

RESULTADOS

R version 3.2.2 (2015-08-14) -- "Fire Safety"
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 Platform: x86_64-w64-mingw32/x64 (64-bit)

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Type 'demo()' for some demos, 'help()' for on-line help, or
 'help.start()' for an HTML browser interface to help.
 Type 'q()' to quit R.

```
> pbi.q <- read.table("C:/Users/Bielo/Desktop/pbi.q.csv", header=TRUE, dec=",",
+ quote="\")
> View(pbi.q)
> recimesicte.m <- read.table("C:/Users/Bielo/Desktop/recimesicte.m.csv",
+ header=TRUE, dec=",", quote="\")
> View(recimesicte.m)
> recivacte.m <- read.table("C:/Users/Bielo/Desktop/recivacte.m.csv",
+ header=TRUE, dec=",", quote="\")
> View(recivacte.m)
> library("car", lib.loc=~R/win-library/3.2")
> library("fracdiff", lib.loc=~R/win-library/3.2")
> library("tempdisagg", lib.loc=~R/win-library/3.2")
> library("timeDate", lib.loc=~R/win-library/3.2")
> library("tseries", lib.loc=~R/win-library/3.2")
```

'tseries' version: 0.10-34

'tseries' is a package for time series analysis and computational finance.

See 'library(help="tseries")' for details.

```
> library("zoo", lib.loc=~R/win-library/3.2")
```

Attaching package: 'zoo'

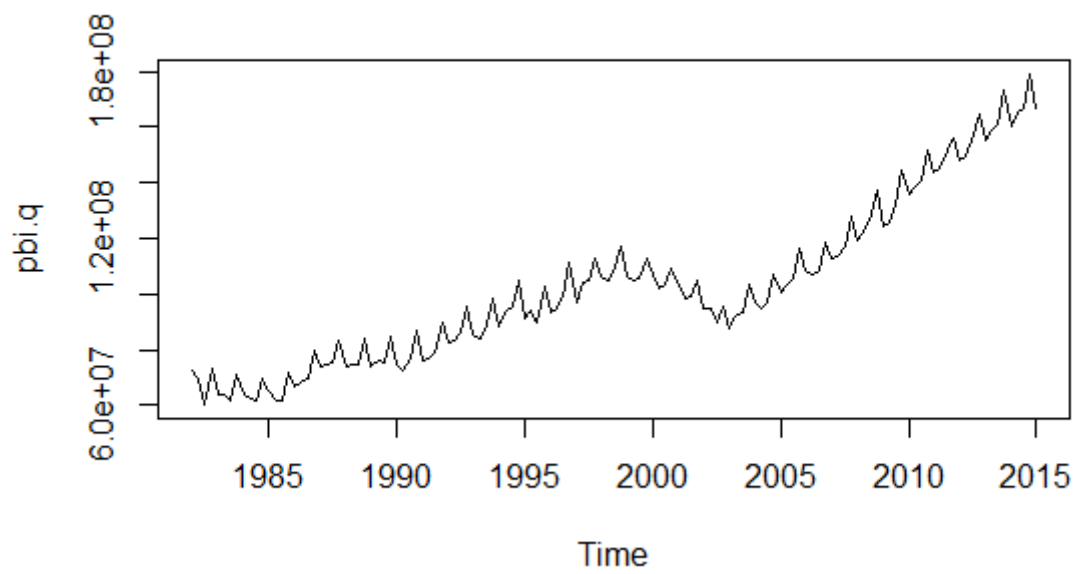
The following objects are masked from 'package:base':

as.Date, as.Date.numeric

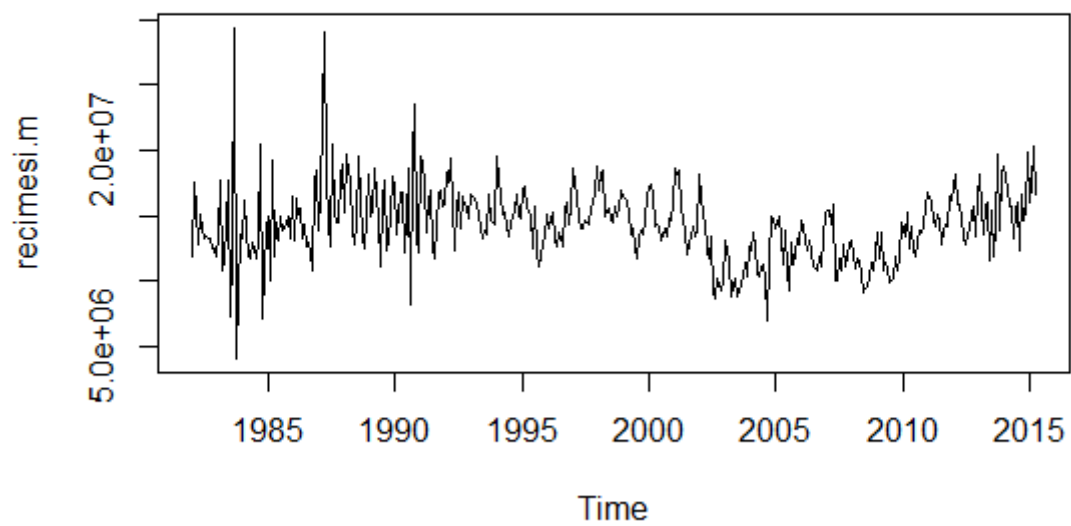
```
> library("quadprog", lib.loc=~R/win-library/3.2")
> library("forecast", lib.loc=~R/win-library/3.2")
This is forecast 5.9

> recimesicte.m=ts(recimesicte.m,star=c(1982,1),frequency=12)
> recivacte.m=ts(recivacte.m,star=c(1982,1),frequency=12)
> pbi.q=ts(pbi.q,star=c(1982,1),frequency=4)

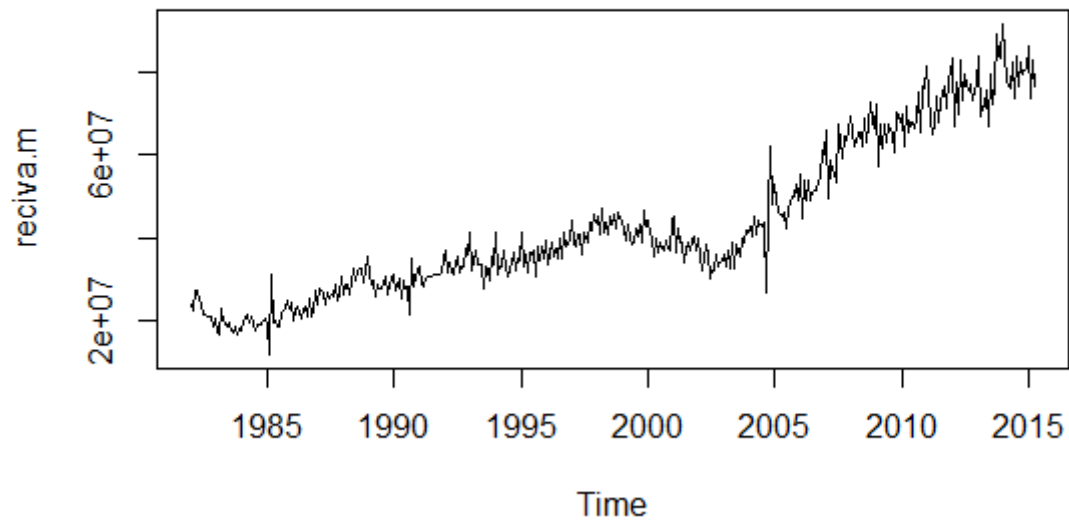
> plot(pbi.q)
```



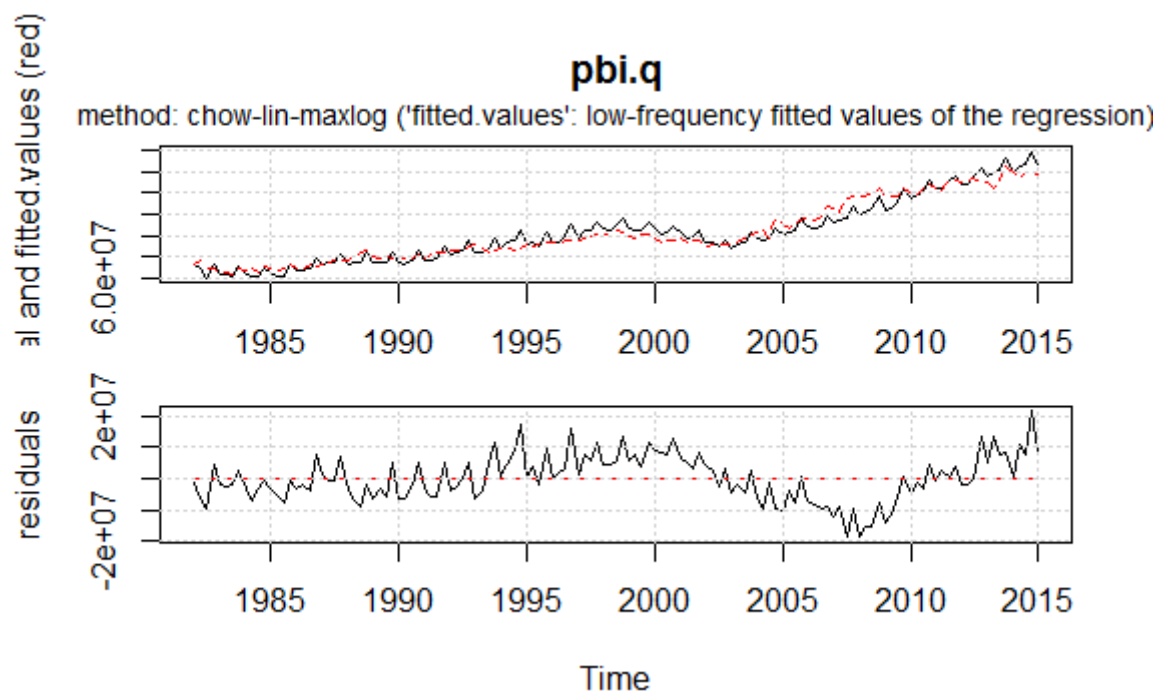
```
> plot(recimesicte.m)
```



```
> plot(recivacte.m)
```



```
> mod1<-  
td(pbi.q~recimesicte.m+recivacte.m,conversion="sum",to="month",method="chow-  
lin-maxlog")  
> plot(mod1)
```



```
> summary(mod1)
```

Call:

```
td(formula = pbi.q ~ recimesicte.m + recivacte.m, conversion = "sum",
  to = "month", method = "chow-lin-maxlog")
```

Residuals:

	Min	1Q	Median	3Q	Max
	-18596429	-5419189	-845221	5028363	21460176

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	1.584e+07	1.613e+06	9.822	<2e-16 ***
recimesicte.m	-2.554e-01	9.776e-02	-2.612	0.0101 *
recivacte.m	5.102e-01	1.837e-02	27.774	<2e-16 ***

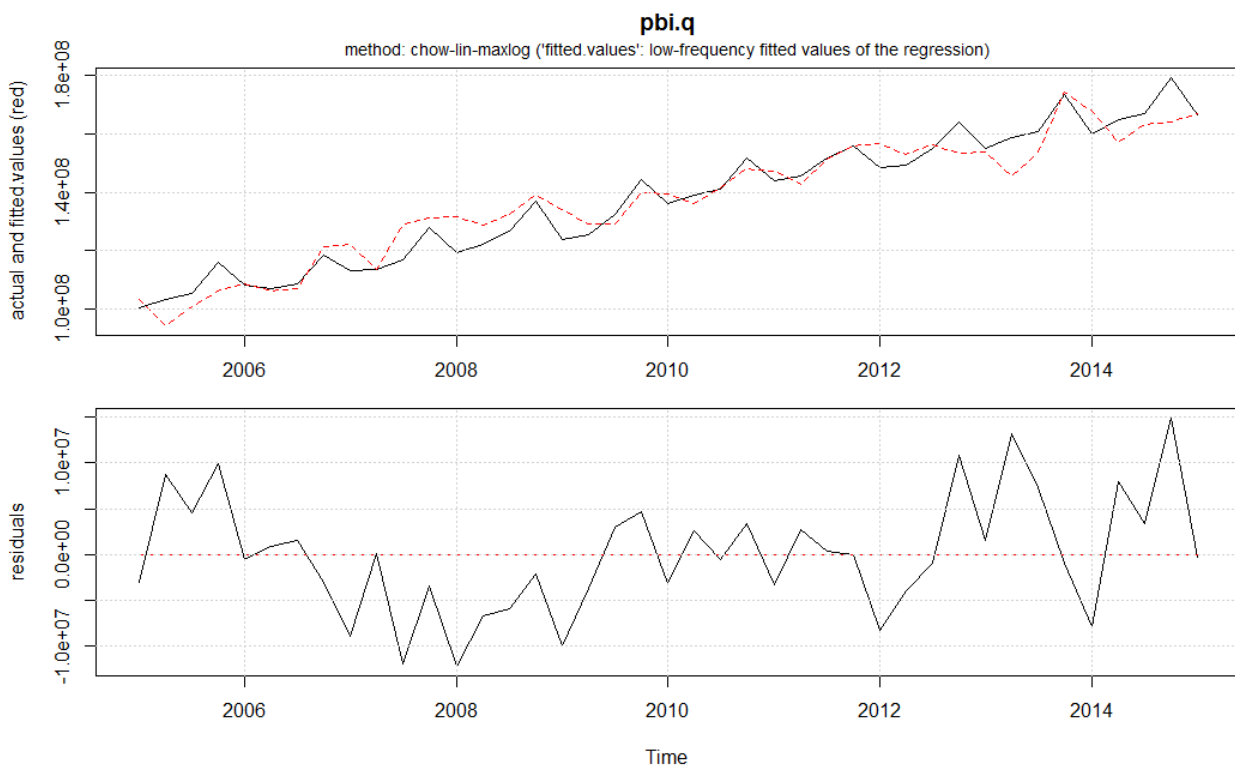
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

'chow-lin-maxlog' disaggregation with 'sum' conversion

133 low-freq. obs. converted to 400 high-freq. obs.

Adjusted R-squared: 0.8538 AR1-Parameter: 0.7207

```
> mod1<-
td(pbi.q~recimesicte.m+recivacte.m,conversion="sum",to="month",star=2005,
method="chow-lin-maxlog")
> plot(mod1)
```



```
> summary(mod1)
```

Call:

```
td(formula = pbi.q ~ recimesicte.m + recivacte.m, conversion = "sum",
  to = "month", method = "chow-lin-maxlog", start = 2005)
```

Residuals:

	Min	1Q	Median	3Q	Max
	-12102183	-3382211	-305036	3390744	14817504

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	3.961e+05	2.916e+06	0.136	0.893
recimesicte.m	3.076e-01	2.364e-01	1.301	0.201
recivacte.m	6.139e-01	4.825e-02	12.723	2.84e-15 ***

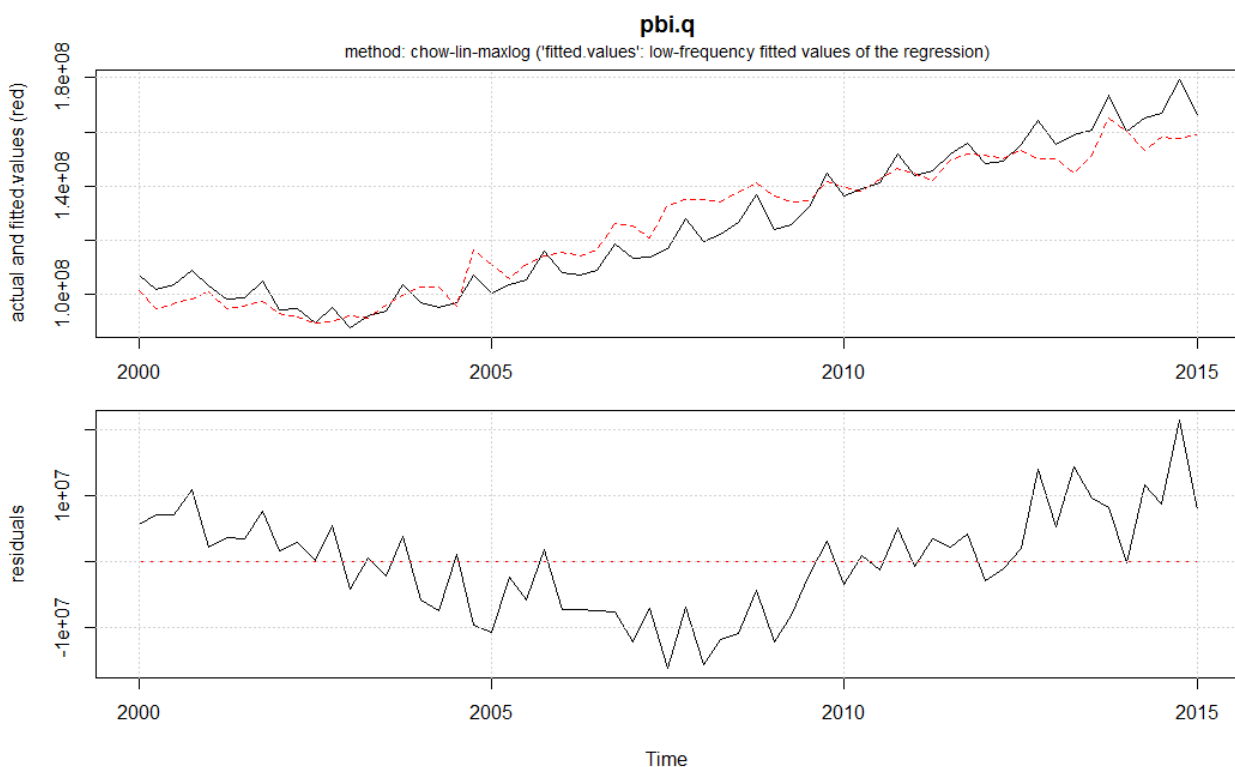
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

'chow-lin-maxlog' disaggregation with 'sum' conversion

41 low-freq. obs. converted to 400 high-freq. obs.

Adjusted R-squared: 0.8774 AR1-Parameter: 0.414

```
> mod1<-td(pbi.q~recivacte.m,conversion="sum",to="month",star=2000,
method="chow-lin-maxlog")
```



```
> plot(mod1)
```

```
> summary(mod1)
```

```
call:
td(formula = pbi.q ~ recivacte.m, conversion = "sum", to = "month",
  method = "chow-lin-maxlog", start = 2000)
```

```
Residuals:
```

	Min	1Q	Median	3Q	Max
	-16115594	-6945896	603180	5139965	21364191

```
Coefficients:
```

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	1.339e+07	1.989e+06	6.729	7.78e-09 ***
recivacte.m	4.884e-01	3.295e-02	14.823	< 2e-16 ***

```
---
```

```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
'chow-lin-maxlog' disaggregation with 'sum' conversion
61 low-freq. obs. converted to 400 high-freq. obs.
Adjusted R-squared: 0.7847      AR1-Parameter: 0.7494
```

```
library("car", lib.loc=~R/win-library/3.2")
library("fracdiff", lib.loc=~R/win-library/3.2")
library("tempdisagg", lib.loc=~R/win-library/3.2")
library("timeDate", lib.loc=~R/win-library/3.2")
library("tseries", lib.loc=~R/win-library/3.2")
library("zoo", lib.loc=~R/win-library/3.2")
library("quadprog", lib.loc=~R/win-library/3.2")
library("forecast", lib.loc=~R/win-library/3.2")
recimesicte.m=ts(recimesicte.m,star=c(1982,1),frequency=12)
recivacte.m=ts(recivacte.m,star=c(1982,1),frequency=12)
pbi.q=ts(pbi.q,star=c(1982,1),frequency=4)
pbisa.q=ts(pbi.q,star=c(1982,1),frequency=4)
plot(pbi.q)
plot(recimesicte.m)
plot(recivacte.m)
plot(pbisa.q)
```

```
mod1<-td(pbi.q~recimesicte.m+recivacte.m,conversion="sum",to="month",method="chow-lin-
maxlog")
```

```
mod2<-td(pbisa.q~recimesicte.m+recivacte.m,conversion="sum",star=2005,
to="month",method="chow-lin-minrss-ecotrim")
plot(mod2)
predict(mod2)
```

```
> mod1<-td(pbisa.q~recimesicte.m+recivacte.m,conversion="sum",star=2005,
to="month",method="chow-lin-minrss-ecotrim")
> plot(mod1)
> predict(mod1)
```

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1982	18634261	18945402	21547142	21058738	20077556	19113928	17542643	17365885	17079940

1983	15154529	15293874	17861837	16274742	16621603	16495096	15374940	14854055	17534878
1984	15006492	17182821	17196533	16114765	17102068	16189339	14974786	16037247	17319803
1985	16657943	10982379	24409091	15976512	16842303	15678974	16090029	17765323	18450150
1986	16685114	18504174	18984402	18234652	16907401	18399473	18580579	17132497	19589135
1987	19049096	21814388	23431934	19953752	20984226	19797080	21786694	20491844	22037107
1988	20660292	23145000	22898601	21378160	22305548	24296782	22843570	25232141	24253866
1989	23789253	22240653	23428425	20624736	22083877	20870575	21880985	23093640	23070814
1990	24189218	21169085	23398477	20416933	22508502	21616284	22464770	16643510	26773926
1991	25762944	22873524	22429829	22981561	23743677	23680152	22943958	23102473	24142259
1992	28035722	24579453	26304065	24284326	23236203	25732295	26831260	23810810	25117272
1993	30192816	24631542	27550883	25139741	24984032	25008493	21448227	24836304	24939216
1994	30769304	24300975	25258841	25091078	27277042	24870778	23085090	24271296	27062004
1995	30373806	25404198	26845994	24037612	27098179	26250006	27595698	22958813	27328463
1996	28903983	25136854	28416907	26191852	27301920	25917257	28932632	25812956	29956299
1997	32480640	28868293	28067187	29774680	29554272	26601824	30069950	28406108	31612203
1998	32705447	30130975	34110822	30098791	31467379	29803238	32415330	31031167	32968075
1999	32188268	29063450	31384350	29016473	28201789	28021706	30008343	29138463	30990359
2000	32020663	30001765	29736314	26342337	29047383	26819323	28114671	27249811	28582363
2001	33102107	27533384	31343095	28723735	28494089	25195566	26832671	28168414	27094475
2002	29728783	24478301	26188046	27715581	26512857	22909510	23511642	23354914	26002797
2003	26384536	24622938	26651047	23663482	27685140	23843651	27209522	25636560	28355199
2004	30516894	29190644	31922206	28904006	30920383	30407126	30304556	30598623	19662081
2005	35835562	32028465	32520390	34242684	36121061	32940574	34365827	34720813	36197087
2006	39393266	31751108	37022008	34403561	37741846	34807455	35872687	35798648	37064795
2007	42341150	32216946	38531241	39290858	38507223	35811003	41888117	38352823	36539075
2008	43201806	37615879	38591645	41185246	41652600	39409042	43355008	39995972	43341418
2009	45784595	35722474	42568104	39510018	44057453	42119934	45423131	44462172	42422435
2010	46815817	41357523	47921015	44977702	47207847	46714162	44713993	45931006	50478135
2011	54474318	45777813	43721788	46495991	51571068	47406231	49442094	50497728	51713692
2012	54465650	43800348	50072932	46278549	54523559	48364501	51961107	50313809	52887147
2013	57742321	47792928	49679161	52747163	56266652	49835000	57018500	50800520	53062867
2014	59147414	50210709	50718550	53563825	58351065	53094265	57442315	51939207	57491902
2015	59760400	50619440	56168473	51775885					

	Oct	Nov	Dec
1982	17195119	15724780	16763531
1983	14098149	13957534	15584318
1984	15047030	16209804	17161258
1985	19779552	18248257	19818155
1986	16811843	18532716	21945221
1987	19794944	21070355	24036516
1988	22105149	24329834	26882967
1989	20319298	22166603	23725990
1990	23377662	22934664	24174117
1991	24067222	24086291	26292807
1992	25073129	27744255	26800087
1993	22719928	26358176	25225683
1994	24684029	26252118	25721770
1995	25359078	27528755	25962990
1996	28062837	28196356	29176155
1997	30624418	33140290	32104070
1998	30495910	33107493	32812260
1999	28186150	33347444	31286880
2000	27465883	27190620	32053483
2001	28623577	29185697	27068895
2002	24084526	24432512	24906226
2003	27819545	29649344	29539839
2004	32112746	42512107	33450488
2005	38207062	40456395	37382528
2006	37438865	41005196	40138724
2007	42008251	42412527	43481083
2008	47905792	45296412	43656409
2009	48885387	48626011	47063955

2010 45953740 53132277 52538771
2011 48784807 53693941 53470115
2012 53321296 54844852 56056478
2013 61333269 56519219 55556261
2014 58662434 60122828 60291453
2015

