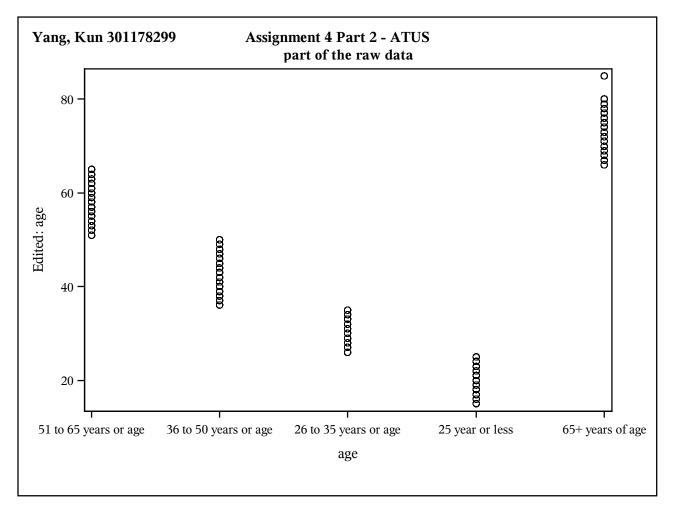
### Assignment 4 Part 2 - ATUS part of the raw data

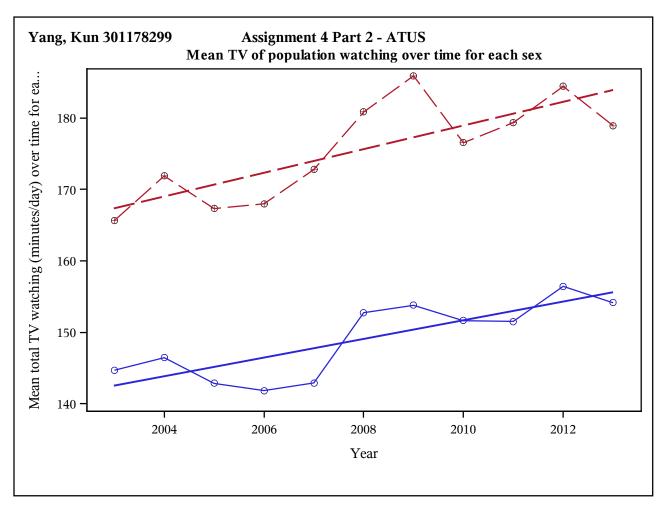
Obs	TUCASEID	t120304	t120303	totaltv	watchtv	TESEX	sex	TEAGE	age
1	20030100013280	0	325	325	1	1	male	60	51 to 65 years or age
2	20030100013344	0	60	60	1	2	female	41	36 to 50 years or age
3	20030100013352	0	120	120	1	2	female	26	26 to 35 years or age
4	20030100013848	0	265	265	1	2	female	36	36 to 50 years or age
5	20030100014165	0	60	60	1	1	male	51	51 to 65 years or age
6	20030100014169	0	60	60	1	2	female	32	26 to 35 years or age
7	20030100014209	0	0	0	0	2	female	44	36 to 50 years or age
8	20030100014427	0	210	210	1	2	female	21	25 year or less
9	20030100014550	0	120	120	1	2	female	33	26 to 35 years or age
10	20030100014758	0	0	0	0	2	female	39	36 to 50 years or age

	sex				
	female male				
	N	N			
Edited: sex					
1		64765			
2	83580				



### Assignment 4 Part 2 - ATUS mean time spent watching TV over time for each sex

Obs	TUYEAR	sex	_TYPE_	_FREQ_	meantv	proptv
1	2003	female	0	11668	144.689	0.77509
2	2003	male	0	9052	165.648	0.80088
3	2004	female	0	7850	146.446	0.78686
4	2004	male	0	6123	171.890	0.82730
5	2005	female	0	7440	142.841	0.79100
6	2005	male	0	5598	167.320	0.80599
7	2006	female	0	7427	141.840	0.78232
8	2006	male	0	5516	167.989	0.80804
9	2007	female	0	6950	142.913	0.77675
10	2007	male	0	5298	172.786	0.81358
11	2008	female	0	7078	152.746	0.79588
12	2008	male	0	5645	180.844	0.82329
13	2009	female	0	7491	153.776	0.80975
14	2009	male	0	5642	185.905	0.82725
15	2010	female	0	7447	151.622	0.78424
16	2010	male	0	5813	176.537	0.80447
17	2011	female	0	7019	151.529	0.76990
18	2011	male	0	5460	179.353	0.79698
19	2012	female	0	6907	156.434	0.79289
20	2012	male	0	5536	184.427	0.80875
21	2013	female	0	6303	154.133	0.78482
22	2013	male	0	5082	178.940	0.80415



### Assignment 4 Part 2 - ATUS test if the slope is the same for males and females

The GLM Procedure

Class Level Information					
Class	Levels	Values			
sex	2	female male			

Number of Observations Read	22
Number of Observations Used	22

### Assignment 4 Part 2 - ATUS test if the slope is the same for males and females

#### The GLM Procedure

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	4385.282769	1461.760923	95.26	<.0001
Error	18	276.203585	15.344644		
<b>Corrected Total</b>	21	4661.486354			

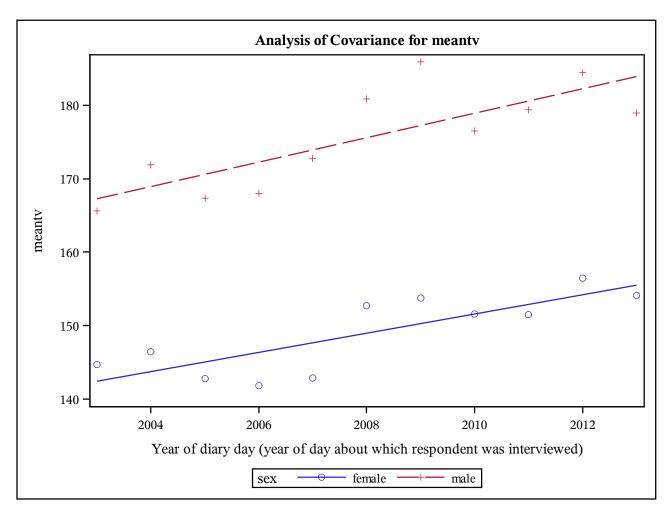
R-Square	Coeff Var	Root MSE	meantv Mean
0.940748	2.413564	3.917224	162.3004

Source	Source DF Type I SS		Mean Square	F Value	<b>Pr</b> > <b>F</b>
sex	1	3893.466612	3893.466612	253.73	<.0001
TUYEAR	1	484.810647	484.810647	31.59	<.0001
TUYEAR*sex	1	7.005510	7.005510	0.46	0.5078

Source	DF	Type III SS	Mean Square	F Value	<b>Pr</b> > <b>F</b>
sex	1	6.4949689	6.4949689	0.42	0.5235
TUYEAR	1	484.8106472	484.8106472	31.59	<.0001
TUYEAR*sex	1	7.0055096	7.0055096	0.46	0.5078

# Assignment 4 Part 2 - ATUS test if the slope is the same for males and females

The GLM Procedure



### Assignment 4 Part 2 - ATUS mean time spent watching TV for each year-age combination

Obs	TUYEAR	age	_TYPE_	_FREQ_	meantv	proptv
1	2003	25 year or less	0	2707	136.756	0.76860
2	2003	26 to 35 years or age	0	3662	128.085	0.75755
3	2003	36 to 50 years or age	0	6681	136.196	0.76346
4	2003	51 to 65 years or age	0	4441	166.485	0.80537
5	2003	65+ years of age	0	3229	234.229	0.87480
6	2004	25 year or less	0	1750	145.150	0.80144
7	2004	26 to 35 years or age	0	2408	135.945	0.77261
8	2004	36 to 50 years or age	0	4319	134.138	0.78657
9	2004	51 to 65 years or age	0	3220	171.196	0.80976
10	2004	65+ years of age	0	2276	236.093	0.88905
11	2005	25 year or less	0	1700	140.276	0.76720
12	2005	26 to 35 years or age	0	2307	131.994	0.77195
13	2005	36 to 50 years or age	0	4252	133.920	0.79013
14	2005	51 to 65 years or age	0	2777	163.299	0.81124
15	2005	65+ years of age	0	2002	230.995	0.86983
16	2006	25 year or less	0	1735	129.095	0.74883
17	2006	26 to 35 years or age	0	2228	130.050	0.77528
18	2006	36 to 50 years or age	0	4188	132.736	0.79129
19	2006	51 to 65 years or age	0	2706	167.004	0.79992
20	2006	65+ years of age	0	2086	241.799	0.87875
21	2007	25 year or less	0	1578	132.318	0.75464
22	2007	26 to 35 years or age	0	2123	132.159	0.76482
23	2007	36 to 50 years or age	0	3860	137.529	0.79518

### Assignment 4 Part 2 - ATUS mean time spent watching TV for each year-age combination

Obs	TUYEAR	age	_TYPE_	_FREQ_	meantv	proptv
24	2007	51 to 65 years or age	0	2686	169.846	0.79905
25	2007	65+ years of age	0	2001	241.313	0.87665
26	2008	25 year or less	0	1558	130.434	0.74991
27	2008	26 to 35 years or age	0	2180	135.407	0.78835
28	2008	36 to 50 years or age	0	3992	147.185	0.79685
29	2008	51 to 65 years or age	0	2913	190.226	0.83255
30	2008	65+ years of age	0	2080	248.570	0.89903
31	2009	25 year or less	0	1522	144.937	0.78716
32	2009	26 to 35 years or age	0	2281	140.085	0.77360
33	2009	36 to 50 years or age	0	3997	147.019	0.80158
34	2009	51 to 65 years or age	0	3102	187.951	0.84372
35	2009	65+ years of age	0	2231	246.116	0.90001
36	2010	25 year or less	0	1585	136.695	0.77365
37	2010	26 to 35 years or age	0	2295	131.474	0.75208
38	2010	36 to 50 years or age	0	3935	142.196	0.76204
39	2010	51 to 65 years or age	0	3198	178.456	0.82985
40	2010	65+ years of age	0	2247	248.819	0.86706
41	2011	25 year or less	0	1473	133.551	0.74278
42	2011	26 to 35 years or age	0	2084	125.287	0.71309
43	2011	36 to 50 years or age	0	3682	144.003	0.76044
44	2011	51 to 65 years or age	0	3010	185.098	0.82292
45	2011	65+ years of age	0	2230	251.888	0.88636
46	2012	25 year or less	0	1343	141.851	0.76117

## Assignment 4 Part 2 - ATUS mean time spent watching TV for each year-age combination

Obs	TUYEAR	age	_TYPE_	_FREQ_	meantv	proptv
47	2012	26 to 35 years or age	0	2117	136.699	0.76863
48	2012	36 to 50 years or age	0	3585	142.204	0.77169
49	2012	51 to 65 years or age	0	3105	192.441	0.82866
50	2012	65+ years of age	0	2293	250.195	0.88634
51	2013	25 year or less	0	1220	129.958	0.73940
52	2013	26 to 35 years or age	0	1915	129.360	0.75104
53	2013	36 to 50 years or age	0	3122	142.491	0.77332
54	2013	51 to 65 years or age	0	2910	190.019	0.82721
55	2013	65+ years of age	0	2218	245.402	0.88361

### Assignment 4 Part 2 - ATUS test if the slope is the same for different age groups

#### The GLM Procedure

Class Level Information					
Class	Levels	Values			
age	5	25 year or less 26 to 35 years or age 36 to 50 years or age 51 to 65 years or age 65+ years of age			

Number of Observations Read	55
Number of Observations Used	55

## Yang, Kun 301178299

### Assignment 4 Part 2 - ATUS test if the slope is the same for different age groups

#### The GLM Procedure

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	98099.27263	10899.91918	420.03	<.0001
Error	45	1167.77379	25.95053		
<b>Corrected Total</b>	54	99267.04643			

R-Square	Coeff Var	Root MSE	meantv Mean
0.988236	3.067221	5.094166	166.0841

Source	DF	Type I SS	Mean Square	F Value	<b>Pr</b> > <b>F</b>
age	4	96739.14781	24184.78695	931.96	<.0001
TUYEAR	1	623.81376	623.81376	24.04	<.0001
TUYEAR*age	4	736.31106	184.07777	7.09	0.0002

Source	DF	Type III SS	Mean Square	F Value	<b>Pr</b> > <b>F</b>
age	4	719.8985812	179.9746453	6.94	0.0002
TUYEAR	1	623.8137627	623.8137627	24.04	<.0001
TUYEAR*age	4	736.3110617	184.0777654	7.09	0.0002

## Assignment 4 Part 2 - ATUS test if the slope is the same for different age groups

#### The GLM Procedure

