## Documentación del paquete fertilityRates

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| frts\_intvw {fertilityRates} |

## Apply fertility rates methodology for year of interview

### Description

Applies a given fertility rates methodology rates case-by-case to a data set and returns another data set with the estimates by observation.

### Usage

frts\_intvw(m.intvw, y.intvw, m.wmn, y.wmn, m.child, y.child, children,

child.dummy, wmn.dummy, id.wmn, ids, strata, weights, data)

### Arguments

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| --- | --- |
| m.intvw | A numeric or a vector which indicates the month in which the mother were interviewed. |
| y.intvw | A numeric which indicate the year in which the mother were interviewed. |
| m.wmn | A vector specifying the woman’s month of birth (mother or not mother). |
| y.wmn | A vector specifying the woman’s year of birth (mother or not mother). |
| m.child | A vector specifying the child’s month of birth (if the woman doesn't have child, NA). |
| y.child | A vector specifying the child’s year of birth (if the woman doesn't have children, NA). |
| children | A vector which indicate the number of children. |
| child.dummy | A vector which indicate 0 if the woman doesn't have a child or 1 if the woman has a child. |
| wmn.dummy | A vector which indicate TRUE if the woman isn't duplicate or FALSE if the woman is duplicate. |
| id.wmn | A vector wich indicate the woman's identification. |
| ids | A vector specifying cluster ids from largest level to smallest level. |
| strata | A vector specifying strata. |
| weights | A vetor pecifying sampling weights as an alternative to prob (1/weights). |
| data | A data frame containing the above variables. |

### Value

An object of class frts\_intvw containing a data.frame and a list.

### Examples

## Information from ENADID 2014, INEGI

mg1 <- frts\_intvw(m.intvw=ENTREV\_M, y.intvw=2014, m.wmn=FEC\_MUJ\_M, y.wmn=FEC\_MUJ\_A, m.child=FEC\_HIJ\_M,

y.child=FEC\_HIJ\_A, children=NUM\_HIJ, child.dummy=CONT,wmn.dummy=MUJER, id.wmn=ID\_1, ids=UPM, strata=ESTRATO,

data = enadid\_2014, weights = FACTOR)

summary(mg1, level = 0.9)

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| frts\_yrly {fertilityRates} |  |

## Apply fertility rates methodology for last complete years up to five years

### Description

Applies a given fertility rates methodology rates case-by-case to a data set and returns another data set with the estimates by observation.

### Usage

frts\_yrly(y.ref, m.wmn, y.wmn, m.child, y.child, children, child.dummy,

wmn.dummy, id.wmn, ids, strata, weights, data)

### Arguments

|  |  |
| --- | --- |
| y.ref | A numeric which indicate the reference year. It must be between last five years above interview. |
| m.wmn | A vector specifying the woman’s month of birth (mother or not mother). |
| y.wmn | A vector specifying the woman’s year of birth (mother or not mother). |
| m.child | A vector specifying the child’s month of birth (if the woman doesn't have child, NA). |
| y.child | A vector specifying the child’s year of birth (if the woman doesn't have children, NA). |
| children | A vector which indicate the number of children. |
| child.dummy | A vector which indicate 0 if the woman doesn't have a child or 1 if the woman has a child. |
| wmn.dummy | A vector which indicate TRUE if the woman isn't duplicate or FALSE if the woman is duplicate. |
| id.wmn | A vector wich indicate the woman's identification. |
| ids | A vector specifying cluster ids from largest level to smallest level. |
| strata | A vector specifying strata. |
| weights | A vetor pecifying sampling weights as an alternative to prob (1/weights). |
| data | A data frame containing the above variables. |

### Value

An object of class frts\_yrly containing a data.frame, a list and a numeric.

### Examples

## Information from ENADID 2014, INEGI

mg2 <- frts\_yrly(y.ref=2012, m.wmn=FEC\_MUJ\_M, y.wmn=FEC\_MUJ\_A, m.child=FEC\_HIJ\_M,

y.child=FEC\_HIJ\_A, children=NUM\_HIJ, child.dummy=CONT,wmn.dummy=MUJER, id.wmn=ID\_1,

ids=UPM, strata=ESTRATO,data = enadid\_2014, weights = FACTOR)

summary(mg2, level = 0.9)

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| frts\_3yrs {fertilityRates} |  |

## Apply fertility rates methodology for last five years to three-year periods

### Description

Applies a given fertility rates methodology rates case-by-case to a data set and returns another data set with the estimates by observation.

### Usage

frts\_3yrs(y.first, y.second, y.third, m.wmn, y.wmn, m.child, y.child,

children, child.dummy, wmn.dummy, id.wmn, ids, strata, weights, data)

### Arguments

|  |  |
| --- | --- |
| y.first | A numeric which indicate the first year retrospectively of three-year periods. |
| y.second | A numeric which indicate the second year retrospectively of three-year periods. |
| y.third | A numeric which indicate third year retrospectively of three-year periods. |
| m.wmn | A vector specifying the woman’s month of birth (mother or not mother). |
| y.wmn | A vector specifying the woman’s year of birth (mother or not mother). |
| m.child | A vector specifying the child’s month of birth (if the woman doesn't have child, NA). |
| y.child | A vector specifying the child’s year of birth (if the woman doesn't have children, NA). |
| children | A vector which indicate the number of children. |
| child.dummy | A vector which indicate 0 if the woman doesn't have a child or 1 if the woman has a child. |
| wmn.dummy | A vector which indicate TRUE if the woman isn't duplicate or FALSE if the woman is duplicate. |
| id.wmn | A vector wich indicate the woman's identification. |
| ids | A vector specifying cluster ids from largest level to smallest level. |
| strata | A vector specifying strata. |
| weights | A vetor pecifying sampling weights as an alternative to prob (1/weights). |
| data | A data frame containing the above variables. |
| y.ref | A numeric which indicate the reference year. It must be between last five years above interview. |

### Value

An object of class frts\_3yrs containing a data.frame, a list and a vector.

### Examples

## Information from ENADID 2014, INEGI

mg3 <- frts\_3yrs(y.first=2013, y.second=2012, y.third=2011, m.wmn=FEC\_MUJ\_M, y.wmn=FEC\_MUJ\_A,

m.child=FEC\_HIJ\_M, y.child=FEC\_HIJ\_A, children=NUM\_HIJ, child.dummy=CONT,wmn.dummy=MUJER,

id.wmn=ID\_1, ids=UPM, strata=ESTRATO, data = enadid\_2014, weights = FACTOR)

summary(mg3, level = 0.9)

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| frts\_15yrs {fertilityRates} |  |

## Apply fertility rates methodology for last fifteen-years to annual periods

### Description

Applies a given fertility rates methodology rates case-by-case to a data set and returns a list with the estimates by year.

### Usage

frts\_15yrs(y.intvw, m.wmn, y.wmn, m.child, y.child, children, child.dummy,

wmn.dummy, id.wmn, weights, data)

### Arguments

|  |  |
| --- | --- |
| y.intvw | A numeric which indicate the year in which the mother were interviewed. |
| m.wmn | A vector specifying the woman’s month of birth (mother or not mother). |
| y.wmn | A vector specifying the woman’s year of birth (mother or not mother). |
| m.child | A vector specifying the child’s month of birth (if the woman doesn't have child, NA). |
| y.child | A vector specifying the child’s year of birth (if the woman doesn't have children, NA). |
| children | A vector which indicate the number of children. |
| child.dummy | A vector which indicate 0 if the woman doesn't have a child or 1 if the woman has a child. |
| wmn.dummy | A vector which indicate TRUE if the woman isn't duplicate or FALSE if the woman is duplicate. |
| id.wmn | A vector wich indicate the woman's identification. |
| weights | A vetor pecifying sampling weights as an alternative to prob (1/weights). |
| data | A data frame containing the above variables. |
| ids | A vector specifying cluster ids from largest level to smallest level. |
| strata | A vector specifying strata. |

### Value

An object of class frts\_15yrs containing four arrays and a numeric.

### Examples

## Information from ENADID 2014, INEGI

mg4 <- frts\_15yrs(y.intvw=2014, m.wmn=FEC\_MUJ\_M, y.wmn=FEC\_MUJ\_A, m.child=FEC\_HIJ\_M,

y.child=FEC\_HIJ\_A, children=NUM\_HIJ, child.dummy=CONT,wmn.dummy=MUJER, id.wmn=ID\_1,

data = enadid\_2014, weights = FACTOR)

summary(mg4)

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| enadid\_2014 {fertilityRates} |  |

## National Survey of Demographic Dynamics 2014

### Description

A dataset containing attributes of the women and attributes of the children. The variables are as follows:

### Usage

enadid\_2014

### Format

A data frame with 214335 rows and 13 variables

\* ID\_1: Indicate the woman's identification.

\* FACTOR: Sampling weights.

\* UPM: Cluster ids.

\* ESTRATO: Strata.

\* ENTIDAD: States where the women live.

\* FEC\_MUJ\_M: The woman’s month of birth.

\* FEC\_MUJ\_A: The woman’s year of birth.

\* ENTREV\_M: The month in which the mother were interviewed.

\* NUM\_HIJ: The woman’s number of children.

\* FEC\_HIJ\_M: The child’s month of birth.

\* FEC\_HIJ\_A: The child’s year of birth.

\* CONT: Indicate 0 if the woman doesn't have a child or 1 if the woman has a child.

\* MUJER: Indicate TRUE if the woman isn't duplicate or FALSE if the woman is duplicate.

### Source

<http://www.beta.inegi.org.mx/proyectos/enchogares/especiales/enadid/2014/>