 eat & drink	TV or radio	at own home	inside	No	No	Yes	No	No	5	woman	48	Thursday
1	I	1 35 18:10	18:50	40 eat & drink		at own home	inside	No	No	Yes	No	No	5	woman	48	Thursday
1	I	1 36 18:50	19:00	10 TV or radio		at own home	inside	No	No	Yes	No	No	5	woman	48	Thursday
1	I	1 37 19:00	19:10	10 TV or radio	cleaning	at own home	inside	No	No	Yes	Yes	No	5	woman	48	Thursday
1	I	1 38 19:10	20:00	50 TV or radio	cleaning	at own home	inside						5	woman	48	Thursday
1	I	1 39 20:00	20:10	10 cooking		at own home	inside	No	No	Yes	Yes	No	4	woman	48	Thursday
1	ı	1 40 20:10	20:50	40 cooking		at own home	inside						4	woman	48	Thursday
1	ı	1 41 20:50	21:00	10 other leisure		at own home	inside						6	woman	48	Thursday
1		1 42 21:00	21:10	10 internet	1.	at own home	inside	No	No	Yes	Yes	No	2	woman	48	Thursday
1	1	1 43 21:10	22:00	50 internet		at own home	inside						2	woman	48	Thursday
1		1 44 22:00	23:40	100 other leisure	TV or radio	at own home	inside	No	No	Yes	Yes	No No	very much	woman	48	Thursday
1		1 45 23:40	01:00	80 internet	TV or radio	at own home	inside	No	No	Yes	Yes	No	2	woman	48	Thursday
1		1 46 01:00	04:00	180 sleep	. • 61 14410	at own home	inside	No	No	Yes	Yes	No	very much	woman	48	Thursday
1		2 1 04:00	06:30	150 sleep		at own home	inside		No	Yes	Yes	No	very much	woman	48	Sunday
1		2 2 06:30	06:40	10 sleep		at own home	inside	No	No	Yes	Yes	No	6	woman	48	Sunday
1			06:40					No							48	
- 1		2 3 06:40 2 4 06:50	06:50	10 self-care 10 cooking	pet care	at own home	inside	No No	No No	Yes	Yes Yes	No No	6	woman	48	Sunday
1							inside			Yes				woman		

# after:

personid[1	11	1																		
inid diarvid	epnum st	rt end	time cloc	kst primary	secondary	location	inout	ww alor	ne ww chi	ld ww part	t ww oth	er ww non.	enjoymen	nt gen	ider age	day	Variables			
1 1	1 04:0		110	4 sleep		at own home	inside	No	No	Yes	Yes	No	very much			Thursday	Silter variables h	here		
1 1	2 05:5		10	5.5 TV or radio	sleep	at own home	inside	No	No	Yes	Yes	No	very much			Thursday	✓ Name	Label	Туре	Format
1 1	3 06:0 4 06:1		10	6 self-care 6.1 cleaning		at own home	inside inside						3	wom		Thursday Thursday	☑ personid	person identifier	float	%3.0f
1 1	5 06:2		10	6.1 cleaning 6.2 cooking		at own home at own home	inside						5	wom		Thursday	☑ diaryid	diary identifier	double	%3.0f
1 1	6 06:3		10	6.3 other leisure		at own home	inside						5	womi		Thursday	☑ epnum	episode number	float	%9.0g
1 1	7 06:4		10	6.4 eat & drink	TV or radio	at own home	inside						5	woma		Thursday	✓ start	start time of episode (m	. float	%7.0f
1 1	8 06:5		10	6.5 childcare		at own home	inside	No	No	Yes	Yes	No	3	wom	an 48	Thursday	✓ end	end time of episode (mi	. float	%9.0g
1 1	9 07:0		30	7 eat & drink	TV or radio	at own home	inside	No	No	Yes	Yes	No	6	wom		Thursday	☑ time	duration of episode (mi		%9.0g
1 1	10 07:3		50	7.3 cleaning	Tr	at own home	inside				-		3	womi		Thursday	☑ clockst	start time on 24-hour cl		%10.0g
1 1	11 08:2		40 10	8.2 cooking 9 internet	TV or radio	at own home at own home	inside inside	Yes Yes	No No	No No	No No	No No	very much			Thursday Thursday	☑ primary	primary activity	float	%13.0g
1 1	13 09:1		50	9.1 other leisure		at own home	inside	Yes	No	No	No	No	very much			Thursday	✓ secondary ✓ location	secondary activity location of activity	float	%13.0g %15.0f
1 1	14 10:0		60	10 internet		at own home	inside	Yes	No	No	No	No	very much			Thursday	☑ inout	inside or outside	float	%21.0g
1 1	15 11:0	11:10	10	11 cooking		at own home	inside	No	No	Yes	No	No	very much	wom	an 48	Thursday	✓ ww_alone	with whom: alone (or w		%4.0f
1 1	16 11:1		20	11.1 other leisure		at own home	inside	No	No	Yes	No	No	5	wom		Thursday	ww_child	with whom: child aged		%4.0f
1 1	17 11:3		90	11.3 reading	TM	at own home	inside	Yes	No	No	No	No	5	wom		Thursday	ww_partner	with whom: spouse or p.		%4.0f
1 1	18 13:0 1 19 14:0		60	13 eat & drink 14 travel	TV or radio TV or radio	at own home travelling	inside in vehicle	Yes	No	No	No	No	5	wom		Thursday Thursday	✓ ww_other	with whom: other adult/	float	%4.0f
1 1	20 15:0		60	15 shopping	. v or radio	at services or sh	in venicie inside	Yes	No	No	No	No	5	wom		Thursday	ww_nonhh	with whom: non house		%4.0f
1 1	21 16:0		20	16 cleaning	cooking	at own home	inside	Yes	No	No	No	No	4	wom		Thursday	✓ enjoyment	level of enjoyment	byte	%10.0g
1 1	22 16:2		40	16.2 cooking	internet	at own home	inside	Yes	No	No	No	No	4	wom	an 48	Thursday	☑ gender	gender of diarist	float	%2.0f
1 1	23 17:0		60	17 internet	TV or radio	at own home	inside	Yes	No	No	No	No	5	wom		Thursday	☑ age	age of diarist day of the week diary ke.	float	%2.0f %2.0f
1 1	24 18:0		50	18 eat & drink	TV or radio	at own home	inside	No	No	Yes	No	No	5	wom		Thursday	☑ day	day of the week diary ke.	float	762.UT
1 1	25 18:5 26 20:0		70 50	18.5 TV or radio 20 cooking		at own home at own home	inside inside	No No	No No	Yes Yes	No Yes	No No	5	wom		Thursday Thursday				
1 1	27 20:5		10	20.5 other leisure		at own home	inside	NO	140	169	res	140	6	wom		Thursday				
1 1	28 21:0		60	21 internet		at own home	inside	No	No	Yes	Yes	No	2	womi		Thursday				
1 1	29 22:0		100	22 other leisure	TV or radio	at own home	inside	No	No	Yes	Yes	No	very much	wom		Thursday				
1 1	30 23:4		80	23.4 internet	TV or radio	at own home	inside	No	No	Yes	Yes	No	2	wom		Thursday				
1 1	31 01:0		180	1 sleep		at own home	inside	No	No	Yes	Yes	No	very much			Thursday	Variables Snapsho	ots		
1 2	2 1 04:0 2 2 06:4		160 10	4 sleep 6.4 self-care		at own home	inside	No	No No	Yes Yes	Yes Yes	No No	very much			Sunday	Properties			
1 2	2 06:4		10	6.5 cooking	pet care	at own home at own home	inside inside	No No	No No	Yes	Yes	No No	6	woma		Sunday	✓ Variables			
1 2	4 07:0		20	7 cleaning	percare	at own home	inside	No	No	Yes	Yes	No	5	womi		Sunday	Name	pers	onid	
1 2	5 07:2		40	7.2 eat & drink	TV or radio	at own home	inside	No	No	Yes	Yes	No	6	wom		Sunday	Label	pers	on identifier	
1 2	6 08:0	08:20	20	8 cleaning		at own home	inside	No	No	Yes	Yes	No	5	woma	an 48	Sunday	Type	floar		
1 2	7 08:2		40	8.2 other leisure	TV or radio	at own home	inside	No	No	Yes	Yes	No	6	woma		Sunday	Format	%3.0	Of	
1 2	8 09:0		20 40	9 pet care		at own home	inside	No	No	Yes	Yes	No No	6	wom		Sunday	Value label Notes			
1 2	9 09:2		10	9.2 cleaning 10 eat & drink	TV or radio	at own home at own home	inside inside	No No	No No	Yes Yes	Yes Yes	No No	6 very much	wom		Sunday Sunday	✓ Data			
1 2	11 10:1		10	10.1 other leisure		at own home	inside	No	No	Yes	Yes	No	very much	wom		Sunday	Frame	defa	ult	
1 2	12 10:2		20	10.2 cleaning		at own home	inside	No	No	Yes	Yes	No	5	womi		Sunday	▶ Filename	dian	y.dta	
1 2	13 10:4	11:50	70	10.4 other leisure		at own home	inside	No	No	Yes	Yes	No	very much	wom	an 48	Sunday	Label			
1 2	14 11:5		10	11.5 travel		travelling	in vehicle	No	Yes	Yes	Yes	No	very much			Sunday	▶ Notes			
1 2	15 12:0		70	12 shopping		at services or sh	inside	No	No	Yes	Yes	No	6	womi		Sunday	Variables Observations	20	2	
1 2	2 16 13:1 2 17 14:0		50 20	13.1 eat & drink 14 shopping		at restaurant, bar. at services or sh	inside inside						6 very much	wom		Sunday Sunday	Observations Size	2,30		
1 2	17 14:0		20	14 shopping 14.2 travel		at services or sh travelling	in vehicle						very much			Sunday	Memory	64M		
1 2	19 14:4		30	14.4 cleaning		at own home	inside						very much			Sunday	Sorted by		onid diaryid	
1 2	20 15:1	17:10	120	15.1 cooking		at own home	inside						very much		an 48	Sunday				
1 2	21 17:1		50	17.1 other leisure	outings	at own home	inside	No	No	Yes	Yes	No	6	wom		Sunday				
1 2	22 18:0		20	18 cooking	other leisure	at own home	inside	No	No	Yes	Yes	No	5	wom		Sunday				
1 2	2 23 18:2 2 24 19:0		40 60	18.2 eat & drink 19 cleaning	other leisure TV or radio	at own home at own home	inside	No	No No	Yes Yes	Yes Yes	No No	5	wom		Sunday Sunday				
1 2	2 24 19:0		30	20 cooking	TV or radio	at own home	inside inside	NO	INO	res	res	IND	5	wom		Sunday				
1 2	26 20:3		90	20.3 TV or radio		at own home	inside						very much			Sunday				
1 2	27 22:0		60	22 self-care		at own home	inside	No	No	Yes	Yes	No	very much			Sunday				
1 2	28 23:0		300	23 sleep		at own home	inside	No	No	No	Yes	No	very much	wom		Sunday				
2 1	1 04:0		190	4 sleep		at own home	inside						very much		13	Thursday				
2 1	2 07:1		10	7.1 self-care	self-care	at own home	inside	-	-		-		not at all	man	13	Thursday				
2 1	3 07:2 4 07:3		10 20	7.2 eat & drink 7.3 self-care		at own home at own home	inside inside	No	No	No	No	No	3 not at all	man man	13 13	Thursday Thursday				
2 1	4 07:3 1 5 07:5		70	7.3 sett-care 7.5 commute		at own home travelling	outside						not at all	man	13	Thursday Thursday				
-	5 07.5		200	7.5 commute		asvening	outside.						not at all	matt	10	Thursday				



File Edit View Data Tools

### TIMEUSE PACKAGE

timeuse: command to extract basic time use information for multiple activities from a file organised in episodes.

timeusex: command to extract detailed time use information for a single activity.

**sequence**: command to create episode files from calendar files.

**sequencex**: command to create episode files from other episode files.

tocalendar: command to transform episode files into calendar files

epichecks: command to detect errors in episode files.

**clocktomins**: command to convert episode start time from string to minute-of-the day.

clocktomine: command to convert episode end time from string to minute-of-the day.

**clocktominb**: command to convert episode start and end time from string to minute-of-the-day.

# timeuse.org/ timeusepackage

Written by **Dr Juana Lamote de Grignon Pérez**, 'timeuse' stata commands are now available to help you with time use data management and cleaning.

Keep an eye on our website, we are organising a webinar on the Stata 'timeuse' commands!



You can download <u>here</u> the working paper, however, please note that we are currently preparing an updated version.

# THANK YOU!

Elena Mylona and Juana Lamote de Grignon Pérez

