Vulgar language on the web across World Englishes - Part 3: data cleaning

Anonymous

2025-04-05

Contents

1	Intro	1
2	data cleaning	2
3	loading data	2
4	lemmas retained	3
5	Checking kwic	10
6	combine kwics and glowbe_table	12
7	Table 1	14
8	Figure 1	15
9	Figure 2	17
10	Figure 3	19
11	Figure 4 (CTTR)	21
12	Figure 5 (lemmas)	23
13	Figure 6 (heatmap) 13.1 CFA 13.2 Table 2	26 27 70
14	Outro	71

1 Intro

This document shows an analysis that was performed with the aim of finding differences in swearing across geographically distinct varieties of English around the world based on the GloWbe corpus.

install packages

```
# install packages
install.packages("tidyverse")
install.packages("quanteda")
install.packages("here")
```

```
install.packages("udpipe")
install.packages("future")
install.packages("furrr")
install.packages("stringi")
install.packages("parallel")
install.packages("usethis")
install.packages("data.table")
install.packages("ggrepel")
install.packages("writexl")
# devtools::install_github("jimjam-slam/ggflags")
install.packages("ggflags")
```

load packages and set options

```
# load packages
library(data.table)
library(tidyverse)
library(quanteda)
library(stringi)
library(parallel)
library(gaflags)
library(ggflags)
library(ggrepel)
library(writexl)
```

2 data cleaning

3 loading data

```
_{
m kwics}
```

```
kwics <- base::readRDS(file = here::here("test", "kwic_results_clean.rda"))
# inspect
head(kwics)</pre>
```

```
##
      docname
                                  pre keyword
                                                                          post
##
       <char>
                                                                        <char>
                               <char>
                                       <char>
## 1: text19 get within a monkey s
                                         fart
                                                   of being a musician working
                                                       with water is much more
## 2: text20
              10 59 am cleaning ur
                                         butt
## 3: text20
                   do the same to you
                                         butt smearing is not cleaning washing
## 4: text20 shelly do you wash your
                                         butt
                                                        with your hands do you
## 5: text20 hands do you dry your
                                         butt
                                                        after you ve washed it
## 6: text20 the water on your dirty
                                         butt
                                                     the other two options are
##
        corpus
                     lemma
##
         <char>
                    <char>
## 1: Australia
                      fart
## 2: Australia butt(hole)
## 3: Australia butt(hole)
## 4: Australia butt(hole)
## 5: Australia butt(hole)
## 6: Australia butt(hole)
```

differentaite between feck and fuck

4 lemmas retained

```
number of lemmas
```

```
length(names(table(kwics$lemma)))
## [1] 65
lemmas
names(table(kwics$lemma))
    [1] "arse(hole)" "ass(hole)"
                                    "bitch"
                                                 "bloody"
                                                               "bollocks"
   [6] "boner"
                                   "butt(hole)" "cock"
                                                               "crap"
##
                      "bullshit"
## [11] "cum"
                      "cunt"
                                   "damn"
                                                 "darkie"
                                                               "dick"
## [16] "dike"
                      "dildo"
                                   "dork"
                                                 "eff"
                                                               "fag(got)"
## [21] "fanny"
                      "fart"
                                   "feck"
                                                 "frig"
                                                               "fuck"
                                                 "jackass"
## [26] "gook"
                      "hoe"
                                   "idiot"
                                                               "jap"
## [31] "jerk"
                      "jiss"
                                   "kike"
                                                 "knob"
                                                               "lesbo"
## [36] "moron"
                      "nigger"
                                   "nonce"
                                                 "nympho"
                                                               "online"
## [41] "pecker"
                      "pedo"
                                   "pikey"
                                                 "pimp"
                                                               "piss"
                                                 "pussy"
## [46] "poofter"
                      "prick"
                                   "puke"
                                                               "queef"
## [51] "retard"
                      "shag"
                                   "shit"
                                                 "skank"
                                                               "slag"
                                                               "tosser"
## [56] "slut"
                      "sod"
                                   "spastic"
                                                 "tits"
## [61] "tranny"
                      "turd"
                                   "twat"
                                                 "wank"
                                                               "whore"
number of forms of lemma fuck
kwics %>%
  dplyr::filter(lemma == "fuck") %>%
  dplyr::group_by(keyword) %>%
  dplyr::summarise(freq = n(),
                   n = 1) \%
  dplyr::mutate(n = sum(n))
## # A tibble: 221 x 3
##
      keyword
                      freq
                                n
      <chr>
                      <int> <dbl>
##
   1 clusterfck
                          3
                              221
                              221
##
    2 clusterfuck
                        270
    3 clusterfucked
                              221
##
  4 clusterfuckers
                              221
  5 clusterfucking
                              221
## 6 clusterfuk
                              221
                          1
```

forms of lemma fuck

i 211 more rows

4043

133

1

221

221

221

221

7 f

8 f\$

9 f\$\$

10 f\$\$\$

```
set.seed(20250220)
kwics %>%
  dplyr::filter(lemma == "fuck") %>%
  dplyr::group_by(keyword) %>%
  dplyr::summarise(freq = n(),
                   n = 1) \% > \%
  dplyr::mutate(n = sum(n)) %>% sample_n(20) %>%
  dplyr::pull(keyword)
  [1] "fuckface"
                               "fkucker"
##
                                                      "mumfocker"
##
    [4] "fuaked"
                               "clusterfucked"
                                                      "fcuker"
##
  [7] "fucka"
                               "focking"
                                                      "faka"
## [10] "fucker"
                                                      "motherfckr"
                               "gammy=u"
## [13] "fcukers"
                               "facked"
                                                      "fkcing"
## [16] "muthafucka"
                                                      "fuuuuuuuuuuuck"
                               "clusterfucking"
## [19] "faaak"
                               "fuc$ing"
all forms
set.seed(20250220)
kwics %>%
  dplyr::group_by(keyword) %>%
  dplyr::summarise(freq = n(),
                   n = 1) \%
  dplyr::mutate(n = sum(n)) %>%
  dplyr::pull(keyword)
##
     [1] "4rseholes"
                                     "5h1"
##
     [3] "5h1t"
                                     "8itch"
     [5] "8ollox"
                                     "a$$h013s"
##
##
     [7] "a$$h0le"
                                     "a$$ho1"
##
     [9] "a$$hol3s"
                                     "a$$hole"
##
    [11] "a$$hole$"
                                     "a$$holee"
##
  [13] "a$$holes"
                                     "a$$sholes"
  [15] "a$51"
                                     "a$5hole"
##
   [17] "a$shole"
                                     "a55hole"
##
  [19] "a55holes"
                                     "ar$ehle"
##
  [21] "ar$ehole"
                                     "ar$ehole$"
##
  [23] "ar$eholes"
                                     "ar53h013"
##
    [25] "ar5ehole"
                                     "ars3hol3"
##
   [27] "ars3hol3s"
                                     "arsehOles"
   [29] "arsehole"
                                     "arseholes"
##
   [31] "arseless"
                                     "arseole"
                                     "as$1"
##
   [33] "arseoles"
  [35] "as$hole"
                                     "as$holes"
##
  [37] "as51"
                                     "assh0le"
##
    [39] "assh0les"
                                     "asshol"
##
   [41] "asshole"
##
                                     "assholes"
  [43] "asshols"
##
                                     "asshoooools"
  [45] "asshooooooooole"
##
                                     "assless"
##
   [47] "assole"
                                     "assoles"
  [49] "assshole"
                                     "asssholes"
##
## [51] "asssshole"
                                     "assssholes"
## [53] "assssoles"
                                     "aszhole"
##
    [55] "azzh0les"
                                     "azzhole"
```

```
[57] "azzholes"
                                      "azzole"
##
##
    [59] "azzoles"
                                      "azzzzhols"
    [61] "beavis+butthead"
                                      "b100dy"
##
   [63] "bl0ody"
                                      "bloodi"
##
##
    [65] "bloodied"
                                      "bloody"
##
    [67] "blooody"
                                      "bloooody"
   [69] "bloooooooooody"
                                      "boner"
                                      "bu77"
##
   [71] "boners"
                                      "bulcrap"
##
    [73] "bu7t"
##
    [75] "bull$h1t"
                                      "bullcrap"
    [77] "bulldyke"
                                      "bulldykes"
   [79] "bullsh1t"
                                      "but7"
##
    [81] "butt"
                                      "buttface"
                                      "butth"
##
   [83] "buttfaces"
##
   [85] "butthead"
                                      "buttheads"
                                      "buttholes"
##
    [87] "butthole"
##
   [89] "buttl"
                                      "butts"
                                      "buttz"
##
   [91] "buttwhipes"
                                      "c0ck"
##
  [93] "buullcrap"
## [95] "c0cksuckers"
                                      "camwhore"
##
  [97] "camwhored"
                                      "camwhores"
## [99] "camwhoring"
                                      "clusterfck"
## [101] "clusterfeck"
                                      "clusterfuck"
## [103] "clusterfucked"
                                      "clusterfuckers"
                                      "clusterfuk"
## [105] "clusterfucking"
## [107] "cock"
                                      "cocka"
## [109] "cockas"
                                      "cocker"
## [111] "cockers"
                                      "cocksucka"
## [113] "cocksuckaz"
                                      "cocksucker"
## [115] "cocksuckers"
                                      "cocksuker"
## [117] "crap"
                                      "crapped"
## [119] "crappin"
                                      "crapping"
## [121] "craps"
                                      "cumming"
                                      "cunts"
## [123] "cunt"
                                      "cuunt"
## [125] "cuntz"
## [127] "d1ck"
                                      "d1cked"
                                      "d1ckheads"
## [129] "d1ckhead"
## [131] "d1cks"
                                      "damn"
## [133] "darkies"
                                      "dgaf"
## [135] "dildo"
                                      "dildos"
## [137] "dipsh1t"
                                      "dipsh1ts"
## [139] "dork"
                                      "dorks"
## [141] "dumbasshole"
                                      "dvke"
## [143] "dykes"
                                      "eff"
## [145] "effed"
                                      "effin"
## [147] "effing"
                                      "errortime=idiot"
## [149] "f"
                                      "f$"
## [151] "f$$"
                                      "f$$$"
## [153] "f$$$$$"
                                      "f$$c"
## [155] "f$$cked"
                                      "f$$k"
## [157] "f$ck"
                                      "f$cked"
## [159] "f$ckin"
                                      "f$cking"
                                      "f$k"
## [161] "f$ers"
## [163] "f$kers"
                                      "f$king"
```

```
## [165] "f00k"
                                      "f00king"
## [167] "f0ck"
                                      "f0cking"
## [169] "f0k"
                                      "f33k"
## [171] "f3ck"
                                      "f3k"
## [173] "f4ck"
                                      "faaaaaaaaaack"
## [175] "faaaaaaak"
                                      "faaaaack"
## [177] "faaaack"
                                      "faaaak"
## [179] "faaak"
                                      "faaake"
## [181] "faaaking"
                                      "faak"
## [183] "faaker"
                                      "fack"
## [185] "facka"
                                      "facked"
## [187] "fackered"
                                      "fackers"
## [189] "facking"
                                      "fag"
                                      "faggggot"
## [191] "fagg$"
## [193] "faggio"
                                      "faggit"
## [195] "faggits"
                                      "faggot"
## [197] "faggots"
                                      "faggott"
                                      "fagit"
## [199] "faggotz"
## [201] "fagits"
                                      "fags"
## [203] "faka"
                                      "fakwit"
## [205] "fannies"
                                      "fart"
## [207] "farted"
                                      "fartin"
## [209] "farting"
                                      "farts"
## [211] "fartz"
                                      "fcck"
## [213] "fccu"
                                      "fccuk"
## [215] "fced"
                                     "fcing"
                                      "fcked"
## [217] "fck"
## [219] "fcker"
                                      "fckers"
                                      "fcking"
## [221] "fckface"
## [223] "fckking"
                                      "fckr"
## [225] "fcku"
                                      "fckued"
## [227] "fckuing"
                                      "fcucking"
## [229] "fcuk"
                                      "fcuked"
## [231] "fcuker"
                                      "fcukers"
## [233] "fcuking"
                                      "fcuuking"
## [235] "feck"
                                      "fecked"
                                      "feckers"
## [237] "fecker"
## [239] "feckhead"
                                      "fecking"
## [241] "feckwit"
                                      "fek"
## [243] "feked"
                                      "feking"
                                      "fk"
## [245] "fekwit"
## [247] "fkcing"
                                      "fkuc"
## [249] "fkuced"
                                      "fkucker"
## [251] "fkuers"
                                      "focked"
## [253] "focking"
                                      "fooked"
## [255] "fooker"
                                      "fookers"
## [257] "fooking"
                                      "foook"
## [259] "foooked"
                                      "fooook"
                                      "frigggin"
## [261] "frigged"
                                      "friggin"
## [263] "friggging"
## [265] "frigging"
                                      "friggs"
## [267] "fu$"
                                      "fu$$$d"
                                      "fu$ken"
## [269] "fu$k"
## [271] "fu$king"
                                      "fu4k"
```

```
## [273] "fu4king"
                                     "fuaked"
  [275] "fuc"
                                     "fuc$"
##
  [277] "fuc$ing"
                                     "fuccccking"
  [279] "fuccck"
                                     "fuccckkk"
                                     "fucck"
  [281] "fucced"
## [283] "fuccked"
                                     "fuccking"
## [285] "fucckkkk"
                                     "fucckkkkkkkkkk"
                                     "fuck"
## [287] "fucing"
## [289] "fucka"
                                     "fuckaaaaaaaaaa"
                                     "fucke"
## [291] "fuckcking"
  [293] "fucked"
                                     "fuckee"
## [295] "fuckeeer"
                                     "fuckeing"
## [297] "fucker"
                                     "fuckered"
## [299] "fuckering"
                                     "fuckers"
## [301] "fuckface"
                                     "fuckhead"
## [303] "fuckheaded"
                                     "fucking"
  [305] "fuckingers"
                                     "fuckk"
  [307] "fuckker"
                                     "fuckking"
## [309] "fuckkkkkkked"
                                     "fuckkkkkkkkkkkkkkkk"
                                     "fuckwit"
## [311] "fucku"
## [313] "fucuk"
                                     "fuecked"
## [315] "fuk"
                                     "fukc"
                                     "fukcer"
## [317] "fukced"
## [319] "fukcers"
                                     "fukcing"
## [321] "fuked"
                                     "fuker"
## [323] "fukers"
                                     "fuking"
## [325] "fukk"
                                     "fukka"
## [327] "fukked"
                                     "fukker"
                                     "fukking"
## [329] "fukkers"
                                     "fukkkk"
## [331] "fukkk"
## [333] "fukkkkkkkkking"
                                     "fukr"
  [335] "fukwit"
                                     "fuuccking"
                                     "fuuk"
  [337] "fuucking"
## [339] "fuuka"
                                     "fuuu"
                                     "fuuuccking"
## [341] "fuuuccckkk"
## [343] "fuuuck"
                                     "fuuucked"
## [345] "fuuuu"
                                     "fuuuuccckkk"
## [347] "fuuuuck"
                                     "funnicked"
## [349] "fuuuuu"
                                     "fuuuuucccckkkkk"
                                     "fuuuuuck"
## [351] "fuuuuucckkkk"
## [353] "fuuuuuu"
                                     "fuuuuuuccck"
                                     "fuuuuuuu"
## [355] "fuuuuuuck"
## [357] "fuuuuuuccccccckkkkk"
                                     "fuuuuuuuck"
## [359] "fuuuuuuu"
                                     "fuuuuuuuckkkkk"
## [361] "fuuuuuuuu"
                                     "fuuuuuuuuccccccck"
                                     "fuuuuuuuuuck"
## [363] "fuuuuuuuuck"
  [365] "fuuuuuuuuuuck"
                                     "fuuuuuuuuuuck"
## [367] "fuuuuuuuuuuuuu"
                                     "fuuuuuuuuuuuuuucccck"
## [369] "fuuuuuuuuuuuuuck"
                                     "fuuuuuuuuuuuuu"
                                     "fuuuuuuuuuuuuuuuuu"
## [371] "fuuuuuuuuuuuuuuk"
## [373] "fuuuuuuuuuuuuuuuuuuk"
                                     "gammy=u"
                                     "gooks"
## [375] "goddamn"
                                     "h0e"
## [377] "gtfo"
## [379] "headfuck"
                                     "headfuckers"
```

```
## [381] "hijabi=slut"
                                      "hoe"
   [383] "hoes"
                                      "idiot."
                                      "idiots"
## [385] "idiot=nullity"
## [387] "idiotz"
                                      "jackass"
## [389] "jackasshole"
                                      "jackazz"
## [391] "jap"
                                      "japs"
## [393] "ierk"
                                      "jerked"
## [395] "jerkin"
                                      "jerking"
   [397] "jerks"
                                      "jiss"
## [399] "jizz"
                                      "jizzz"
## [401] "kikes"
                                      "knob"
## [403] "ktfo"
                                      "kyke"
## [405] "lesbo"
                                      "lmao"
                                      "madafaka"
## [407] "lmfao"
## [409] "manwhore"
                                      "manwhores"
                                      "moron"
## [411]
         "manwhoring"
## [413] "moronic"
                                      "moronics"
## [415] "morons"
                                      "mothafaka"
## [417] "mothafccckers"
                                      "mothafucka"
## [419] "mothafucker"
                                      "mothafucking"
## [421] "mothafuka"
                                      "motherfcker"
## [423] "motherfckr"
                                      "motherfecking"
## [425] "motherfockers"
                                      "motherfuck"
## [427] "motherfucka"
                                      "motherfucker"
## [429] "motherfuckers"
                                      "motherfucking"
## [431] "motherfuker"
                                      "motherfukers"
## [433] "mumbai=damn"
                                      "mumfocker"
## [435] "muthafuck"
                                      "muthafucka"
## [437] "muthafuckaz"
                                      "muthafucker"
## [439] "muthafuckers"
                                      "muthafucking"
## [441] "n1gger"
                                      "nigga"
## [443] "niggar"
                                      "niggarz"
                                      "niggaz"
## [445] "niggas"
## [447] "niggers"
                                      "nonce"
                                      "nymphoes"
## [449] "nympho"
## [451] "nymphomania"
                                      "nymphomaniac"
## [453] "nymphomaniacs"
                                      "nymphomanic"
## [455] "nymphomation"
                                      "nymphomax"
## [457] "nymphoniac"
                                      "nymphos"
## [459] "omfg"
                                      "p1ss"
## [461] "p1ssing"
                                      "pecker"
## [463] "peckers"
                                      "pedo"
## [465] "pedofile"
                                      "pedofiles"
## [467] "pedohile"
                                      "pedophiies"
## [469] "pedophile"
                                      "pedophiles"
         "pedophiles="
                                      "pedophille"
## [471]
## [473] "pedophilles"
                                      "pedophils"
## [475] "pedophle"
                                      "pedophlie"
## [477] "pedopihile"
                                      "pedos"
                                      "pi$$ed"
## [479] "pi$$e$"
## [481] "pi$$er"
                                      "pi$$es"
                                      "pi$$ing"
## [483] "pi$$in"
## [485] "pi$$up"
                                      "pi$$y"
## [487] "pi$s"
                                      "pi55"
```

##	[489]	"pi55ing"	"pikeys"
##	[491]	"pimp"	"pimp\$lap"
##	[493]	"pimped"	"pimpin"
##	[495]	"pimping"	"pimpingz"
##	[497]	"pimps"	"pimpz"
##	[499]	"pis\$ed"	"pis\$es"
##	[501]	"pis\$y"	"piss"
##	[503]	"pissers"	"pissin"
##	[505]	"pissing"	"pisss"
##	[507]	"pisssing"	"pissss"
##	[509]	"pooftas"	"poofter"
##	[511]	"poofters"	"prick"
##	[513]	"pricks"	"pu\$\$y"
##	[515]	"pu55y"	"puke"
##	[517]	"puked"	"pukes"
##	[519]	"puking"	"pus\$y"
##	[521]	"pussay"	"pussy"
##	[523]	"pussys"	"puzsy"
##	[525]	"puzzy"	"queef"
##	[527]	"queefed"	"queefing"
##	[529]	"queefs"	"retard"
##	[531]	"retards"	"retardz"
##	[533]	"rofl"	"rofl="
##	[535]	"sh17"	"sh1t"
##	[537]	"sh1te"	"sh1ts"
##	[539]	"sh1tter"	"sh1tting"
##	[541]	"sh1tz"	"shag"
##	[543]	"shagged"	"shaggin"
##	[545]	"shagging"	"skank"
##	[547]	"skanks"	"skanky"
##	[549]	"slag"	"slags"
##	[551]	"slu7"	"slut"
##	[553]	"sluts"	"slutz"
##	[555]	"sod"	"sodding"
##	[557]	"sods"	"spast"
##	[559]	"spastic"	"spastics"
##	[561]	"stfu"	"tities"
##	[563]	"tittays"	"titties"
##	[565]	"tosser"	"tossers"
##	[567]	"trannies"	"tranny"
##	[569]	"turd"	"turds"
##	[571]	"tw4t"	"tw4ts"
##	[573]	"twat"	"twats"
##	[575]	"w4nka"	"wank"
##	[577]	"wanked"	"wanker"
##	[579]	"wankered"	"wankering'
##	[581]	"wankers"	"wanking"
##	[583]	"wh0r\$e"	"wh0re"
##	[585]	"whOre\$"	"whOres"
##	[587]	"whOring"	"whor"
##	[589]	"whor3"	"whore"
##	[591]	"whored"	"whoree"
##	[593]	"whoreing"	"whores"
##	[595]	"whoring"	"whring"

5 Checking kwic

```
kwics %>% filter(corpus == "India", lemma == "cum")
##
          docname
                                                  pre keyword
##
           <char>
                                               <char>
                                                       <char>
        text11566
##
    1:
                        the bahamas for four summers cumming
##
        text11566 sherrill of 1095 mockingbird lane cumming
##
        text30632
                                                      cumming
##
    4:
        text44240
                          content video he cant stop cumming
        text55838
##
    5:
                           to where these clips were cumming
##
    6:
        text55838
                                  a champ and she is cumming
##
    7:
        text79222
                        had learned tricks about not cumming
                        we could start again without cumming
##
    8:
        text79222
##
    9:
        text79222
                     were animals finally he started cumming
                          the husband s property but cumming
## 10:
        text84586
## 11:
        text84586
                     the abundant authority to which cumming
                            better device in 1775 in cumming
## 12:
        text93572
   13: text100639
                              was very very close to cumming
   14: text100639
                                much you enjoy it by cumming
   15: text108187
                               helps and i felt like cumming
##
                                  post corpus lemma
##
                                <char> <char> <char>
              ga prhwy com october 13
##
    1:
                                         India
##
    2:
           georgia became a member of
                                        India
                                                  cum
##
                  ca sbwire 09 18 2012
                                         India
                                                  cum
##
    4:
        as her skilled mouth extracts
                                        India
                                                  cum
##
    5:
               from could you tell me
                                        India
                                                  cum
##
    6:
                  for real i love her
                                        India
                                                  cum
##
    7:
             during oral so this came
                                         India
                                                  cum
##
    8:
                soon and we wanted to
                                         India
                                                  cum
    9:
               inside me i could feel
                                        India
                                                  cum
         bruce lj relying on abundant
## 10:
                                         India
                                                  cum
        bruce lj referred was perhaps
   11:
                                         India
                                                  cum
  12: s design water was perennially
                                                  cum
## 13:
          his tongue started to flick
                                         India
                                                  cum
## 14:
              on his cock arkady sped
                                         India
                                                  cum
## 15:
             early for some reason do
                                        India
                                                  cum
kwicstb <- kwics %>%
  dplyr::mutate(vulgar = 1) %>%
  dplyr::group_by(corpus, docname) %>%
  dplyr::summarise(VulgarTokens = n(),
                    VulgarTypes = length(names(table(keyword))))
## `summarise()` has grouped output by 'corpus'. You can override using the
## `.groups` argument.
# inspect
head(kwicstb)
## # A tibble: 6 x 4
## # Groups:
               corpus [1]
```

```
##
     corpus
               docname
                         VulgarTokens VulgarTypes
##
     <chr>>
               <chr>>
                                <int>
                                             <int>
## 1 Australia text10002
                                    5
                                    1
## 2 Australia text1001
                                                 1
## 3 Australia text10019
                                    1
                                                 1
## 4 Australia text10029
                                    1
                                                 1
## 5 Australia text10073
                                                 1
                                    1
## 6 Australia text10082
                                    3
                                                 1
glowbetb <- base::readRDS(file = here::here("test", "glowbe_table.rda")) %>%
  dplyr::ungroup() %>%
  dplyr::mutate(id = 1:nrow(.),
                type = stringr::str_replace_all(file, ".*_([bg])\\d+", "\\1")) %>%
  dplyr::mutate(type = ifelse(type == "g", "General Web", "Blog")) %>%
 dplyr::group_by(corpus) %>%
  dplyr::mutate(docname = paste0("text", 1:length(id)))
# inspect
head(glowbetb)
## # A tibble: 6 x 7
## # Groups:
               corpus [1]
##
     corpus
               file
                        subfile type
                                              tokens
                                                        id docname
##
     <chr>>
               <chr>>
                        <chr>
                                 <chr>
                                               <int> <int> <chr>
## 1 Australia w_au_g01 ##1000
                                 General Web
                                                1029
                                                        1 text1
## 2 Australia w_au_g01 ##100100 General Web
                                               5728
                                                         2 text2
## 3 Australia w_au_g01 ##100101 General Web
                                                857
                                                         3 text3
## 4 Australia w_au_g01 ##100303 General Web
                                                655
                                                         4 text4
## 5 Australia w au g01 ##1004
                                 General Web
                                               2522
                                                         5 text5
## 6 Australia w_au_g01 ##100400 General Web
                                               1071
                                                         6 text6
glowbetb %>% group_by(corpus, type) %>% summarise(freq = n())
## `summarise()` has grouped output by 'corpus'. You can override using the
## `.groups` argument.
## # A tibble: 39 x 3
## # Groups:
              corpus [22]
##
      corpus
                 type
                               freq
##
      <chr>
                 <chr>
                              <int>
## 1 Australia General Web 81677
## 2 Bangladesh Blog
                              14212
## 3 Bangladesh General Web
                              30807
                 Blog
## 4 Canada
                              54053
## 5 Canada
                 General Web 81642
                 Blog
                             149407
## 6 GB-Blog
## 7 GB-General General Web 232418
## 8 Ghana
                 Blog
                              15162
## 9 Ghana
                 General Web 32189
## 10 Hong Kong Blog
                              16040
## # i 29 more rows
test
Testtb <- glowbetb %>%
 dplyr::group_by(corpus, type) %>%
  dplyr::summarise(Tokens = sum(tokens))
```

```
## `summarise()` has grouped output by 'corpus'. You can override using the
## `.groups` argument.
# inspect
Testtb
## # A tibble: 39 x 3
## # Groups:
              corpus [22]
##
      corpus
                type
                                Tokens
##
      <chr>
                 <chr>
                                 <int>
##
  1 Australia General Web 100345338
## 2 Bangladesh Blog
                             10301460
## 3 Bangladesh General Web 27493315
## 4 Canada
                              42020545
                Blog
## 5 Canada
                General Web 87354912
## 6 GB-Blog
                Blog
                            125820554
## 7 GB-General General Web 244590686
## 8 Ghana
                              10591895
                Blog
## 9 Ghana
                 General Web 26467958
## 10 Hong Kong Blog
                              11982993
## # i 29 more rows
    combine kwics and glowbe_table
res <- dplyr::left_join(glowbetb, kwicstb) %>%
  dplyr::mutate(VulgarTokens = ifelse(is.na(VulgarTokens), 0, VulgarTokens),
                VulgarTypes = ifelse(is.na(VulgarTypes), 0, VulgarTypes)) %>%
  dplyr::mutate(corpus = dplyr::case_when(corpus == "GB-Blog" ~ "Great Britain",
                                          corpus == "GB-General" ~ "Great Britain",
                                          corpus == "US-Blog" ~ "United States",
                                          corpus == "US-General" ~ "United States",
                                          T ~ corpus))
## Joining with `by = join_by(corpus, docname)`
# inspect
head(res, 100); table(res$VulgarTokens)
## # A tibble: 100 x 9
## # Groups:
              corpus [1]
##
      corpus
               file
                        subfile type tokens
                                                id docname VulgarTokens VulgarTypes
##
      <chr>
                <chr>
                        <chr> <chr>
                                       <int> <int> <chr>
                                                                  <dbl>
                                                                              <dbl>
  1 Australia w_au_g~ ##1000 Gene~
                                        1029
                                                 1 text1
                                                                      0
                                                                                  0
## 2 Australia w_au_g~ ##1001~ Gene~
                                       5728
                                                 2 text2
                                                                      0
                                                                                  0
## 3 Australia w_au_g~ ##1001~ Gene~
                                                                      0
                                                                                  0
                                                 3 text3
## 4 Australia w_au_g~ ##1003~ Gene~
                                                                      0
                                                                                  0
                                        655
                                                 4 text4
## 5 Australia w_au_g~ ##1004 Gene~
                                        2522
                                                 5 text5
                                                                      0
                                                                                  0
## 6 Australia w_au_g~ ##1004~ Gene~
                                        1071
                                                                      0
                                                                                  0
                                                 6 text6
  7 Australia w_au_g~ ##1004~ Gene~
                                        665
                                                 7 text7
                                                                      0
                                                                                  0
## 8 Australia w_au_g~ ##1007~ Gene~
                                                                      0
                                                                                  0
                                        5196
                                                 8 text8
                                         567
                                                                      0
                                                                                  0
## 9 Australia w_au_g~ ##1008~ Gene~
                                                 9 text9
                                                                      0
                                                                                  0
## 10 Australia w_au_g~ ##1009~ Gene~
                                        1759
                                                10 text10
## # i 90 more rows
```

##

```
2
                                         3
                                                            5
                                                                       6
                                                                                 7
                                                                                          8
                                                                                                     9
##
           0
                     1
                                                   4
## 1597772
                83971
                          25233
                                    11376
                                               6234
                                                         3826
                                                                   2495
                                                                             1829
                                                                                       1364
                                                                                                 1078
##
         10
                    11
                              12
                                       13
                                                 14
                                                           15
                                                                     16
                                                                               17
                                                                                         18
                                                                                                   19
##
        804
                  689
                            482
                                      417
                                                378
                                                          319
                                                                    245
                                                                              226
                                                                                        179
                                                                                                  174
##
         20
                    21
                              22
                                       23
                                                  24
                                                           25
                                                                     26
                                                                               27
                                                                                         28
                                                                                                   29
##
        144
                  118
                            111
                                      101
                                                 84
                                                           94
                                                                     71
                                                                               75
                                                                                         68
                                                                                                   67
##
          30
                    31
                              32
                                       33
                                                  34
                                                           35
                                                                     36
                                                                               37
                                                                                         38
                                                                                                   39
                                                                                         22
##
         59
                    33
                              41
                                       30
                                                 31
                                                           38
                                                                     28
                                                                               30
                                                                                                   27
##
          40
                    41
                              42
                                       43
                                                  44
                                                           45
                                                                     46
                                                                               47
                                                                                         48
                                                                                                   49
##
          27
                    24
                              20
                                       30
                                                  16
                                                           21
                                                                     12
                                                                               14
                                                                                          9
                                                                                                    4
##
          50
                    51
                              52
                                       53
                                                  54
                                                           55
                                                                     56
                                                                               57
                                                                                         58
                                                                                                   59
##
           8
                                                  7
                                                            7
                                                                     12
                                                                               10
                                                                                          7
                                                                                                    6
                    10
                              13
                                       12
##
          60
                    61
                              62
                                       63
                                                  64
                                                           65
                                                                     66
                                                                               67
                                                                                         68
                                                                                                   69
##
           3
                     6
                              3
                                                  5
                                                           10
                                                                      9
                                                                                8
                                                                                          6
                                                                                                     4
                                         4
##
          70
                    71
                             72
                                       73
                                                 74
                                                           75
                                                                     76
                                                                               77
                                                                                         78
                                                                                                   79
           7
##
                    5
                              1
                                        5
                                                  4
                                                            4
                                                                       4
                                                                                5
                                                                                          3
                                                                                                    7
##
          80
                    81
                              82
                                       83
                                                  84
                                                           85
                                                                     86
                                                                               87
                                                                                         88
                                                                                                   90
                                                  3
##
           3
                     4
                               4
                                        1
                                                            3
                                                                      3
                                                                                 2
                                                                                           4
                                                                                                     4
##
         91
                   92
                             93
                                       94
                                                 95
                                                           97
                                                                     98
                                                                               99
                                                                                        100
                                                                                                  101
                                        3
                                                  3
##
           3
                     1
                               1
                                                            4
                                                                       1
                                                                                 1
                                                                                          5
                                                                                                     2
##
        102
                  104
                            105
                                      106
                                                107
                                                          109
                                                                    110
                                                                              111
                                                                                        112
                                                                                                  115
##
           1
                     4
                               3
                                         1
                                                   1
                                                             1
                                                                       2
                                                                                 1
                                                                                           1
                                                                                                     2
##
        117
                  118
                                      120
                                                121
                                                                    123
                                                                                        129
                                                                                                  130
                            119
                                                          122
                                                                              125
##
           2
                     2
                               4
                                         1
                                                   4
                                                             2
                                                                       1
                                                                                 1
                                                                                           2
                                                                                                     1
##
        131
                  132
                            134
                                      135
                                                137
                                                          138
                                                                    140
                                                                                        142
                                                                                                  147
                                                                              141
##
           1
                     2
                               1
                                        1
                                                  1
                                                            2
                                                                       2
                                                                                 1
                                                                                           2
                                                                                                     1
##
        152
                  153
                            155
                                      157
                                                162
                                                          163
                                                                    164
                                                                              167
                                                                                        168
                                                                                                  170
##
                                        2
                                                                                          1
                                                                                                     2
           1
                     1
                               1
                                                  1
                                                            1
                                                                      1
                                                                                 1
##
        172
                  177
                            187
                                      198
                                                208
                                                          217
                                                                    219
                                                                              242
                                                                                        245
                                                                                                  249
##
           1
                     1
                               1
                                         1
                                                   1
                                                             1
                                                                       1
                                                                                 1
                                                                                           1
                                                                                                     1
        258
                  285
                            294
                                      300
                                                          329
                                                                    399
                                                                              563
                                                                                                  883
##
                                                310
                                                                                        640
##
           1
                     1
                               1
                                         1
                                                   1
                                                             1
                                                                       1
                                                                                 1
                                                                                           1
                                                                                                     1
```

```
## # A tibble: 20 x 3
##
      corpus
                                vul
                       freq
##
      <chr>
                      <int>
                              <dbl>
##
    1 Australia
                      81677
                              22409
                               2825
##
    2 Bangladesh
                      45019
                     135695
    3 Canada
##
                             22557
##
    4 Ghana
                      47351
                               3127
##
    5 Great Britain 381825
                              94389
##
    6 Hong Kong
                      43937
                               3588
##
    7 India
                     113772
                               9649
    8 Ireland
                     102145
##
                              18454
##
    9 Jamaica
                      46744
                               6461
## 10 Kenva
                      45959
                               4186
                               7546
## 11 Malaysia
                      45025
## 12 New Zealand
                      82677
                              15608
## 13 Nigeria
                      37285
                               6456
## 14 Pakistan
                      42769
                               5045
```

```
## 15 Philippines 46340 6135

## 16 Singapore 45456 8515

## 17 South Africa 42307 5442

## 18 Sri Lanka 38391 5209

## 19 Tanzania 41353 2594

## 20 United States 275146 134935
```

7 Table 1

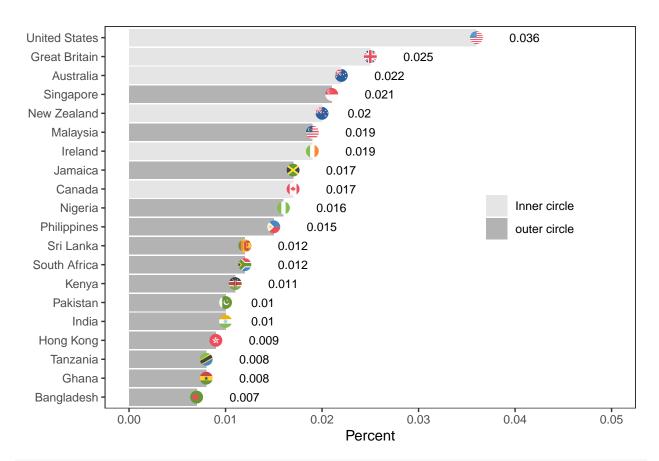
```
# Assuming 'res' is your initial data frame
Table1 <- res %>%
  ungroup() %>%
  dplyr::rename(VulgarTexts = VulgarTypes) %>%
  group_by(corpus, type) %>%
  summarise(
   Texts = n(),
    VulgarTexts = sum(ifelse(VulgarTexts > 0, 1, 0), na.rm = TRUE),
   VulgarTokens = sum(VulgarTokens, na.rm = TRUE),
   Tokens = sum(tokens, na.rm = TRUE),
   Percent = round(sum(VulgarTokens, na.rm = TRUE) / sum(tokens, na.rm = TRUE) * 100, 3)
  ) %>%
  rename(
   Region = corpus,
    `Discourse Type` = type
## `summarise()` has grouped output by 'corpus'. You can override using the
## `.groups` argument.
# Calculate totals
totals <- Table1 %>%
  dplyr::ungroup() %>%
  summarise(
   Region = "Total",
    `Discourse Type` = "",
   Texts = sum(Texts, na.rm = TRUE),
   VulgarTexts = sum(VulgarTexts, na.rm = TRUE),
   VulgarTokens = sum(VulgarTokens, na.rm = TRUE),
   Tokens = sum(Tokens, na.rm = TRUE),
   Percent = round(sum(VulgarTokens, na.rm = TRUE) / sum(Tokens, na.rm = TRUE) * 100, 3)
  )
# Bind the totals row to the original summary
Table1 <- bind_rows(Table1, totals)</pre>
# save
writexl::write_xlsx(Table1, here::here("tables", "Table1.xlsx"))
# inspect
Table1
## # A tibble: 40 x 7
## # Groups:
               Region [21]
##
      Region
                    `Discourse Type` Texts VulgarTexts VulgarTokens Tokens Percent
##
      <chr>
                    <chr>>
                                      <int>
                                                   <dbl>
                                                                <dbl> <int>
```

```
7694
                                                               22409 1.00e8
## 1 Australia
                   General Web
                                     81677
                                                                             0.022
## 2 Bangladesh
                                      14212
                                                   551
                                                                939 1.03e7
                                                                             0.009
                   Blog
## 3 Bangladesh
                   General Web
                                     30807
                                                  1166
                                                               1886 2.75e7
                                                                             0.007
## 4 Canada
                                                               9178 4.20e7
                   Blog
                                     54053
                                                  4620
                                                                             0.022
## 5 Canada
                   General Web
                                     81642
                                                  5957
                                                              13379 8.74e7
                                                                             0.015
## 6 Ghana
                   Blog
                                     15162
                                                   560
                                                               1040 1.06e7
                                                                             0.01
## 7 Ghana
                   General Web
                                                  1232
                                                               2087 2.65e7
                                                                             0.008
                                     32189
## 8 Great Britain Blog
                                                              34705 1.26e8
                                                                             0.028
                                    149407
                                                 14844
## 9 Great Britain General Web
                                    232418
                                                 23322
                                                              59684 2.45e8
                                                                             0.024
                                                               1593 1.20e7
                                                                             0.013
## 10 Hong Kong
                   Blog
                                     16040
                                                   740
## # i 30 more rows
```

8 Figure 1

```
res %>%
    ungroup() %>%
  dplyr::rename(VulgarTexts = VulgarTypes) %>%
  dplyr::group by(corpus) %>%
  dplyr::summarise(Texts = n(),
                   VulgarTexts = sum(ifelse(VulgarTexts > 0, 1, 0), na.rm = TRUE),,
                   VulgarTokens = sum(VulgarTokens),
                   Tokens = sum(tokens)) %>%
  dplyr::mutate(Percent = round(VulgarTokens/Tokens *100, 3)) %>%
  dplyr::mutate(Kachru = dplyr::case_when(corpus == "Australia" ~ "Inner circle",
                                           corpus == "Canada" ~ "Inner circle",
                                           corpus == "Great Britain" ~ "Inner circle",
                                           corpus == "Ireland" ~ "Inner circle",
                                           corpus == "New Zealand" ~ "Inner circle",
                                           corpus == "United States" ~ "Inner circle",
                                           T ~ "outer circle")) %>%
  dplyr::mutate(country = dplyr::case_when(corpus == "Australia" ~ "au",
                                            corpus == "Bangladesh" ~ "bd",
                                            corpus == "Canada" ~ "ca",
                                            corpus == "Great Britain" ~ "gb",
                                            corpus == "Ghana" ~ "gh",
                                            corpus == "Hong Kong" ~ "hk",
                                           corpus == "Ireland" ~ "ie",
                                           corpus == "India" ~ "in",
                                           corpus == "Jamaica" ~ "jm",
                                           corpus == "Kenya" ~ "ke",
                                           corpus == "Malaysia" ~ "my",
                                           corpus == "New Zealand" ~ "nz",
                                           corpus == "Nigeria" ~ "ng",
                                           corpus == "Pakistan" ~ "pk",
                                           corpus == "Philippines" ~ "ph",
                                           corpus == "Singapore" ~ "sg",
                                           corpus == "South Africa" ~ "za",
                                           corpus == "Sri Lanka" ~ "lk",
                                           corpus == "Tanzania" ~ "tz",
                                           corpus == "United States" ~ "us",
                                           T ~ NA)) -> Figure1dat
# inspect
head(Figure1dat)
```

```
## # A tibble: 6 x 8
##
    corpus
                   Texts VulgarTexts VulgarTokens Tokens Percent Kachru country
    <chr>
##
                   <int>
                              <dbl>
                                            <dbl>
                                                    <int> <dbl> <chr> <chr>
## 1 Australia
                   81677
                                7694
                                            22409 100345338 0.022 Inner~ au
## 2 Bangladesh
                   45019
                                1717
                                             2825 37794775 0.007 outer~ bd
## 3 Canada
                  135695
                               10577
                                            22557 129375457 0.017 Inner~ ca
## 4 Ghana
                   47351
                               1792
                                             3127 37059853 0.008 outer~ gh
## 5 Great Britain 381825
                                            94389 370411240 0.025 Inner~ gb
                               38166
## 6 Hong Kong
                   43937
                                1805
                                             3588 38764295 0.009 outer~ hk
Figure1dat %>%
 ggplot(aes(x = reorder(corpus, Percent),
            y = Percent,
            country = country,
            label = Percent,
            fill = Kachru)) +
 geom_bar(stat = "identity") +
 ggflags::geom_flag(size = 4) +
  geom_text(hjust = -1.1, color = "black", size = 3)+
 coord_flip(ylim = c(0, 0.05)) +
 scale_fill_manual(values = c("gray90", "gray70")) +
 theme bw() +
 labs(xlab = "", ylab = "Percent") +
 theme(legend.position = c(0.8, 0.5),
       legend.title = element_blank(),
       panel.grid.major = element_blank(),
       panel.grid.minor = element_blank(),
       axis.title.y=element_blank())
## Warning: A numeric `legend.position` argument in `theme()` was deprecated in ggplot2
## 3.5.0.
## i Please use the `legend.position.inside` argument of `theme()` instead.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
```

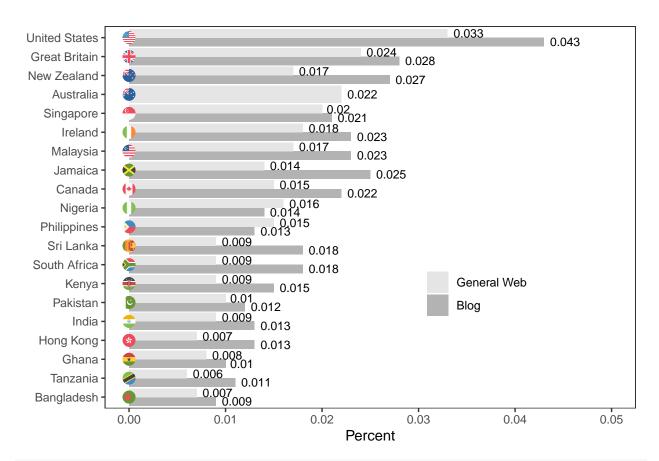


ggsave(here::here("images", "Fig1.png"), width = 14, height = 10, units = "cm", dpi = 600)

9 Figure 2

```
res %>%
  ungroup() %>%
  dplyr::rename(VulgarTexts = VulgarTypes) %>%
  dplyr::group_by(corpus, type) %>%
    dplyr::summarise(Texts = n(),
                   VulgarTexts = sum(ifelse(VulgarTexts > 0, 1, 0), na.rm = TRUE),,
                   VulgarTokens = sum(VulgarTokens),
                   Tokens = sum(tokens)) %>%
  dplyr::mutate(Percent = round(VulgarTokens/Tokens *100, 3)) %>%
  dplyr::mutate(Kachru = dplyr::case_when(corpus == "Australia" ~ "Inner circle",
                                          corpus == "Canada" ~ "Inner circle",
                                          corpus == "Great Britain" ~ "Inner circle",
                                          corpus == "Ireland" ~ "Inner circle",
                                          corpus == "New Zealand" ~ "Inner circle",
                                          corpus == "United States" ~ "Inner circle",
                                          T ~ "outer circle")) %>%
  dplyr::mutate(country = dplyr::case_when(corpus == "Australia" ~ "au",
                                           corpus == "Bangladesh" ~ "bd",
                                           corpus == "Canada" ~ "ca",
                                           corpus == "Great Britain" ~ "gb",
                                           corpus == "Ghana" ~ "gh",
```

```
corpus == "Hong Kong" ~ "hk",
                                          corpus == "Ireland" ~ "ie",
                                          corpus == "India" ~ "in",
                                          corpus == "Jamaica" ~ "jm",
                                          corpus == "Kenya" ~ "ke",
                                          corpus == "Malaysia" ~ "my",
                                          corpus == "New Zealand" ~ "nz",
                                          corpus == "Nigeria" ~ "ng",
                                          corpus == "Pakistan" ~ "pk",
                                          corpus == "Philippines" ~ "ph",
                                          corpus == "Singapore" ~ "sg",
                                          corpus == "South Africa" ~ "za",
                                          corpus == "Sri Lanka" ~ "lk",
                                          corpus == "Tanzania" ~ "tz",
                                          corpus == "United States" ~ "us",
                                          T ~ NA)) -> Figure2dat
## `summarise()` has grouped output by 'corpus'. You can override using the
## `.groups` argument.
# inspect
head(Figure2dat)
## # A tibble: 6 x 9
## # Groups: corpus [4]
                type
                      Texts VulgarTexts VulgarTokens Tokens Percent Kachru country
##
     corpus
     <chr>>
                <chr> <int>
                                   <dbl>
                                                <dbl> <int>
                                                               <dbl> <chr> <chr>
                                    7694
                                                22409 1.00e8
                                                               0.022 Inner~ au
## 1 Australia Gener~ 81677
                                                  939 1.03e7
## 2 Bangladesh Blog
                                    551
                                                               0.009 outer~ bd
                       14212
## 3 Bangladesh Gener~ 30807
                                    1166
                                                 1886 2.75e7
                                                               0.007 outer~ bd
## 4 Canada
               Blog
                      54053
                                    4620
                                                 9178 4.20e7
                                                               0.022 Inner~ ca
## 5 Canada
                Gener~ 81642
                                                               0.015 Inner~ ca
                                    5957
                                                13379 8.74e7
## 6 Ghana
                                     560
                                                 1040 1.06e7
                Blog
                      15162
                                                               0.01 outer~ gh
Figure2dat %>%
  ggplot(aes(x = reorder(corpus, Percent),
            y = Percent,
            country = country,
            label = Percent,
            fill = type)) +
  geom_bar(stat = "identity", position = position_dodge()) +
  ggflags::geom_flag(aes(y = 0), size = 4) +
  geom_text(color = "black", hjust = -0.2, size = 3, position = position_dodge(width = .9))+
  coord_flip(ylim = c(0, 0.05)) +
  scale_fill_manual(breaks = c("General Web", "Blog"), values = c("gray90", "gray70")) +
  theme bw() +
  labs(xlab = "", ylab = "Percent") +
  theme(legend.position = c(0.7, 0.3),
        legend.title = element_blank(),
       panel.grid.major = element_blank(),
       panel.grid.minor = element blank(),
       axis.title.y=element_blank())
```

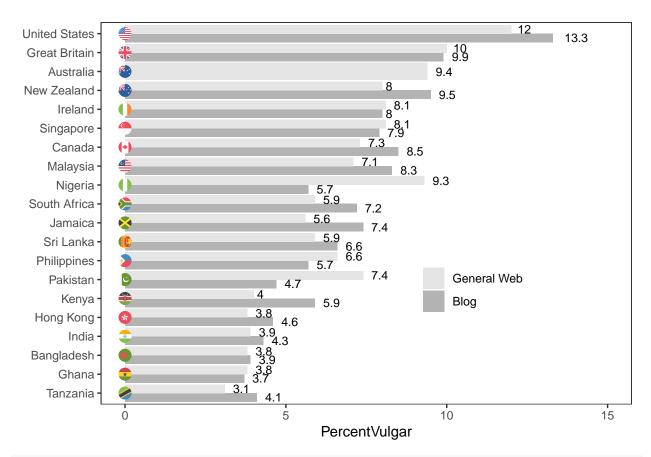


ggsave(here::here("images", "Fig2.png"), width = 14, height = 14, units = "cm", dpi = 600)

10 Figure 3

```
Table1 %>%
  dplyr::mutate(PercentVulgar = round((VulgarTexts/Texts) *100, 1)) %>%
  dplyr::filter(Region != "Total") %>%
  dplyr::mutate(Kachru = dplyr::case_when(Region == "Australia" ~ "Inner circle",
                                          Region == "Canada" ~ "Inner circle",
                                          Region == "Great Britain" ~ "Inner circle",
                                          Region == "Ireland" ~ "Inner circle",
                                          Region == "New Zealand" ~ "Inner circle",
                                          Region == "United States" ~ "Inner circle",
                                          T ~ "outer circle")) %>%
  dplyr::mutate(country = dplyr::case_when(Region == "Australia" ~ "au",
                                           Region == "Bangladesh" ~ "bd",
                                           Region == "Canada" ~ "ca",
                                           Region == "Great Britain" ~ "gb",
                                           Region == "Ghana" ~ "gh",
                                           Region == "Hong Kong" ~ "hk",
                                          Region == "Ireland" ~ "ie",
                                          Region == "India" ~ "in",
                                          Region == "Jamaica" ~ "jm",
                                          Region == "Kenya" ~ "ke",
                                          Region == "Malaysia" ~ "my",
```

```
Region == "New Zealand" ~ "nz",
                                          Region == "Nigeria" ~ "ng",
                                          Region == "Pakistan" ~ "pk",
                                          Region == "Philippines" ~ "ph",
                                          Region == "Singapore" ~ "sg",
                                          Region == "South Africa" ~ "za",
                                          Region == "Sri Lanka" ~ "lk",
                                          Region == "Tanzania" ~ "tz",
                                          Region == "United States" ~ "us",
                                          T ~ NA)) -> Fig3dat
# inspect
Fig3dat
## # A tibble: 39 x 10
## # Groups:
               Region [20]
##
                    `Discourse Type`
                                      Texts VulgarTexts VulgarTokens Tokens Percent
      Region
##
      <chr>
                    <chr>
                                      <int>
                                                   <dbl>
                                                                <dbl> <int>
                                                                               <dbl>
## 1 Australia
                    General Web
                                      81677
                                                   7694
                                                                22409 1.00e8
                                                                               0.022
## 2 Bangladesh
                                      14212
                                                    551
                                                                 939 1.03e7
                                                                               0.009
                    Blog
## 3 Bangladesh
                    General Web
                                      30807
                                                   1166
                                                                1886 2.75e7
                                                                               0.007
## 4 Canada
                                                                9178 4.20e7
                                                                               0.022
                    Blog
                                      54053
                                                   4620
## 5 Canada
                    General Web
                                      81642
                                                   5957
                                                                13379 8.74e7
                                                                               0.015
## 6 Ghana
                    Blog
                                      15162
                                                    560
                                                                1040 1.06e7
                                                                               0.01
## 7 Ghana
                    General Web
                                      32189
                                                   1232
                                                                 2087 2.65e7
                                                                               0.008
## 8 Great Britain Blog
                                                                34705 1.26e8
                                     149407
                                                  14844
                                                                               0.028
## 9 Great Britain General Web
                                     232418
                                                  23322
                                                                59684 2.45e8
                                                                               0.024
## 10 Hong Kong
                                      16040
                                                    740
                                                                 1593 1.20e7
                                                                               0.013
                    Blog
## # i 29 more rows
## # i 3 more variables: PercentVulgar <dbl>, Kachru <chr>, country <chr>
Fig3dat %>%
  ggplot(aes(x = reorder(Region, PercentVulgar),
             y = PercentVulgar,
             country = country,
             label = PercentVulgar,
             fill = `Discourse Type`)) +
  geom_bar(stat = "identity", position = position_dodge()) +
  ggflags::geom_flag(aes(y = 0), size = 4) +
  geom_text(color = "black", hjust = -0.5, size = 3, position = position_dodge(width = .9))+
  coord_flip(ylim = c(0, 15)) +
  scale_fill_manual(breaks = c("General Web", "Blog"), values = c("gray90", "gray70")) +
  theme_bw() +
  theme(legend.position = c(0.7, 0.3),
        legend.title = element_blank(),
        panel.grid.major = element_blank(),
        panel.grid.minor = element_blank(),
        axis.title.y=element_blank()) +
  labs(xlab = "", ylab = "Percent")
```

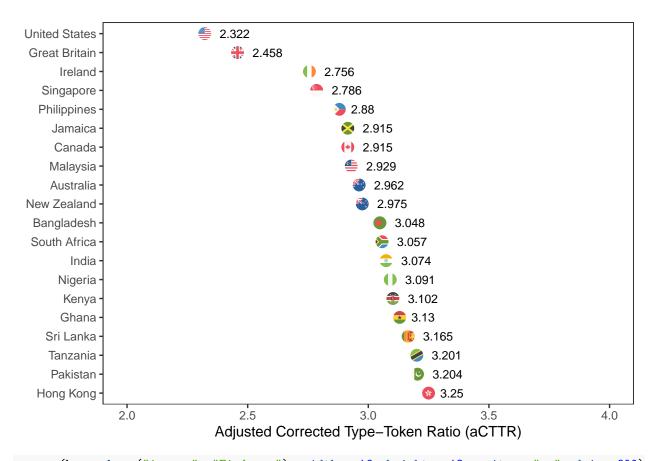


```
ggsave(here::here("images", "Fig3.png"), width = 14, height = 14, units = "cm", dpi = 600)
```

11 Figure 4 (CTTR)

```
#head(kwics)
kwics
       %>%
  dplyr::mutate(corpus = dplyr::case_when(corpus == "GB-Blog" ~ "Great Britain",
                                          corpus == "GB-General" ~ "Great Britain",
                                          corpus == "US-Blog" ~ "United States",
                                          corpus == "US-General" ~ "United States",
                                          T ~ corpus)) %>%
  dplyr::group_by(corpus) %>%
  dplyr::summarise(tokens = length(names(table(keyword))),
                   types = length(names(table(lemma)))) %>%
  dplyr::mutate(CTTR = round(types / (sqrt(2 * tokens)), 3)) %>%
  dplyr::mutate(country = dplyr::case_when(corpus == "Australia" ~ "au",
                                           corpus == "Bangladesh" ~ "bd",
                                           corpus == "Canada" ~ "ca",
                                           corpus == "Great Britain" ~ "gb",
                                           corpus == "Ghana" ~ "gh",
                                           corpus == "Hong Kong" ~ "hk",
                                          corpus == "Ireland" ~ "ie",
                                          corpus == "India" ~ "in",
                                          corpus == "Jamaica" ~ "jm",
                                          corpus == "Kenya" ~ "ke",
```

```
corpus == "Malaysia" ~ "my",
                                         corpus == "New Zealand" ~ "nz",
                                         corpus == "Nigeria" ~ "ng",
                                         corpus == "Pakistan" ~ "pk",
                                         corpus == "Philippines" ~ "ph",
                                         corpus == "Singapore" ~ "sg",
                                         corpus == "South Africa" ~ "za",
                                         corpus == "Sri Lanka" ~ "lk",
                                         corpus == "Tanzania" ~ "tz",
                                         corpus == "United States" ~ "us",
                                         T ~ NA)) -> Fig4dat
Fig4dat
## # A tibble: 20 x 5
##
                 tokens types CTTR country
     corpus
##
     <chr>
                   <int> <int> <dbl> <chr>
## 1 Australia
                      212
                            61 2.96 au
## 2 Bangladesh
                      124
                             48 3.05 bd
## 3 Canada
                      219
                             61 2.92 ca
## 4 Ghana
                      138
                             52 3.13 gh
## 5 Great Britain
                     339
                             64 2.46 gb
                             54 3.25 hk
## 6 Hong Kong
                      138
## 7 India
                      178
                             58 3.07 in
## 8 Ireland
                    245
                             61 2.76 ie
## 9 Jamaica
                             51 2.92 jm
                    153
## 10 Kenya
                      146
                             53 3.10 ke
## 11 Malaysia
                     170
                            54 2.93 my
## 12 New Zealand
                     190
                            58 2.98 nz
## 13 Nigeria
                            58 3.09 ng
                      176
## 14 Pakistan
                      142
                             54 3.20 pk
## 15 Philippines
                    163
                             52 2.88 ph
## 16 Singapore
                      181
                             53 2.79 sg
                             54 3.06 za
## 17 South Africa
                      156
## 18 Sri Lanka
                      151
                             55 3.16 lk
## 19 Tanzania
                      122
                             50 3.20 tz
## 20 United States
                      368
                             63 2.32 us
ggplot(Fig4dat, aes(x = CTTR, y = reorder(corpus, -CTTR), country = country, label = CTTR)) +
 geom_text(color = "black", hjust = -0.5, size = 3, position = position_dodge(width = .9))+
 ggflags::geom_flag(size = 4) +
 theme bw() +
 coord_cartesian(xlim = c(2, 4)) +
 theme(legend.position = c(0.7, 0.3),
       legend.title = element_blank(),
       panel.grid.major = element_blank(),
       panel.grid.minor = element_blank(),
       axis.title.y=element blank()) +
 labs(x = "Adjusted Corrected Type-Token Ratio (aCTTR)")
```



```
ggsave(here::here("images", "Fig4.png"), width = 16, height = 12, units = "cm", dpi = 600)
```

12 Figure 5 (lemmas)

```
kwics %>%
  dplyr::mutate(corpus = dplyr::case_when(corpus == "GB-Blog" ~ "Great Britain",
                                           corpus == "GB-General" ~ "Great Britain",
                                           corpus == "US-Blog" ~ "United States",
                                          corpus == "US-General" ~ "United States",
                                          T ~ corpus)) %>%
  group_by(corpus, lemma) %>%
  dplyr::summarise(freq = n()) -> Fig5dat_1
## `summarise()` has grouped output by 'corpus'. You can override using the
## `.groups` argument.
# inspect
Fig5dat_1
## # A tibble: 1,114 x 3
               corpus [20]
## # Groups:
##
      corpus
                lemma
                            freq
##
      <chr>
                <chr>
                           <int>
  1 Australia arse(hole)
                             165
   2 Australia ass(hole)
                             162
## 3 Australia bloody
                            2804
```

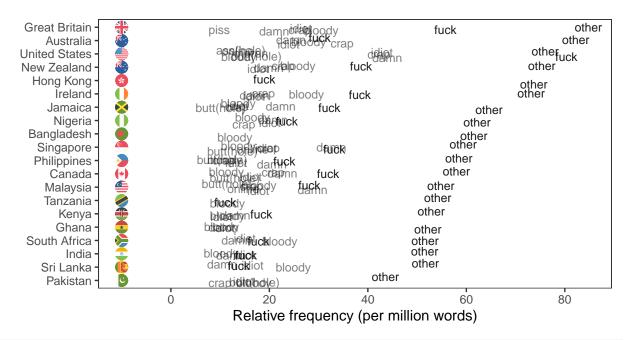
```
## 4 Australia boner
                             27
## 5 Australia bullshit
                            5
## 6 Australia butt(hole)
                            906
## 7 Australia cock
                           339
## 8 Australia crap
                           3500
                            39
## 9 Australia cum
## 10 Australia cunt
                           113
## # i 1,104 more rows
res %>%
 dplyr::group_by(corpus) %>%
 dplyr::summarise(tokens = sum(tokens)) -> Fig5dat_2
# inspect
Fig5dat_2
## # A tibble: 20 x 2
##
      corpus
                      tokens
##
      <chr>
                       <int>
## 1 Australia
                  100345338
## 2 Bangladesh
                    37794775
## 3 Canada
                   129375457
## 4 Ghana
                    37059853
## 5 Great Britain 370411240
## 6 Hong Kong 38764295
## 7 India
                    92320648
## 8 Ireland
                    96552489
## 9 Jamaica
                    37857472
## 10 Kenya
                    39239962
## 11 Malaysia
                    39872004
## 12 New Zealand
                    77787824
## 13 Nigeria
                    40812333
## 14 Pakistan
                    49214441
## 15 Philippines
                    41458499
## 16 Singapore
                    41214500
## 17 South Africa
                    45338362
## 18 Sri Lanka
                    44491369
## 19 Tanzania
                    33602324
## 20 United States 372703448
dplyr::left_join(Fig5dat_2, Fig5dat_1) %>%
  dplyr::rowwise() %>%
  dplyr::mutate(rfreq = freq/tokens*1000000) %>%
  dplyr::mutate(lemma = ifelse(rfreq < 10, "other", lemma)) %>%
  dplyr::group_by(corpus, lemma) %>%
  dplyr::summarise(tokens = unique(tokens),
                  freq = sum(freq)) %>%
  dplyr::mutate(rfreq = freq/tokens*1000000) %>%
  dplyr::group_by(corpus) %>%
  dplyr::mutate(maxfreq = max(rfreq)) %>%
  dplyr::mutate(country = dplyr::case_when(corpus == "Australia" ~ "au",
                                          corpus == "Bangladesh" ~ "bd",
                                          corpus == "Canada" ~ "ca",
                                          corpus == "Great Britain" ~ "gb",
                                          corpus == "Ghana" ~ "gh",
                                          corpus == "Hong Kong" ~ "hk",
```

```
corpus == "Ireland" ~ "ie",
                                         corpus == "India" ~ "in",
                                         corpus == "Jamaica" ~ "jm",
                                         corpus == "Kenya" ~ "ke",
                                         corpus == "Malaysia" ~ "my",
                                         corpus == "New Zealand" ~ "nz",
                                         corpus == "Nigeria" ~ "ng",
                                         corpus == "Pakistan" ~ "pk",
                                         corpus == "Philippines" ~ "ph",
                                         corpus == "Singapore" ~ "sg",
                                         corpus == "South Africa" ~ "za",
                                         corpus == "Sri Lanka" ~ "lk",
                                         corpus == "Tanzania" ~ "tz",
                                         corpus == "United States" ~ "us",
                                        T ~ NA)) -> Fig5dat
## Joining with `by = join_by(corpus)`
## `summarise()` has grouped output by 'corpus'. You can override using the
## `.groups` argument.
# inspect
Fig5dat
## # A tibble: 114 x 7
## # Groups: corpus [20]
##
     corpus
                lemma
                              tokens freq rfreq maxfreq country
##
      <chr>
                <chr>
                               <int> <int> <dbl>
                                                  <dbl> <chr>
                           100345338 2804 27.9
                                                   82.4 au
## 1 Australia bloody
                          100345338 3500 34.9
                                                   82.4 au
## 2 Australia crap
## 3 Australia damn
                         100345338 2428 24.2
                                                  82.4 au
## 4 Australia fuck
                         100345338 3022 30.1 82.4 au
## 5 Australia idiot
                         100345338 2389 23.8 82.4 au
## 6 Australia other
                         100345338 8266 82.4 82.4 au
## 7 Bangladesh bloody
                                     498 13.2 61.6 bd
                          37794775
## 8 Bangladesh other
                           37794775 2327 61.6 61.6 bd
## 9 Canada
               bloody
                          129375457 1482 11.5
                                                   58.2 ca
## 10 Canada
                butt(hole) 129375457 1691 13.1
                                                   58.2 ca
## # i 104 more rows
Fig5dat %>%
 ggplot(aes(x = reorder(corpus, maxfreq), y = rfreq, group = lemma, label = lemma, country = country,
 geom_text(size = 3, position=position_jitter(width=.3,height=.3)) +
 ggflags::geom_flag(aes(y = -10), size = 4) +
 coord_flip() +
 labs(x = "",
      y = "Relative frequency (per million words)",
      alpha = "Vulgar lemma") +
 #scale_alpha_manual(values = rep(.5, length(names(table(Fig5dat$lemma))))) +
 scale_alpha_manual(values = c(0.5, 0.5, 0.5, 0.5, 0.5, 0.9, 0.5, 0.5, 0.5, 0.5, 0.5)) +
 theme_bw() +
 theme(panel.grid.major = element_blank(),
       panel.grid.minor = element_blank(),
       legend.position = "top")
```

```
a ass(hole) a crap a idiot a other

Vulgar lemma a bloody a damn a moron a piss

a butt(hole) a fuck a online
```



```
ggsave(here::here("images", "Fig5.png"), width = 15, height = 20, units = "cm", dpi = 600)
```

13 Figure 6 (heatmap)

```
kwics %>%
  dplyr::mutate(corpus = dplyr::case_when(corpus == "GB-Blog" ~ "Great Britain",
                                            corpus == "GB-General" ~ "Great Britain",
                                            corpus == "US-Blog" ~ "United States",
                                            corpus == "US-General" ~ "United States",
                                           T ~ corpus)) %>%
  dplyr::group_by(corpus, lemma) %>%
  dplyr::summarise(freq = n(), .groups = "drop") %>%
  mutate(z score = scale(freq)) -> cfadat
# inspect
head(cfadat)
## # A tibble: 6 x 4
##
     corpus
               lemma
                            freq z_score[,1]
                                       <dbl>
##
     <chr>>
               <chr>>
                           <int>
                                      -0.114
## 1 Australia arse(hole)
                             165
## 2 Australia ass(hole)
                             162
                                      -0.116
                            2804
## 3 Australia bloody
                                       1.55
## 4 Australia boner
                              27
                                      -0.201
## 5 Australia bullshit
                               5
                                      -0.215
                                       0.354
## 6 Australia butt(hole)
                             906
```

13.1 CFA

```
library(cfa)
# define configurations
configs <- cfadat %>%
  dplyr::select(corpus, lemma)
# define counts
counts <- cfadat$freq</pre>
# perform cfa
cfa(configs, counts) -> cfa_res
# inspect
cfa_res
##
   *** Analysis of configuration frequencies (CFA) ***
##
##
                           label
                                            expected
                                                                 Q
                                                                          chisq
## 1
                    Ireland feck
                                    546 5.663661e+01 1.270822e-03 4.228299e+03
## 2
                                   5205 1.203914e+04 1.831749e-02 3.879470e+03
            United States bloody
## 3
         United States ass(hole)
                                   5395 2.938136e+03 6.428301e-03 2.054424e+03
## 4
              Great Britain cunt
                                   2074 8.173557e+02 3.269823e-03 1.932029e+03
## 5
             Pakistan butt(hole)
                                    842 2.396006e+02 1.565107e-03 1.514542e+03
## 6
                                  1302 4.855117e+02 2.122692e-03 1.373094e+03
              Great Britain twat
## 7
            Great Britain bloody 11299 8.421582e+03 7.638255e-03 9.831328e+02
## 8
              Philippines nigger
                                    284 5.588090e+01 5.923985e-04 9.312362e+02
## 9
                                  1102 4.647528e+02 1.656615e-03 8.737632e+02
                Sri Lanka bloody
                                    726 2.055276e+03 3.469990e-03 8.597261e+02
## 10
         Great Britain ass(hole)
                                    357 8.789743e+01 6.988858e-04 8.238716e+02
## 11
                    India nigger
## 12
        Great Britain butt(hole)
                                   2644 4.482834e+03 4.830773e-03 7.542800e+02
                                   7755 1.035383e+04 6.934285e-03 6.523091e+02
## 13
              Great Britain damn
## 14
                                   2649 1.646487e+03 2.614208e-03 6.104106e+02
                  Ireland bloody
## 15
                Singapore online
                                    672 2.764098e+02 1.027890e-03 5.661580e+02
## 16
                                   1523 2.767860e+03 3.255685e-03 5.598828e+02
              United States cock
## 17
             South Africa bloody
                                   1001 4.855414e+02 1.340081e-03 5.472193e+02
## 18
                  Australia crap
                                   3500 2.434406e+03 2.784421e-03 4.664342e+02
                                    942 4.749731e+02 1.214135e-03 4.592136e+02
## 19
              Great Britain shag
## 20
                   Pakistan fuck
                                    328 9.922118e+02 1.729084e-03 4.446403e+02
## 21
              United States fuck 29965 2.653818e+04 9.556256e-03 4.424993e+02
## 22
                 Malaysia online
                                    574 2.449546e+02 8.549120e-04 4.420039e+02
## 23
                    Malaysia jap
                                    142 2.895880e+01 2.935342e-04 4.412585e+02
## 24
              Great Britain wank
                                   1083 5.783986e+02 1.312171e-03 4.402198e+02
## 25
                  Australia fuck
                                  3022 4.407230e+03 3.638393e-03 4.353896e+02
## 26
                                    855 4.286522e+02 1.108248e-03 4.240558e+02
              Great Britain slag
## 27
                                    122 2.362756e+01 2.554403e-04 4.095700e+02
                 Tanzania nigger
## 28
             United States moron
                                  6151 4.758618e+03 3.660557e-03 4.074141e+02
## 29
            Great Britain nigger
                                    281 8.597553e+02 1.506103e-03 3.895965e+02
## 30
            Great Britain tosser
                                    460 1.911656e+02 6.983766e-04 3.780591e+02
                                    143 3.267746e+01 2.864774e-04 3.724604e+02
## 31
                   Singapore jap
## 32
                    Ireland shit
                                     94 1.624350e+01 2.019037e-04 3.722151e+02
## 33
                                    206 5.885029e+01 3.821334e-04 3.679343e+02
                  Jamaica nigger
## 34
               Canada butt(hole)
                                   1691 1.071292e+03 1.613562e-03 3.584804e+02
## 35
              United States cunt
                                    537 1.168458e+03 1.644573e-03 3.412521e+02
                                   3721 2.759893e+03 2.513532e-03 3.346967e+02
## 36
              Great Britain piss
## 37
                Australia bloody
                                   2804 1.999356e+03 2.100165e-03 3.238300e+02
```

```
## 38
            Great Britain online
                                  2074 3.064042e+03 2.591266e-03 3.198989e+02
## 39
              United States shag
                                    217 6.790017e+02 1.201709e-03 3.143521e+02
## 40
                 Pakistan bloody
                                    824 4.501206e+02 9.719159e-04 3.105519e+02
              United States feck
## 41
                                     60 4.141280e+02 9.204851e-04 3.028209e+02
## 42
                   Jamaica skank
                                     72 1.231360e+01 1.549810e-04 2.893115e+02
##
  43
                                    194 6.127833e+02 1.089106e-03 2.862014e+02
              United States slag
## 44
              New Zealand bloody
                                   2019 1.392563e+03 1.632449e-03 2.817990e+02
              United States twat
## 45
                                    277 6.940673e+02 1.084873e-03 2.506171e+02
##
  46
                  Australia wank
                                    322 1.373168e+02 4.797019e-04 2.483882e+02
## 47
               Bangladesh bloody
                                    498 2.520497e+02 6.390296e-04 2.399986e+02
## 48
                   Hong Kong jap
                                     71 1.376944e+01 1.486048e-04 2.378701e+02
## 49
                New Zealand puke
                                    275 1.125414e+02 4.219479e-04 2.345162e+02
##
  50
              United States wank
                                    390 8.268545e+02 1.136736e-03 2.308047e+02
## 51
              Great Britain fuck 20626 1.856390e+04 5.625406e-03 2.290605e+02
## 52
              Great Britain slut
                                    557 1.034745e+03 1.243810e-03 2.205766e+02
## 53
          New Zealand arse(hole)
                                    155 5.000940e+01 2.726441e-04 2.204190e+02
## 54
                                    162 4.879402e+02 8.473791e-04 2.177255e+02
             Australia ass(hole)
## 55
               New Zealand prick
                                    352 1.644556e+02 4.871682e-04 2.138749e+02
                                    234 9.298949e+01 3.662230e-04 2.138302e+02
## 56
                   Jamaica pussy
## 57
             United States pussy
                                   1304 1.942057e+03 1.665115e-03 2.096317e+02
                                    554 3.024339e+02 6.537062e-04 2.092541e+02
##
  58
        Great Britain arse(hole)
## 59
                Philippines cock
                                    287 1.258435e+02 4.185804e-04 2.063785e+02
                                    142 4.323468e+02 7.547344e-04 1.949853e+02
## 60
        United States arse(hole)
                Philippines jiss
                                     24 2.405364e+00 5.607094e-05 1.938702e+02
##
  61
## 62
            United States nigger
                                  1716 1.229070e+03 1.268364e-03 1.929106e+02
##
  63
                  Nigeria online
                                    407 2.095715e+02 5.129032e-04 1.859890e+02
## 64
                                    748 4.621276e+02 7.431611e-04 1.768409e+02
           United States jackass
  65
##
                  Singapore damn
                                  1340 9.340272e+02 1.056673e-03 1.764552e+02
## 66
                                     55 2.732824e+02 5.671740e-04 1.743516e+02
            United States tosser
## 67
                 Bangladesh cock
                                    158 5.794751e+01 2.598259e-04 1.727512e+02
## 68
                  Ireland online
                                    278 5.990448e+02 8.348932e-04 1.720568e+02
##
  69
              United States damn 16380 1.480140e+04 4.262676e-03 1.683617e+02
## 70
               Australia poofter
                                     36 5.527584e+00 7.912294e-05 1.679881e+02
## 71
                                    505 2.861114e+02 5.687680e-04 1.674600e+02
                     Canada fart
## 72
                  Sri Lanka fuck
                                    615 1.024466e+03 1.066017e-03 1.636584e+02
                   Tanzania slut
## 73
                                     96 2.843659e+01 1.754417e-04 1.605261e+02
## 74
                      Ghana fuck
                                    304 6.149943e+02 8.087901e-04 1.572656e+02
                                  2487 1.936165e+03 1.437473e-03 1.567115e+02
## 75
              Great Britain cock
## 76
                                    444 2.472799e+02 5.111130e-04 1.564979e+02
                     Canada slut
## 77
                 Philippines jap
                                     84 2.354389e+01 1.569842e-04 1.552394e+02
##
  78
              Great Britain pedo
                                    487 8.475010e+02 9.381073e-04 1.533461e+02
## 79
            United States online
                                   5177 4.380227e+03 2.092626e-03 1.449349e+02
                                    179 7.497017e+01 2.701666e-04 1.443535e+02
##
  80
                 Sri Lanka pussy
## 81
                   Canada bloody
                                   1482 2.012561e+03 1.384841e-03 1.398690e+02
## 82
              Great Britain feck
                                    489 2.896895e+02 5.179004e-04 1.371285e+02
                                     52 2.278519e+02 4.568708e-04 1.357193e+02
## 83
                   Jamaica moron
## 84
                      Kenva shit
                                     26 3.684582e+00 5.794266e-05 1.351518e+02
## 85
             United States idiot 16001 1.460800e+04 3.759539e-03 1.328353e+02
## 86
             Great Britain moron
                                  2673 3.328733e+03 1.717459e-03 1.291741e+02
## 87
             United States prick
                                    994 1.421769e+03 1.114821e-03 1.287034e+02
##
  88
                                    135 5.320915e+01 2.123997e-04 1.257254e+02
                   Tanzania cock
## 89
                 Tanzania pecker
                                     14 1.299920e+00 3.297594e-05 1.240785e+02
## 90
                Jamaica fag(got)
                                    143 5.819602e+01 2.202273e-04 1.235774e+02
## 91
          Great Britain fag(got)
                                  1174 8.501970e+02 8.426165e-04 1.233225e+02
```

```
28 4.505940e+00 6.100317e-05 1.224985e+02
## 92
                  Tanzania dildo
## 93
            Australia arse(hole)
                                    165 7.180041e+01 2.420384e-04 1.209765e+02
## 94
                   Nigeria lesbo
                                     12 1.005782e+00 2.854662e-05 1.201779e+02
                                    356 2.012041e+02 4.021386e-04 1.190920e+02
## 95
                  Australia pedo
## 96
             United States boner
                                    398 2.322901e+02 4.305265e-04 1.182133e+02
## 97
                   Malaysia damn
                                   1140 8.277357e+02 8.125425e-04 1.178021e+02
## 98
                     Ireland sod
                                     63 1.768097e+01 1.176765e-04 1.161596e+02
## 99
                                     52 2.054614e+02 3.986760e-04 1.146220e+02
                   Canada nigger
## 100
                     Jamaica cum
                                     41 8.958396e+00 8.319814e-05 1.146036e+02
## 101
             Bangladesh fag(got)
                                     79 2.544556e+01 1.390636e-04 1.127143e+02
## 102
                      India fuck
                                   1437 1.897888e+03 1.202624e-03 1.119232e+02
## 103
                  Singapore puke
                                    144 6.139737e+01 2.145124e-04 1.111317e+02
## 104
                 Jamaica jackass
                                     71 2.212757e+01 1.269048e-04 1.079429e+02
## 105
                  Ireland nigger
                                     34 1.680890e+02 3.483149e-04 1.069663e+02
## 106
             New Zealand poofter
                                     24 3.849995e+00 5.232013e-05 1.054606e+02
## 107
                 Tanzania bloody
                                    387 2.314396e+02 4.041563e-04 1.045588e+02
## 108
                                    169 3.622344e+02 5.022065e-04 1.030811e+02
               Great Britain jap
## 109
                     Kenya pussy
                                    139 6.024671e+01 2.045153e-04 1.029447e+02
                                    866 1.215406e+03 9.101069e-04 1.004476e+02
## 110
          United States fag(got)
## 111
              United States piss
                                   3316 3.945427e+03 1.651228e-03 1.004147e+02
## 112
                Ireland bullshit
                                     16 1.964553e+00 3.644330e-05 1.002741e+02
## 113
                 Bangladesh fuck
                                    321 5.555993e+02 6.100184e-04 9.905850e+01
## 114
                     India idiot
                                   1366 1.044697e+03 8.365355e-04 9.881907e+01
## 115
                India butt(hole)
                                    670 4.583044e+02 5.503237e-04 9.778441e+01
## 116
                                    423 6.805987e+02 6.700406e-04 9.749813e+01
              Great Britain puke
## 117
                New Zealand wank
                                    192 9.564197e+01 2.502563e-04 9.707944e+01
## 118
            Great Britain retard
                                    478 7.408894e+02 6.839095e-04 9.328093e+01
## 119
                                   1113 1.484089e+03 9.672628e-04 9.278908e+01
                   Malaysia fuck
## 120
                                     93 3.560301e+01 1.490454e-04 9.253189e+01
                      Ghana pimp
## 121
                 Singapore moron
                                    135 3.002878e+02 4.295055e-04 9.097955e+01
## 122
           Great Britain jackass
                                    152 3.232660e+02 4.450667e-04 9.073657e+01
## 123
                Australia nigger
                                     69 2.041133e+02 3.510085e-04 8.943859e+01
## 124
                New Zealand shag
                                    162 7.853989e+01 2.167488e-04 8.868856e+01
## 125
                                   2940 2.474322e+03 1.216954e-03 8.764263e+01
                     Canada damn
## 126
                    Ireland piss
                                    757 5.395811e+02 5.653214e-04 8.760679e+01
                       Kenya cum
## 127
                                     28 5.804031e+00 5.763283e-05 8.488256e+01
## 128
                      Kenya cock
                                    171 8.586488e+01 2.211031e-04 8.441155e+01
## 129
              United States crap 15770 1.465880e+04 2.999401e-03 8.423386e+01
## 130
                  Sri Lanka crap
                                    348 5.658808e+02 5.665610e-04 8.389050e+01
## 131
                                     14 1.816671e+00 3.163423e-05 8.170631e+01
                  Hong Kong tits
## 132
                                     66 2.291080e+01 1.118880e-04 8.103948e+01
                   Pakistan slag
## 133
                       India crap
                                    757 1.048330e+03 7.585038e-04 8.096020e+01
## 134
                                    541 7.914679e+02 6.516807e-04 7.926309e+01
              United States dike
                                     71 1.953289e+02 3.229844e-04 7.913663e+01
## 135
                     Canada cunt
## 136
                                    476 3.181288e+02 4.102524e-04 7.834351e+01
              United States jerk
## 137
                                    234 1.325306e+02 2.635566e-04 7.768806e+01
                    Jamaica cock
## 138
           New Zealand ass(hole)
                                    179 3.398532e+02 4.180252e-04 7.613215e+01
## 139
                                   1633 2.024256e+03 1.021265e-03 7.562337e+01
                    Ireland damn
## 140
                    Ireland pimp
                                    336 2.101113e+02 3.270492e-04 7.542654e+01
## 141
                        Ghana sod
                                     18 2.996012e+00 3.895824e-05 7.513978e+01
## 142
                                    443 6.664769e+02 5.812650e-04 7.493424e+01
                Philippines crap
## 143
                                    964 1.269716e+03 7.964202e-04 7.360901e+01
                    Nigeria fuck
## 144
          Philippines butt(hole)
                                    437 2.913676e+02 3.784216e-04 7.279049e+01
## 145
              New Zealand nigger
                                     41 1.421661e+02 2.627754e-04 7.199031e+01
```

```
## 146
                  Sri Lanka cock
                                    194 1.068491e+02 2.263507e-04 7.108425e+01
## 147
                Canada ass(hole)
                                    677 4.911628e+02 4.831435e-04 7.031368e+01
## 148
             Tanzania butt(hole)
                                    216 1.231960e+02 2.410432e-04 6.990955e+01
## 149
                                    797 1.070291e+03 7.115785e-04 6.978276e+01
               South Africa fuck
## 150
              United States fart
                                   1367 1.711519e+03 8.985380e-04 6.934963e+01
## 151
                                   1626 1.997806e+03 9.704307e-04 6.919581e+01
                   Ireland idiot
## 152
              United States frig
                                    868 6.551771e+02 5.535375e-04 6.913183e+01
## 153
                                    101 4.538437e+01 1.444233e-04 6.815337e+01
                Australia tosser
## 154
                     Canada pedo
                                    320 2.025329e+02 3.051644e-04 6.812976e+01
## 155
                                     36 1.292836e+02 2.422927e-04 6.730808e+01
               United States sod
## 156
                    Ireland shag
                                    171 9.286104e+01 2.029372e-04 6.575089e+01
## 157
                                    266 1.626472e+02 2.684696e-04 6.567474e+01
                     Canada puke
## 158
              Great Britain frig
                                    286 4.583074e+02 4.479301e-04 6.478149e+01
## 159
                     Kenya whore
                                    137 6.994184e+01 1.741485e-04 6.429338e+01
## 160
                     Canada twat
                                     30 1.160259e+02 2.234341e-04 6.378282e+01
## 161
                      India cock
                                    310 1.979446e+02 2.911021e-04 6.343397e+01
## 162
               Ireland ass(hole)
                                    244 4.018229e+02 4.102159e-04 6.198765e+01
## 163
                  Pakistan idiot
                                    730 5.461652e+02 4.780060e-04 6.187733e+01
## 164
                 Australia skank
                                     94 4.270786e+01 1.331951e-04 6.160186e+01
## 165
                    India retard
                                    144 7.574513e+01 1.772590e-04 6.150530e+01
## 166
                   Ireland moron
                                    452 6.507940e+02 5.170433e-04 6.072434e+01
## 167
               Great Britain sod
                                    164 9.043606e+01 1.910541e-04 5.983956e+01
## 168
              Ireland butt(hole)
                                    648 8.764300e+02 5.944726e-04 5.953729e+01
## 169
              United States slut
                                  1775 1.479229e+03 7.709328e-04 5.913937e+01
## 170
                                    746 5.639196e+02 4.734660e-04 5.879078e+01
                 Sri Lanka idiot
## 171
              Ireland arse(hole)
                                    118 5.912824e+01 1.528843e-04 5.861640e+01
## 172
                  Australia pimp
                                    133 2.551416e+02 3.173517e-04 5.847176e+01
## 173
                                    733 5.536451e+02 4.663663e-04 5.810251e+01
              Great Britain dike
## 174
                    Canada idiot
                                   2068 2.441992e+03 9.772678e-04 5.727691e+01
## 175
                 Sri Lanka moron
                                    286 1.836992e+02 2.657513e-04 5.697055e+01
              Great Britain jerk
## 176
                                    110 2.225364e+02 2.923704e-04 5.690954e+01
## 177
                Sri Lanka online
                                     71 1.690920e+02 2.548084e-04 5.690419e+01
## 178
                Ghana butt(hole)
                                    240 1.485096e+02 2.376469e-04 5.636328e+01
## 179
                                   1369 1.674665e+03 7.971265e-04 5.579085e+01
                  Singapore fuck
## 180
                     Jamaica hoe
                                      9 1.123994e+00 2.045015e-05 5.518847e+01
           Bangladesh butt(hole)
## 181
                                    220 1.341668e+02 2.229440e-04 5.491173e+01
## 182
               United States cum
                                     86 1.870934e+02 2.626170e-04 5.462442e+01
## 183
                     Canada cock
                                    304 4.626981e+02 4.125561e-04 5.443092e+01
## 184
                New Zealand piss
                                    613 4.563662e+02 4.071830e-04 5.375977e+01
## 185
                                     41 1.187727e+02 2.019997e-04 5.092582e+01
              United States shit
## 186
                                    137 2.489722e+02 2.909245e-04 5.035814e+01
                  Singapore piss
## 187
                   Jamaica idiot
                                    512 6.994595e+02 4.876252e-04 5.024031e+01
## 188
               New Zealand idiot
                                   1400 1.689702e+03 7.555273e-04 4.966981e+01
                                     21 8.656554e+01 1.702796e-04 4.965995e+01
## 189
                      Canada jap
## 190
                                     36 1.098513e+02 1.918101e-04 4.964909e+01
              Pakistan ass(hole)
## 191
                                    163 2.808231e+02 3.061515e-04 4.943425e+01
                  Tanzania idiot
## 192
                  Malaysia whore
                                    205 1.260824e+02 2.049770e-04 4.939610e+01
## 193
                  Pakistan lesbo
                                      7 7.859623e-01 1.613482e-05 4.912992e+01
## 194
               South Africa crap
                                    421 5.911928e+02 4.425858e-04 4.899514e+01
## 195
                                     11 6.922900e+01 1.512191e-04 4.897683e+01
                     Canada feck
## 196
                                    517 7.018920e+02 4.809497e-04 4.870416e+01
                    Jamaica crap
## 197
                                    853 6.729603e+02 4.682924e-04 4.816674e+01
                Philippines damn
## 198
                  Nigeria nigger
                                    112 5.880475e+01 1.381429e-04 4.812086e+01
## 199
                Philippines fuck
                                    966 1.206585e+03 6.266427e-04 4.797093e+01
```

```
## 200
              New Zealand online
                                    351 5.066593e+02 4.047027e-04 4.782270e+01
## 201
                 Pakistan retard
                                     83 3.959940e+01 1.127015e-04 4.756669e+01
                  Tanzania moron
## 202
                                     26 9.147933e+01 1.700578e-04 4.686898e+01
## 203
                                    167 2.817997e+02 2.982963e-04 4.676716e+01
                   Tanzania crap
## 204
                   Pakistan piss
                                     65 1.475120e+02 2.143250e-04 4.615375e+01
## 205
                  Jamaica online
                                    308 2.097338e+02 2.552877e-04 4.604044e+01
## 206
                                     78 3.703318e+01 1.063808e-04 4.531829e+01
                       India jap
                                      8 1.067281e+00 1.800089e-05 4.503276e+01
## 207
                 Philippines hoe
## 208
                  Australia puke
                                     77 1.615800e+02 2.197046e-04 4.427390e+01
## 209
                                    577 7.597179e+02 4.753657e-04 4.394503e+01
                Singapore bloody
## 210
             Great Britain boner
                                     78 1.624908e+02 2.194734e-04 4.393292e+01
## 211
                 Hong Kong idiot
                                    259 3.884322e+02 3.364108e-04 4.312902e+01
## 212
              United States pedo
                                   1440 1.211552e+03 5.950382e-04 4.307570e+01
## 213
               New Zealand moron
                                    397 5.504277e+02 3.989460e-04 4.276683e+01
## 214
                     Canada dike
                                    207 1.323082e+02 1.940043e-04 4.216564e+01
## 215
                  Singapore frig
                                     83 4.134429e+01 1.081709e-04 4.196948e+01
## 216
                                    143 8.380493e+01 1.537338e-04 4.181205e+01
                    Ireland slag
## 217
                    Ireland dick
                                      9 1.389562e+00 1.976062e-05 4.168133e+01
## 218
                   Tanzania shit
                                     12 2.283279e+00 2.522967e-05 4.135048e+01
## 219
             Great Britain whore
                                   1324 1.577117e+03 6.599211e-04 4.062351e+01
## 220
              Great Britain pimp
                                    866 1.074694e+03 5.433916e-04 4.052615e+01
## 221
                  Australia feck
                                     16 6.877478e+01 1.370545e-04 4.049708e+01
## 222
                                     16 6.873306e+01 1.369461e-04 4.045761e+01
                 Malaysia nigger
## 223
              United States turd
                                    769 6.117322e+02 4.089964e-04 4.043136e+01
## 224
                                    118 2.101220e+02 2.393258e-04 4.038824e+01
                 India ass(hole)
## 225
                     Canada frig
                                    176 1.095247e+02 1.726525e-04 4.034669e+01
## 226
                    Ghana bloody
                                    385 2.789945e+02 2.754435e-04 4.027741e+01
## 227
                                    146 8.692023e+01 1.534356e-04 4.015658e+01
                  India fag(got)
## 228
             Great Britain pussy
                                   1590 1.358502e+03 6.032148e-04 3.944901e+01
## 229
                  Nigeria retard
                                     95 5.067467e+01 1.151061e-04 3.877154e+01
## 230
                 Hong Kong moron
                                     58 1.265335e+02 1.780060e-04 3.711932e+01
## 231
                New Zealand slut
                                     92 1.711019e+02 2.054797e-04 3.656948e+01
## 232
                  Australia fart
                                    386 2.842342e+02 2.644307e-04 3.643573e+01
## 233
                 Tanzania online
                                     29 8.420517e+01 1.433719e-04 3.619268e+01
## 234
                     Canada wank
                                     68 1.382237e+02 1.824018e-04 3.567674e+01
## 235
                                    649 8.197612e+02 4.443282e-04 3.557059e+01
                   Malaysia crap
## 236
                Sri Lanka retard
                                     79 4.088667e+01 9.897198e-05 3.552810e+01
## 237
               Nigeria ass(hole)
                                     70 1.405749e+02 1.833149e-04 3.543173e+01
## 238
             Great Britain pikey
                                     24 7.597609e+00 4.258974e-05 3.541093e+01
## 239
              Philippines online
                                    283 1.991514e+02 2.178260e-04 3.530274e+01
## 240
               New Zealand whore
                                    165 2.607865e+02 2.488787e-04 3.518223e+01
## 241
                Philippines cunt
                                     10 5.312509e+01 1.119900e-04 3.500744e+01
## 242
                                     22 7.227461e+01 1.305628e-04 3.497129e+01
               Canada arse(hole)
## 243
                                      5 4.426111e+01 1.019534e-04 3.482594e+01
                   Malaysia dike
## 244
                                    377 5.101680e+02 3.462301e-04 3.476054e+01
                   Tanzania fuck
## 245
                                     74 3.789704e+01 9.375078e-05 3.439383e+01
                    Jamaica dike
## 246
             Great Britain nonce
                                    101 5.685953e+01 1.146279e-04 3.426658e+01
## 247
                                     10 5.217782e+01 1.095298e-04 3.409434e+01
                  Singapore wank
                  Singapore dork
## 248
                                     52 2.367900e+01 7.354015e-05 3.387300e+01
## 249
                  Australia cunt
                                    113 1.940473e+02 2.105458e-04 3.385084e+01
## 250
                                    102 1.798918e+02 2.023410e-04 3.372655e+01
             Great Britain skank
## 251
                                    185 2.821588e+02 2.524582e-04 3.345572e+01
                      India piss
                 Kenya ass(hole)
## 252
                                     36 9.114720e+01 1.432239e-04 3.336596e+01
## 253
                                    336 2.456575e+02 2.347246e-04 3.322420e+01
                  Australia slut
```

```
## 254
                    Ghana retard
                                     53 2.454456e+01 7.388941e-05 3.298946e+01
## 255
             South Africa retard
                                     80 4.271555e+01 9.682004e-05 3.254390e+01
## 256
              Singapore fag(got)
                                     27 7.669697e+01 1.290642e-04 3.220191e+01
## 257
                                    859 7.081714e+02 3.923487e-04 3.212396e+01
                    Nigeria damn
##
  258
                  Australia cock
                                    339 4.596622e+02 3.136746e-04 3.167408e+01
## 259
                  Hong Kong slag
                                     39 1.629414e+01 5.895838e-05 3.164057e+01
## 260
                  Sri Lanka piss
                                     83 1.523073e+02 1.800279e-04 3.153819e+01
## 261
                                     60 2.953445e+01 7.911005e-05 3.142601e+01
                   Tanzania pimp
## 262
                   Jamaica dildo
                                     30 1.122316e+01 4.875559e-05 3.141448e+01
## 263
              New Zealand tosser
                                     63 3.161048e+01 8.150975e-05 3.117010e+01
  264
                   Canada tosser
                                      8 4.568411e+01 9.785862e-05 3.108504e+01
## 265
                   Malaysia cock
                                    224 1.547865e+02 1.797854e-04 3.094911e+01
  266
##
                 Bangladesh dike
                                     39 1.657006e+01 5.824198e-05 3.036215e+01
## 267
                                      2 1.171388e-01 4.888861e-06 3.026468e+01
                    Canada bitch
## 268
                   Canada tranny
                                     58 2.864043e+01 7.623797e-05 3.009678e+01
## 269
               Philippines moron
                                    297 2.163553e+02 2.095121e-04 3.005965e+01
## 270
                                     82 4.529762e+01 9.530913e-05 2.973808e+01
                   Pakistan pedo
## 271
                   Pakistan cunt
                                      8 4.368640e+01 9.267045e-05 2.915139e+01
## 272
                                     56 1.135075e+02 1.493624e-04 2.913559e+01
                     Canada shag
## 273
               Jamaica ass(hole)
                                     77 1.406837e+02 1.654156e-04 2.882791e+01
## 274
                   Malaysia puke
                                     94 5.441040e+01 1.028091e-04 2.880582e+01
## 275
                     Ireland jap
                                     26 7.081972e+01 1.163961e-04 2.836509e+01
## 276
                      Ghana fart
                                     73 3.966265e+01 8.656953e-05 2.802080e+01
## 277
                      India feck
                                      1 2.961652e+01 7.430867e-05 2.765029e+01
## 278
                                    510 4.044002e+02 2.744787e-04 2.757495e+01
            Singapore butt(hole)
## 279
                    Jamaica damn
                                    848 7.087199e+02 3.623084e-04 2.737183e+01
## 280
                      India twat
                                     13 4.963649e+01 9.513911e-05 2.704124e+01
## 281
          South Africa ass(hole)
                                     62 1.184957e+02 1.467366e-04 2.693571e+01
## 282
                    Jamaica wank
                                      7 3.959141e+01 8.463249e-05 2.682906e+01
## 283
                   Malaysia slag
                                      4 3.426856e+01 7.859948e-05 2.673546e+01
## 284
                 Hong Kong dildo
                                     19 6.232579e+00 3.315122e-05 2.615402e+01
## 285
                  Singapore twat
                                     10 4.379842e+01 8.776776e-05 2.608160e+01
## 286
                New Zealand pimp
                                    110 1.777076e+02 1.758844e-04 2.579701e+01
## 287
                                     18 5.594804e+01 9.854660e-05 2.573912e+01
                    Jamaica cunt
  288
##
                    Jamaica twat
                                      4 3.323330e+01 7.591098e-05 2.571475e+01
## 289
                                    454 3.583798e+02 2.485096e-04 2.551266e+01
             Malaysia butt(hole)
## 290
              Great Britain dork
                                    181 2.624851e+02 2.117209e-04 2.529602e+01
## 291
                   Pakistan wank
                                      3 3.091452e+01 7.248601e-05 2.520564e+01
## 292
                  Hong Kong dike
                                     44 2.104544e+01 5.960491e-05 2.503688e+01
## 293
               Australia jackass
                                     33 7.674614e+01 1.136097e-04 2.493578e+01
## 294
               Great Britain cum
                                    188 1.308749e+02 1.483759e-04 2.493428e+01
## 295
                     Canada dork
                                    102 6.272780e+01 1.019871e-04 2.458727e+01
  296
                                    830 6.989182e+02 3.409734e-04 2.458433e+01
                   Nigeria idiot
## 297
                                     49 2.454057e+01 6.351310e-05 2.437856e+01
                  Canada spastic
## 298
                    Nigeria cunt
                                     19 5.590474e+01 9.583727e-05 2.436215e+01
## 299
                                      8 3.866907e+01 7.964041e-05 2.432414e+01
                  Singapore slag
## 300
           United States poofter
                                      5 3.328440e+01 7.344695e-05 2.403550e+01
## 301
                 Singapore prick
                                    136 8.971932e+01 1.201961e-04 2.387336e+01
## 302
                  Sri Lanka damn
                                    455 5.713855e+02 3.026446e-04 2.370656e+01
## 303
                                     13 4.595259e+01 8.557180e-05 2.363030e+01
                 Pakistan nigger
## 304
            Australia butt(hole)
                                    906 1.064264e+03 4.120709e-04 2.353492e+01
## 305
                                      4 3.091945e+01 6.990211e-05 2.343692e+01
                India arse(hole)
## 306
                 Singapore whore
                                    200 1.422730e+02 1.499439e-04 2.342263e+01
## 307
                                    659 7.954893e+02 3.551287e-04 2.341870e+01
                    Canada moron
```

```
## 308
                      India wank
                                     22 5.913282e+01 9.643038e-05 2.331778e+01
## 309
            Bangladesh ass(hole)
                                     24 6.151239e+01 9.741668e-05 2.287635e+01
## 310
              Jamaica butt(hole)
                                    390 3.068502e+02 2.160710e-04 2.253179e+01
## 311
                                     33 7.373433e+01 1.057872e-04 2.250357e+01
                  Singapore cunt
## 312
                Nigeria fag(got)
                                     22 5.815099e+01 9.388042e-05 2.247415e+01
## 313
                 Ghana ass(hole)
                                     29 6.808822e+01 1.015107e-04 2.243985e+01
## 314
                   Tanzania fart
                                     60 3.290211e+01 7.036582e-05 2.231758e+01
## 315
                                     15 4.744639e+01 8.425762e-05 2.218859e+01
                Sri Lanka nigger
## 316
                      India pedo
                                     43 8.664461e+01 1.133490e-04 2.198466e+01
## 317
                                      5 3.106973e+01 6.769567e-05 2.187438e+01
                  Hong Kong cunt
## 318
                    Jamaica turd
                                      4 2.929094e+01 6.567305e-05 2.183718e+01
## 319
                      India dork
                                     51 2.683528e+01 6.274822e-05 2.175994e+01
## 320
               Bangladesh retard
                                     44 2.217409e+01 5.667435e-05 2.148319e+01
## 321
             South Africa nigger
                                     17 4.956868e+01 8.457566e-05 2.139898e+01
## 322
                                    445 5.533960e+02 2.818559e-04 2.123199e+01
                   Pakistan damn
## 323
                Singapore nigger
                                     37 7.755923e+01 1.053335e-04 2.121026e+01
## 324
                                      1 2.315920e+01 5.753995e-05 2.120238e+01
                   Malaysia feck
## 325
              Tanzania ass(hole)
                                     22 5.648252e+01 8.954720e-05 2.105155e+01
## 326
                                     30 6.775339e+01 9.804415e-05 2.103686e+01
                   Malaysia pedo
## 327
               Philippines idiot
                                    546 6.641672e+02 3.073517e-04 2.102404e+01
## 328
                     Kenya moron
                                     92 1.476224e+02 1.444792e-04 2.095786e+01
## 329
                                     58 3.216454e+01 6.708753e-05 2.075177e+01
                 Bangladesh pimp
## 330
                Philippines twat
                                      6 3.155646e+01 6.636294e-05 2.069727e+01
## 331
                                     42 8.356269e+01 1.079412e-04 2.067259e+01
                      India cunt
                                     79 4.766044e+01 8.138340e-05 2.060761e+01
## 332
                      Kenya pimp
  333
                      Kenya crap
                                    358 4.547469e+02 2.515009e-04 2.058281e+01
## 334
                 Singapore queef
                                      6 1.149681e+00 1.259392e-05 2.046272e+01
  335
                                   2674 2.450484e+03 5.840764e-04 2.038753e+01
                     Canada crap
## 336
                Hong Kong nigger
                                      7 3.268145e+01 6.668768e-05 2.018077e+01
## 337
                  Australia dike
                                     80 1.314401e+02 1.336102e-04 2.013150e+01
## 338
               South Africa cock
                                    159 1.116285e+02 1.230362e-04 2.010297e+01
## 339
                    Jamaica shag
                                      7 3.251193e+01 6.624747e-05 2.001907e+01
## 340
                    Ireland jerk
                                     14 4.350765e+01 7.662544e-05 2.001261e+01
## 341
                                      3 2.538658e+01 5.813071e-05 1.974110e+01
                   Pakistan shag
## 342
                  Hong Kong pedo
                                      7 3.221563e+01 6.547801e-05 1.973664e+01
## 343
                                     93 1.468017e+02 1.397497e-04 1.971792e+01
           United States spastic
## 344
                    India nympho
                                     19 7.191152e+00 3.066231e-05 1.939173e+01
## 345
                  Australia twat
                                     68 1.152647e+02 1.227597e-04 1.938104e+01
## 346
                    Ireland knob
                                      6 1.197898e+00 1.246872e-05 1.925054e+01
## 347
                    Canada boner
                                     66 3.883150e+01 7.055028e-05 1.900848e+01
## 348
                 Pakistan online
                                    108 1.637683e+02 1.448644e-04 1.899089e+01
                                     15 4.374826e+01 7.465351e-05 1.889132e+01
## 349
                      India turd
  350
                                     38 7.584661e+01 9.828830e-05 1.888504e+01
                   Tanzania piss
## 351
                  Singapore cock
                                    232 1.746630e+02 1.489433e-04 1.882211e+01
## 352
                New Zealand fart
                                    259 1.979708e+02 1.585442e-04 1.881372e+01
## 353
                                     44 8.366119e+01 1.030029e-04 1.880214e+01
                    Ireland turd
## 354
              Great Britain crap
                                   9815 1.025408e+04 1.171249e-03 1.880112e+01
## 355
                                     16 4.510653e+01 7.558413e-05 1.878199e+01
                  Sri Lanka cunt
## 356
                 Bangladesh crap
                                    231 3.068944e+02 1.972175e-04 1.876856e+01
## 357
             Great Britain idiot
                                   9782 1.021854e+04 1.164370e-03 1.864909e+01
## 358
                                    245 3.225200e+02 2.014498e-04 1.863248e+01
                 Australia pussy
## 359
                   Australia jap
                                    126 8.599757e+01 1.038897e-04 1.860744e+01
## 360
                   Malaysia twat
                                     12 3.881419e+01 6.963022e-05 1.852417e+01
## 361
                Philippines piss
                                    122 1.793828e+02 1.490642e-04 1.835619e+01
```

```
## 362
                    Ireland crap
                                   1813 2.004754e+03 5.004955e-04 1.834119e+01
## 363
             South Africa online
                                    120 1.766556e+02 1.471740e-04 1.817012e+01
## 364
               Bangladesh online
                                     51 9.170378e+01 1.057128e-04 1.806684e+01
## 365
          Philippines arse(hole)
                                      1 1.965708e+01 4.844568e-05 1.770795e+01
##
  366
              South Africa idiot
                                    691 5.891439e+02 2.648752e-04 1.760974e+01
## 367
                  Ireland tosser
                                     63 3.737441e+01 6.654344e-05 1.757006e+01
## 368
                                    225 1.704038e+02 1.418222e-04 1.749228e+01
            Hong Kong butt(hole)
## 369
                                     89 5.744074e+01 8.195602e-05 1.733938e+01
                   Pakistan pimp
## 370
                  Ireland retard
                                     95 1.448498e+02 1.294840e-04 1.715573e+01
## 371
                Philippines slag
                                      6 2.786080e+01 5.676581e-05 1.715294e+01
## 372
                New Zealand damn
                                   1541 1.712072e+03 4.461738e-04 1.709376e+01
## 373
                    Jamaica slag
                                      7 2.934126e+01 5.801364e-05 1.701127e+01
  374
##
                    Kenya bloody
                                    453 3.734796e+02 2.066755e-04 1.693128e+01
## 375
                   Pakistan twat
                                      5 2.594985e+01 5.440008e-05 1.691325e+01
## 376
                Philippines feck
                                      1 1.882874e+01 4.629469e-05 1.688185e+01
## 377
                      India shag
                                     20 4.855907e+01 7.416313e-05 1.679646e+01
## 378
                                     51 8.960276e+01 1.002556e-04 1.663088e+01
                    Ireland frig
## 379
                   Tanzania dike
                                     31 1.521512e+01 4.098714e-05 1.637597e+01
## 380
                  Sri Lanka twat
                                      6 2.679342e+01 5.399398e-05 1.613703e+01
## 381
                   Malaysia piss
                                    161 2.206394e+02 1.549427e-04 1.612067e+01
##
  382
                     Canada fuck
                                   4169 4.436337e+03 7.022323e-04 1.610999e+01
## 383
                Philippines wank
                                     13 3.759377e+01 6.386409e-05 1.608919e+01
## 384
              Malaysia ass(hole)
                                    113 1.643088e+02 1.332805e-04 1.602225e+01
## 385
                   Malaysia cunt
                                     33 6.534343e+01 8.399414e-05 1.600922e+01
## 386
                    Canada prick
                                    176 2.376745e+02 1.602372e-04 1.600402e+01
  387
               Malaysia fag(got)
                                     35 6.796892e+01 8.561910e-05 1.599186e+01
## 388
                Bangladesh pussy
                                     66 4.065862e+01 6.580599e-05 1.579458e+01
  389
##
                 Singapore idiot
                                    802 9.218229e+02 3.118672e-04 1.557514e+01
## 390
                                      8 2.926827e+01 5.522738e-05 1.545494e+01
                    Nigeria turd
## 391
                 Bangladesh wank
                                      1 1.731090e+01 4.235326e-05 1.536867e+01
## 392
                  Singapore crap
                                    807 9.250287e+02 3.072001e-04 1.505983e+01
## 393
                Bangladesh moron
                                     61 9.962571e+01 1.003178e-04 1.497551e+01
## 394
                  Ireland pecker
                                     21 9.247772e+00 3.051546e-05 1.493494e+01
## 395
                                     47 8.195087e+01 9.076945e-05 1.490605e+01
                    Jamaica fart
##
  396
                   India spastic
                                     23 1.049858e+01 3.246089e-05 1.488634e+01
## 397
              South Africa moron
                                    245 1.919162e+02 1.379012e-04 1.468295e+01
## 398
                 Hong Kong pussy
                                     79 5.164004e+01 7.104981e-05 1.449587e+01
## 399
                  Hong Kong dork
                                     22 9.977717e+00 3.121673e-05 1.448581e+01
## 400
                    Jamaica pedo
                                     87 5.801149e+01 7.528018e-05 1.448565e+01
## 401
              Great Britain fart
                                   1066 1.197236e+03 3.418180e-04 1.438557e+01
## 402
             Pakistan arse(hole)
                                      1 1.616462e+01 3.937668e-05 1.422649e+01
## 403
                    Kenya online
                                     92 1.358839e+02 1.139850e-04 1.417237e+01
                                      3 1.954390e+01 4.295850e-05 1.400440e+01
## 404
                    India tosser
## 405
                  Malaysia idiot
                                    710 8.169202e+02 2.782090e-04 1.399393e+01
## 406
                  Jamaica nympho
                                     13 4.814719e+00 2.125340e-05 1.391542e+01
## 407
                                    665 5.760116e+02 2.314050e-04 1.374788e+01
                  Nigeria bloody
## 408
                  Australia jerk
                                     26 5.283207e+01 6.967917e-05 1.362733e+01
## 409
                   Pakistan cock
                                     66 1.034850e+02 9.735625e-05 1.357807e+01
## 410
                Tanzania spastic
                                      9 2.822106e+00 1.604106e-05 1.352408e+01
## 411
                     Ghana dildo
                                     14 5.431794e+00 2.224771e-05 1.351564e+01
## 412
                                      2 1.724521e+01 3.958605e-05 1.347716e+01
                Singapore tosser
## 413
                  Singapore fart
                                    146 1.080037e+02 9.868538e-05 1.336734e+01
## 414
                 Malaysia tosser
                                      1 1.528272e+01 3.708664e-05 1.334815e+01
## 415
              Philippines bloody
                                    462 5.473716e+02 2.219834e-04 1.331511e+01
```

```
## 416
                 New Zealand sod
                                     29 1.495419e+01 3.647144e-05 1.319261e+01
## 417
                  Hong Kong jerk
                                     19 8.459166e+00 2.736994e-05 1.313477e+01
## 418
                 Malaysia retard
                                     87 5.923034e+01 7.211517e-05 1.301958e+01
## 419
                    Nigeria puke
                                     22 4.655096e+01 6.375442e-05 1.294817e+01
## 420
               Hong Kong spastic
                                     11 3.903514e+00 1.842625e-05 1.290123e+01
## 421
              Great Britain knob
                                     15 6.127104e+00 2.303889e-05 1.284918e+01
## 422
                                     69 4.500513e+01 6.231009e-05 1.279307e+01
                     Ghana pussy
## 423
                                     22 4.624003e+01 6.294692e-05 1.270715e+01
                   Malaysia wank
## 424
                  Pakistan whore
                                    117 8.429445e+01 8.493873e-05 1.268948e+01
## 425
               Great Britain hoe
                                      2 1.642064e+01 3.744487e-05 1.266423e+01
## 426
                     Canada shit
                                      4 1.985502e+01 4.116977e-05 1.266086e+01
## 427
                    Ireland puke
                                    174 1.330625e+02 1.063312e-04 1.259468e+01
## 428
                    Nigeria dork
                                      3 1.795322e+01 3.882792e-05 1.245452e+01
## 429
                                      9 2.728281e+01 4.747478e-05 1.225171e+01
            Singapore arse(hole)
## 430
                    Canada whore
                                    309 3.768939e+02 1.764597e-04 1.223046e+01
## 431
                New Zealand twat
                                     49 8.028252e+01 8.124218e-05 1.218940e+01
## 432
                                    180 1.388870e+02 1.067888e-04 1.217020e+01
                     India pussy
## 433
                   Tanzania wank
                                      2 1.589539e+01 3.608095e-05 1.214704e+01
## 434
                     India whore
                                    117 1.612372e+02 1.149101e-04 1.213694e+01
## 435
                    Ireland slut
                                    153 2.023010e+02 1.280776e-04 1.201471e+01
## 436
                    Nigeria crap
                                    610 7.013488e+02 2.376205e-04 1.189795e+01
## 437
                 Australia moron
                                    887 7.902700e+02 2.516765e-04 1.183988e+01
                                    103 7.359847e+01 7.635583e-05 1.174549e+01
## 438
                  Hong Kong cock
## 439
                                      2 1.548346e+01 3.501128e-05 1.174180e+01
                   Pakistan feck
## 440
                                    725 8.232703e+02 2.557061e-04 1.173012e+01
                      Kenya fuck
## 441
                  Ireland tranny
                                      7 2.343088e+01 4.266547e-05 1.152214e+01
## 442
                    Kenya pecker
                                      7 2.097712e+00 1.272889e-05 1.145650e+01
## 443
                                   1101 9.945515e+02 2.771096e-04 1.139335e+01
             Great Britain prick
## 444
                                      8 2.477577e+01 4.356119e-05 1.135894e+01
                     Nigeria jap
## 445
               South Africa fart
                                     97 6.902595e+01 7.264781e-05 1.133701e+01
## 446
             United States nonce
                                     51 8.128400e+01 7.864918e-05 1.128292e+01
## 447
               South Africa turd
                                      8 2.467130e+01 4.328990e-05 1.126541e+01
## 448
                  Sri Lanka wank
                                     13 3.191947e+01 4.912857e-05 1.121404e+01
## 449
                      Ghana damn
                                    405 3.430068e+02 1.611092e-04 1.120431e+01
                  Nigeria tosser
## 450
                                      1 1.307517e+01 3.135431e-05 1.115165e+01
## 451
                                      8 2.446265e+01 4.274809e-05 1.107889e+01
                 Bangladesh cunt
## 452
                Bangladesh whore
                                     70 4.720155e+01 5.920356e-05 1.101170e+01
## 453
                  Australia shag
                                    148 1.127627e+02 9.152061e-05 1.101132e+01
## 454
                    Jamaica puke
                                     24 4.658702e+01 5.865441e-05 1.095098e+01
## 455
              Great Britain tits
                                     25 4.779141e+01 5.918537e-05 1.086908e+01
## 456
                    Jamaica dork
                                      4 1.796712e+01 3.626740e-05 1.085764e+01
                                      2 1.453089e+01 3.253775e-05 1.080616e+01
## 457
                 Bangladesh twat
## 458
          New Zealand butt(hole)
                                    652 7.412658e+02 2.322262e-04 1.074970e+01
                   Jamaica whore
                                    142 1.079537e+02 8.842618e-05 1.073747e+01
## 459
## 460
                                      7 2.246234e+01 4.015041e-05 1.064377e+01
                   Tanzania cunt
                                      3 1.606434e+01 3.392305e-05 1.062459e+01
## 461
                       Kenya jap
## 462
                  Malaysia moron
                                    319 2.661153e+02 1.374104e-04 1.050971e+01
## 463
              Nigeria arse(hole)
                                      6 2.068559e+01 3.813327e-05 1.042593e+01
## 464
                    Nigeria dike
                                     18 3.786771e+01 5.159169e-05 1.042381e+01
## 465
                   Tanzania tits
                                      5 1.313390e+00 9.572335e-06 1.034810e+01
## 466
                                      2 1.402943e+01 3.123561e-05 1.031454e+01
                   Pakistan dork
## 467
                                    955 8.609839e+02 2.446604e-04 1.026620e+01
                    India bloody
## 468
                     Jamaica jap
                                      9 2.479496e+01 4.101435e-05 1.006175e+01
                                     40 2.437955e+01 4.056114e-05 1.000832e+01
## 469
               Australia spastic
```

```
## 470
                South Africa hoe
                                      4 9.467223e-01 7.927872e-06 9.847138e+00
## 471
             United States whore
                                   2403 2.254580e+03 3.876426e-04 9.770554e+00
## 472
                   Ireland prick
                                    238 1.944428e+02 1.131537e-04 9.757273e+00
## 473
                Sri Lanka nympho
                                     10 3.881732e+00 1.588628e-05 9.643429e+00
## 474
                    Nigeria feck
                                      6 1.981391e+01 3.586975e-05 9.630819e+00
## 475
                                     20 3.933326e+01 5.020404e-05 9.502770e+00
                  Hong Kong slut
## 476
                New Zealand dike
                                    121 9.154882e+01 7.648833e-05 9.474420e+00
## 477
                                     31 5.345414e+01 5.831039e-05 9.432165e+00
             New Zealand jackass
## 478
             Great Britain lesbo
                                      3 1.470505e+01 3.039339e-05 9.317085e+00
## 479
                Philippines shag
                                     14 3.087149e+01 4.381043e-05 9.220391e+00
## 480
                   Jamaica boner
                                      1 1.112250e+01 2.628390e-05 9.212411e+00
## 481
               United States jap
                                    449 5.178352e+02 1.789715e-04 9.150169e+00
##
  482
             South Africa tosser
                                      1 1.102154e+01 2.602174e-05 9.112275e+00
## 483
                    Nigeria pedo
                                     35 5.796659e+01 5.964187e-05 9.099455e+00
## 484
                                      6 1.916148e+01 3.417557e-05 9.040253e+00
                      Ghana wank
## 485
                      Kenya dick
                                      2 3.152002e-01 4.374596e-06 9.005547e+00
## 486
                                     33 5.530554e+01 5.792479e-05 8.996156e+00
                   Pakistan slut
## 487
                Philippines turd
                                     12 2.781302e+01 4.106155e-05 8.990447e+00
## 488
                  Sri Lanka feck
                                      4 1.598678e+01 3.112504e-05 8.987610e+00
## 489
                      Kenya slag
                                      6 1.900983e+01 3.378177e-05 8.903590e+00
## 490
              United States dork
                                    433 3.752378e+02 1.501262e-04 8.891623e+00
## 491
                    Nigeria pimp
                                     48 7.350593e+01 6.623894e-05 8.850341e+00
## 492
                                     99 7.356286e+01 6.606029e-05 8.795853e+00
                    Jamaica pimp
## 493
                                    393 3.385250e+02 1.415692e-04 8.766055e+00
                     Ghana idiot
## 494
                                      2 1.242506e+01 2.706960e-05 8.746988e+00
              Philippines tosser
## 495
              Great Britain turd
                                    489 4.279170e+02 1.587789e-04 8.719305e+00
## 496
             South Africa darkie
                                      6 1.921705e+00 1.058937e-05 8.655070e+00
  497
                                     19 3.679784e+01 4.621662e-05 8.608201e+00
##
                New Zealand jerk
## 498
                                     34 2.067136e+01 3.460974e-05 8.594139e+00
              United States gook
## 499
                     Canada slag
                                     73 1.024378e+02 7.645586e-05 8.459632e+00
               New Zealand dildo
## 500
                                     12 2.711207e+01 3.924133e-05 8.423356e+00
## 501
                      India frig
                                     27 4.685524e+01 5.156052e-05 8.413800e+00
## 502
                  Kenya fag(got)
                                     20 3.770447e+01 4.597425e-05 8.313289e+00
## 503
             Sri Lanka ass(hole)
                                     83 1.134223e+02 7.901497e-05 8.159919e+00
## 504
                     India lesbo
                                      5 1.503377e+00 9.079037e-06 8.132608e+00
## 505
                                      1 1.001918e+01 2.341897e-05 8.118992e+00
                Ghana arse(hole)
## 506
                Kenya arse(hole)
                                      3 1.341231e+01 2.703657e-05 8.083337e+00
## 507
                   Ireland dildo
                                     16 3.205575e+01 4.169231e-05 8.041834e+00
## 508
                 Sri Lanka skank
                                      1 9.927495e+00 2.318089e-05 8.028226e+00
## 509
             Singapore ass(hole)
                                    147 1.854081e+02 9.977496e-05 7.956418e+00
               Bangladesh nigger
## 510
                                     40 2.573163e+01 3.705038e-05 7.911911e+00
## 511
                 Bangladesh fart
                                     19 3.583210e+01 4.370871e-05 7.906867e+00
## 512
                   Nigeria pussy
                                    120 9.291753e+01 7.033675e-05 7.893667e+00
## 513
                                     15 7.372300e+00 1.980575e-05 7.891948e+00
                      Ghana jerk
## 514
                  Sri Lanka turd
                                     10 2.361500e+01 3.535358e-05 7.849593e+00
## 515
                New Zealand pedo
                                    107 1.401398e+02 8.607902e-05 7.836794e+00
## 516
                   Malaysia fart
                                    123 9.571294e+01 7.086863e-05 7.779344e+00
## 517
                                     91 6.802442e+01 5.966677e-05 7.760116e+00
                   Nigeria prick
## 518
                  Sri Lanka shag
                                     12 2.621183e+01 3.690362e-05 7.705535e+00
## 519
                   Malaysia turd
                                     18 3.420978e+01 4.209253e-05 7.680757e+00
## 520
                                     94 7.077356e+01 6.031868e-05 7.622447e+00
                    Nigeria slut
## 521
            New Zealand fag(got)
                                    108 1.405856e+02 8.463958e-05 7.552844e+00
                New Zealand feck
## 522
                                     29 4.790204e+01 4.908536e-05 7.458703e+00
## 523
                Malaysia jackass
                                     12 2.584347e+01 3.594707e-05 7.415479e+00
```

```
## 524
                Malaysia spastic
                                     16 8.209564e+00 2.022834e-05 7.392706e+00
## 525
                                      5 1.583258e+00 8.871626e-06 7.373481e+00
                      Ghana tits
## 526
                                     58 8.260088e+01 6.389003e-05 7.326839e+00
                 Bangladesh piss
## 527
               South Africa piss
                                    125 1.591200e+02 8.862938e-05 7.316329e+00
## 528
                 Sri Lanka whore
                                    112 8.703465e+01 6.483733e-05 7.161157e+00
## 529
                                      3 7.282212e-01 5.898698e-06 7.087104e+00
                       Kenya hoe
## 530
                                     32 2.007519e+01 3.096444e-05 7.083417e+00
                  Singapore jerk
## 531
           Philippines ass(hole)
                                    103 1.335853e+02 7.944248e-05 7.002724e+00
## 532
               South Africa twat
                                     14 2.799189e+01 3.633267e-05 6.993921e+00
## 533
                 Bangladesh frig
                                      4 1.371669e+01 2.523034e-05 6.883152e+00
## 534
              United States knob
                                      1 8.759052e+00 2.014688e-05 6.873220e+00
## 535
             Philippines jackass
                                      9 2.101109e+01 3.118857e-05 6.866199e+00
##
  536
                   Ireland boner
                                     17 3.176825e+01 3.834901e-05 6.865384e+00
## 537
                Hong Kong bloody
                                    367 3.201254e+02 1.218114e-04 6.863648e+00
## 538
               South Africa feck
                                      6 1.670188e+01 2.778869e-05 6.857323e+00
## 539
               South Africa frig
                                     13 2.642344e+01 3.485644e-05 6.819279e+00
## 540
                                    128 1.016784e+02 6.836228e-05 6.813913e+00
                     India prick
## 541
                   Malaysia slut
                                     59 8.272262e+01 6.160916e-05 6.803010e+00
## 542
                  Pakistan boner
                                      1 8.684883e+00 1.995429e-05 6.800025e+00
## 543
                      India dike
                                     37 5.660213e+01 5.090453e-05 6.788502e+00
## 544
                 Bangladesh feck
                                      1 8.670122e+00 1.991596e-05 6.785460e+00
## 545
                                     22 3.797168e+01 4.147465e-05 6.718023e+00
                   Malaysia shag
## 546
              Philippines retard
                                     66 4.815507e+01 4.634027e-05 6.612838e+00
## 547
                 Pakistan tosser
                                      2 1.021751e+01 2.133738e-05 6.608994e+00
## 548
               South Africa shag
                                     14 2.738430e+01 3.475487e-05 6.541683e+00
## 549
                    Jamaica piss
                                    154 1.889148e+02 9.070095e-05 6.452871e+00
## 550
             Tanzania arse(hole)
                                      1 8.311404e+00 1.898451e-05 6.431721e+00
  551
                                      2 9.972399e+00 2.070092e-05 6.373506e+00
##
                       India eff
## 552
                 Singapore boner
                                      5 1.465843e+01 2.507912e-05 6.363933e+00
## 553
                 New Zealand eff
                                      6 1.612945e+01 2.630228e-05 6.361393e+00
## 554
                    Jamaica jerk
                                     25 1.523263e+01 2.536204e-05 6.262973e+00
## 555
                   Pakistan dike
                                     16 2.959148e+01 3.529306e-05 6.242618e+00
## 556
                Philippines dike
                                     21 3.598488e+01 3.891196e-05 6.240028e+00
## 557
                                    190 2.276756e+02 9.788281e-05 6.234536e+00
                   Nigeria moron
## 558
                      India pimp
                                    136 1.098718e+02 6.786142e-05 6.213457e+00
## 559
             United States skank
                                    297 2.571658e+02 1.034989e-04 6.170207e+00
## 560
               New Zealand boner
                                     14 2.686891e+01 3.341653e-05 6.163586e+00
## 561
                  Sri Lanka gook
                                      3 7.979867e-01 5.717552e-06 6.076371e+00
## 562
                 Bangladesh turd
                                      4 1.280713e+01 2.286853e-05 6.056438e+00
## 563
                  Pakistan skank
                                      2 9.614938e+00 1.977272e-05 6.030958e+00
## 564
                                     19 3.304923e+01 3.648204e-05 5.972330e+00
                   India jackass
## 565
                      India slag
                                     60 4.382343e+01 4.200733e-05 5.971265e+00
                                      2 4.222022e-01 4.096765e-06 5.896336e+00
##
  566
                     Ghana queef
## 567
                      Canada eff
                                     35 2.331061e+01 3.035340e-05 5.861785e+00
## 568
                      Kenya damn
                                    511 4.591706e+02 1.347359e-04 5.850299e+00
## 569
                                   1137 1.058528e+03 2.043157e-04 5.817441e+00
                      India damn
## 570
                     Ghana moron
                                     85 1.102760e+02 6.564799e-05 5.793416e+00
## 571
                  Jamaica bloody
                                    519 5.764577e+02 1.494129e-04 5.727024e+00
## 572
                       India sod
                                      2 9.245767e+00 1.881413e-05 5.678397e+00
## 573
                  Singapore shit
                                      1 7.495034e+00 1.686472e-05 5.628456e+00
## 574
                                      7 1.669009e+01 2.516147e-05 5.625967e+00
            Sri Lanka arse(hole)
## 575
                      Ghana crap
                                    296 3.397023e+02 1.135734e-04 5.622241e+00
## 576
                New Zealand crap
                                   1793 1.695578e+03 2.540749e-04 5.597507e+00
## 577
               Hong Kong jackass
                                      4 1.228815e+01 2.152091e-05 5.590217e+00
```

```
## 578
                 Nigeria jackass
                                     11 2.211045e+01 2.885000e-05 5.582976e+00
## 579
                    Ireland cunt
                                    130 1.597996e+02 7.740688e-05 5.557053e+00
## 580
                Kenya butt(hole)
                                    232 1.988044e+02 8.623714e-05 5.542883e+00
               South Africa cunt
## 581
                                     31 4.712416e+01 4.187160e-05 5.517098e+00
## 582
                 Sri Lanka boner
                                      2 8.967206e+00 1.809081e-05 5.413276e+00
## 583
                     Ghana whore
                                     69 5.224752e+01 4.350380e-05 5.371461e+00
## 584
                    Nigeria wank
                                     25 3.956078e+01 3.781102e-05 5.359252e+00
## 585
                                      5 1.349894e+01 2.206832e-05 5.350939e+00
                 Australia nonce
## 586
                    Nigeria piss
                                    157 1.887686e+02 8.252779e-05 5.346460e+00
## 587
                                     14 2.565078e+01 3.025332e-05 5.291870e+00
                      Kenya wank
## 588
                      Kenya piss
                                     97 1.223955e+02 6.596052e-05 5.269241e+00
## 589
                      Kenya turd
                                      9 1.897723e+01 2.590720e-05 5.245500e+00
##
  590
              South Africa skank
                                      3 1.037155e+01 1.914080e-05 5.239313e+00
## 591
                                     42 5.965764e+01 4.585525e-05 5.226357e+00
               South Africa slut
## 592
                                     28 4.284772e+01 3.855647e-05 5.145075e+00
                  Singapore shag
## 593
                   Pakistan crap
                                    495 5.480646e+02 1.379788e-04 5.137806e+00
## 594
                                      7 1.608428e+01 2.358837e-05 5.130733e+00
                      Ghana twat
## 595
                  Singapore tits
                                      9 4.311303e+00 1.217436e-05 5.099127e+00
## 596
                                     28 1.834144e+01 2.507971e-05 5.086178e+00
                      Ghana dike
## 597
                   Hong Kong cum
                                     10 4.974884e+00 1.304791e-05 5.075855e+00
## 598
                    Kenya nigger
                                     52 3.812836e+01 3.602137e-05 5.046704e+00
## 599
              Bangladesh spastic
                                      7 3.073419e+00 1.019547e-05 5.016576e+00
## 600
                Ireland fag(got)
                                    195 1.662203e+02 7.475890e-05 4.982969e+00
                    Kenya tosser
## 601
                                      2 8.477799e+00 1.682001e-05 4.949619e+00
## 602
                                      6 1.445997e+01 2.196717e-05 4.949598e+00
              Great Britain gook
## 603
                   Ireland skank
                                     22 3.517028e+01 3.419983e-05 4.931900e+00
## 604
                Bangladesh idiot
                                    267 3.058308e+02 1.009046e-04 4.930289e+00
  605
                    Canada dildo
                                     53 3.918291e+01 3.587979e-05 4.872325e+00
##
## 606
          United States bullshit
                                      6 1.436485e+01 2.172018e-05 4.870964e+00
## 607
                    Nigeria shag
                                     45 3.248677e+01 3.249341e-05 4.819835e+00
## 608
                     India skank
                                      9 1.839131e+01 2.438575e-05 4.795563e+00
## 609
                      Kenya feck
                                      5 1.284713e+01 2.037579e-05 4.793086e+00
## 610
               South Africa jerk
                                      5 1.283021e+01 2.033185e-05 4.778733e+00
## 611
                                      6 1.421548e+01 2.133232e-05 4.747930e+00
                 Bangladesh shag
## 612
                      Ghana slut
                                     47 3.427957e+01 3.303161e-05 4.720284e+00
## 613
                    Nigeria dick
                                      2 4.861282e-01 3.930782e-06 4.714411e+00
## 614
               United States eff
                                    165 1.394441e+02 6.638005e-05 4.683623e+00
## 615
                 Canada fag(got)
                                    234 2.031772e+02 8.007389e-05 4.675953e+00
## 616
               South Africa slag
                                     14 2.471369e+01 2.781994e-05 4.644518e+00
## 617
                                      5 1.978005e+00 7.846667e-06 4.617002e+00
                   Pakistan jiss
## 618
                 Australia whore
                                    333 3.744211e+02 1.076547e-04 4.582290e+00
## 619
                      Ghana piss
                                     71 9.143113e+01 5.306215e-05 4.565526e+00
## 620
                                    605 6.595498e+02 1.418817e-04 4.511678e+00
                     Canada piss
## 621
                                     14 2.449582e+01 2.725420e-05 4.497188e+00
                   Pakistan frig
## 622
                  Hong Kong feck
                                      4 1.101182e+01 1.820676e-05 4.464806e+00
## 623
                                     58 7.645377e+01 4.792483e-05 4.454217e+00
                  Singapore pedo
## 624
                      Ghana cock
                                     81 6.414226e+01 4.377851e-05 4.430519e+00
## 625
                                      7 1.518304e+01 2.124815e-05 4.410326e+00
                      Ghana frig
## 626
                     Jamaica sod
                                      1 6.190352e+00 1.347700e-05 4.351894e+00
## 627
             Great Britain fanny
                                     23 1.495013e+01 2.090233e-05 4.334432e+00
## 628
                                      3 9.368312e+00 1.653576e-05 4.328997e+00
              South Africa boner
## 629
                                      5 1.228088e+01 1.890545e-05 4.316564e+00
                  Sri Lanka jerk
## 630
                    Malaysia eff
                                      2 7.798106e+00 1.505512e-05 4.311051e+00
                                    102 8.308353e+01 4.912731e-05 4.306903e+00
## 631
              Great Britain shit
```

```
## 632
              Philippines nympho
                                      9 4.571784e+00 1.149802e-05 4.289156e+00
## 633
                   Pakistan turd
                                     13 2.287150e+01 2.563293e-05 4.260610e+00
## 634
                   Malaysia pimp
                                    105 8.591632e+01 4.956194e-05 4.238855e+00
                                     15 2.529212e+01 2.672530e-05 4.188171e+00
  635
##
                  Sri Lanka frig
##
  636
                  Singapore slut
                                    113 9.334523e+01 5.104608e-05 4.138506e+00
  637
                                    173 2.018441e+02 7.493312e-05 4.121903e+00
##
              Australia fag(got)
## 638
            South Africa spastic
                                      1 5.920547e+00 1.277642e-05 4.089450e+00
                                    342 3.066128e+02 9.195635e-05 4.084161e+00
## 639
              Nigeria butt(hole)
## 640
           Bangladesh arse(hole)
                                      3 9.051548e+00 1.571325e-05 4.045853e+00
## 641
                                    267 2.361151e+02 8.024198e-05 4.039878e+00
                 Australia prick
  642
               Bangladesh darkie
                                      3 9.975775e-01 5.199315e-06 4.019433e+00
## 643
                                      2 5.439913e-01 3.780540e-06 3.897050e+00
                       Ghana hoe
##
  644
                    Jamaica shit
                                      1 5.687072e+00 1.217019e-05 3.862909e+00
## 645
                    Nigeria cock
                                    155 1.324280e+02 5.862844e-05 3.847331e+00
## 646
                                      8 4.055363e+00 1.024238e-05 3.836935e+00
             South Africa nympho
## 647
                South Africa eff
                                      1 5.623813e+00 1.200593e-05 3.801628e+00
## 648
                                      7 1.438143e+01 1.916665e-05 3.788603e+00
                  Malaysia skank
## 649
                      Kenya dork
                                      5 1.164067e+01 1.724306e-05 3.788312e+00
##
  650
                                      3 1.027307e+00 5.122121e-06 3.788073e+00
                  India bullshit
##
  651
                    Malaysia sod
                                      2 7.229902e+00 1.357973e-05 3.783160e+00
##
  652
                  Australia dork
                                     47 6.231624e+01 3.977513e-05 3.764462e+00
##
  653
                  Malaysia boner
                                      6 1.299031e+01 1.815100e-05 3.761608e+00
## 654
                                      1 5.564091e+00 1.185086e-05 3.743815e+00
                  Canada poofter
  655
              United States dick
                                      4 1.016050e+01 1.599620e-05 3.735226e+00
##
## 656
            Sri Lanka butt(hole)
                                    217 2.473894e+02 7.895695e-05 3.733043e+00
  657
                   Tanzania pedo
                                     14 2.329079e+01 2.412505e-05 3.706134e+00
##
  658
                      Kenya dike
                                     34 2.455301e+01 2.453073e-05 3.634815e+00
   659
                                      9 1.680941e+01 2.027807e-05 3.628140e+00
##
                   Canada nympho
## 660
                                     11 1.936087e+01 2.171014e-05 3.610589e+00
                    Pakistan jap
## 661
         South Africa butt(hole)
                                    228 2.584552e+02 7.913017e-05 3.588701e+00
## 662
                Bangladesh skank
                                      1 5.383984e+00 1.138320e-05 3.569720e+00
## 663
                     Ghana boner
                                      1 5.383078e+00 1.138085e-05 3.568845e+00
## 664
                    Pakistan cum
                                      2 6.995064e+00 1.296995e-05 3.566896e+00
  665
                                    413 4.531709e+02 1.044269e-04 3.560918e+00
##
                     Kenya idiot
##
   666
               Singapore spastic
                                     15 9.263774e+00 1.489450e-05 3.551932e+00
##
  667
                                      9 1.669912e+01 1.999168e-05 3.549677e+00
                Australia nympho
## 668
                  Pakistan moron
                                    203 1.779157e+02 6.516174e-05 3.536644e+00
## 669
                 Jamaica spastic
                                     12 7.029154e+00 1.290707e-05 3.515262e+00
## 670
                                     17 1.084132e+01 1.599150e-05 3.498591e+00
                  Bangladesh jap
## 671
                 Australia boner
                                     27 3.857672e+01 3.006202e-05 3.474126e+00
## 672
                                     12 2.036965e+01 2.173300e-05 3.438992e+00
                 Bangladesh puke
## 673
                  Tanzania prick
                                     37 2.733199e+01 2.510482e-05 3.419816e+00
##
  674
                      Kenya frig
                                     12 2.032498e+01 2.161699e-05 3.409857e+00
##
  675
                    Pakistan eff
                                      1 5.213550e+00 1.094065e-05 3.405358e+00
## 676
               New Zealand nonce
                                     15 9.402092e+00 1.453535e-05 3.332936e+00
## 677
                                      1 1.956415e-01 2.088522e-06 3.307031e+00
                  Hong Kong kike
## 678
                New Zealand shit
                                      7 1.373840e+01 1.749692e-05 3.305047e+00
## 679
                Australia darkie
                                     13 7.913173e+00 1.320825e-05 3.269967e+00
## 680
                   Singapore sod
                                      3 8.158312e+00 1.339387e-05 3.261481e+00
## 681
              South Africa prick
                                     71 5.734029e+01 3.547281e-05 3.254044e+00
##
  682
                                      9 1.626619e+01 1.886751e-05 3.245847e+00
                  Hong Kong turd
## 683
                   Ireland fanny
                                      6 2.922871e+00 7.989844e-06 3.239529e+00
## 684
                 Singapore skank
                                      9 1.622819e+01 1.876882e-05 3.219502e+00
## 685
                     Kenya prick
                                     56 4.410629e+01 3.088562e-05 3.207260e+00
```

```
## 686
               New Zealand skank
                                     20 2.974627e+01 2.530821e-05 3.193337e+00
## 687
                 Ireland jackass
                                     49 6.320109e+01 3.687927e-05 3.190942e+00
                   Canada online
## 688
                                    684 7.322344e+02 1.254793e-04 3.177334e+00
## 689
                New Zealand cock
                                    352 3.201575e+02 8.274814e-05 3.167029e+00
## 690
             United States pikey
                                      5 1.086122e+01 1.521913e-05 3.162991e+00
## 691
                                      1 2.029818e-01 2.069463e-06 3.129531e+00
                      Ghana knob
## 692
                                    127 1.086053e+02 4.777546e-05 3.115554e+00
                  Malaysia pussy
## 693
                                     19 1.274438e+01 1.624330e-05 3.070595e+00
             Great Britain queef
## 694
                Bangladesh boner
                                      1 4.863190e+00 1.003092e-05 3.068816e+00
## 695
                                     15 9.581090e+00 1.407058e-05 3.064848e+00
                 Malaysia tranny
## 696
             United States lesbo
                                     13 2.102172e+01 2.082959e-05 3.061027e+00
## 697
                                    700 6.552223e+02 1.164636e-04 3.060088e+00
                  Australia piss
## 698
                      Ghana cunt
                                     18 2.707778e+01 2.357215e-05 3.043308e+00
## 699
                    Pakistan sod
                                      1 4.833668e+00 9.954265e-06 3.040550e+00
## 700
                   Tanzania twat
                                      7 1.334270e+01 1.646943e-05 3.015120e+00
## 701
                      Kenya shag
                                     29 2.106407e+01 2.060682e-05 2.989878e+00
## 702
                                     63 5.071392e+01 3.190508e-05 2.976458e+00
                  Jamaica retard
## 703
                Singapore nympho
                                      2 6.345353e+00 1.128292e-05 2.975736e+00
## 704
                                     19 2.807645e+01 2.356876e-05 2.934199e+00
                      Ghana pedo
## 705
                  Hong Kong wank
                                     30 2.198638e+01 2.080860e-05 2.920814e+00
## 706
                Sri Lanka tranny
                                     11 6.613822e+00 1.138893e-05 2.908842e+00
## 707
                  Sri Lanka dork
                                      8 1.448549e+01 1.684024e-05 2.903702e+00
## 708
                    Canada queef
                                      6 3.045608e+00 7.671157e-06 2.865909e+00
## 709
              Australia bullshit
                                      5 2.385589e+00 6.788375e-06 2.865182e+00
## 710
                                      6 1.180634e+01 1.507665e-05 2.855547e+00
                   Singapore cum
## 711
                  Malaysia dildo
                                      7 1.310787e+01 1.585966e-05 2.846084e+00
## 712
                     Nigeria sod
                                      2 6.185562e+00 1.086801e-05 2.832229e+00
## 713
                                      6 1.175990e+01 1.495606e-05 2.821148e+00
                   Tanzania turd
## 714
                                      2 6.521384e-01 3.499736e-06 2.785806e+00
                     Kenya lesbo
## 715
                   Kenya spastic
                                      1 4.554099e+00 9.228348e-06 2.773682e+00
## 716
                      India fart
                                    104 1.223999e+02 4.779070e-05 2.765992e+00
## 717
                  Malaysia nonce
                                      1 4.545630e+00 9.206356e-06 2.765621e+00
## 718
             United States dildo
                                    209 2.343922e+02 6.597123e-05 2.750797e+00
## 719
              United States tits
                                     82 6.832061e+01 3.552493e-05 2.738937e+00
## 720
                    India tranny
                                     18 1.225252e+01 1.492384e-05 2.696059e+00
## 721
                                      4 8.843976e+00 1.257770e-05 2.653117e+00
                     Canada jiss
## 722
                     Canada jerk
                                     65 5.318099e+01 3.069235e-05 2.626669e+00
## 723
                   Australia sod
                                     14 2.147030e+01 1.939776e-05 2.599190e+00
## 724
                  Australia kike
                                      3 1.221887e+00 4.616895e-06 2.587544e+00
## 725
                    Ireland pedo
                                    145 1.656932e+02 5.375322e-05 2.584354e+00
## 726
                                     35 4.588880e+01 2.827620e-05 2.583768e+00
                      Kenya slut
## 727
                    Ghana nigger
                                     37 2.848241e+01 2.211761e-05 2.547163e+00
## 728
                                     42 3.285690e+01 2.374213e-05 2.544251e+00
                    Kenya retard
## 729
              Sri Lanka fag(got)
                                     36 4.691891e+01 2.835447e-05 2.541036e+00
## 730
                  Australia tits
                                      6 1.134609e+01 1.388157e-05 2.518992e+00
## 731
                Hong Kong tosser
                                      3 7.266684e+00 1.107868e-05 2.505214e+00
## 732
              New Zealand retard
                                    105 1.225109e+02 4.548157e-05 2.502888e+00
## 733
                                     47 3.733397e+01 2.510035e-05 2.502607e+00
                  Tanzania pussy
## 734
                   Canada pecker
                                      6 1.130389e+01 1.377198e-05 2.488634e+00
## 735
                  Sri Lanka puke
                                     28 3.755947e+01 2.482365e-05 2.433036e+00
## 736
                                     11 6.909660e+00 1.062078e-05 2.421376e+00
             South Africa tranny
## 737
                Philippines slut
                                     80 6.725461e+01 3.309925e-05 2.415373e+00
## 738
            United States tranny
                                    151 1.713271e+02 5.280281e-05 2.411699e+00
## 739
               Philippines skank
                                     17 1.169230e+01 1.378190e-05 2.409423e+00
```

```
## 740
            United States nympho
                                     85 1.005539e+02 4.039638e-05 2.405917e+00
## 741
            United States darkie
                                     37 4.764924e+01 2.765424e-05 2.380025e+00
## 742
                      India shit
                                      4 8.494079e+00 1.166916e-05 2.377744e+00
## 743
            South Africa jackass
                                     12 1.863771e+01 1.723569e-05 2.363982e+00
## 744
                    Nigeria slag
                                     21 2.931856e+01 2.160083e-05 2.360225e+00
## 745
                   Nigeria boner
                                      6 1.111390e+01 1.327864e-05 2.353084e+00
## 746
                                      2 5.623257e+00 9.407946e-06 2.334589e+00
                 Malaysia nympho
## 747
                                     41 3.231811e+01 2.254446e-05 2.332288e+00
              Hong Kong fag(got)
          Great Britain bollocks
## 748
                                      1 2.450842e-01 1.960144e-06 2.325315e+00
## 749
                                     58 7.082837e+01 3.331506e-05 2.323462e+00
                    Jamaica slut
## 750
               Tanzania fag(got)
                                     16 2.336488e+01 1.912411e-05 2.321495e+00
## 751
                    Nigeria tits
                                      6 3.268793e+00 7.091655e-06 2.282033e+00
##
  752
            Great Britain darkie
                                     42 3.333145e+01 2.250990e-05 2.254442e+00
## 753
                                    364 3.935748e+02 7.686972e-05 2.222372e+00
                  Hong Kong damn
## 754
                    Ghana tranny
                                      1 3.970325e+00 7.712544e-06 2.222193e+00
## 755
        United States butt(hole)
                                   6527 6.408473e+03 3.129640e-04 2.192205e+00
## 756
                    Jamaica fuck
                                   1218 1.270700e+03 1.372884e-04 2.185626e+00
## 757
                      Canada hoe
                                      1 3.924148e+00 7.592645e-06 2.178981e+00
## 758
              United States puke
                                    927 9.729555e+02 1.196259e-04 2.170611e+00
## 759
                 Tanzania retard
                                     27 2.036092e+01 1.723932e-05 2.164804e+00
## 760
                  Nigeria nympho
                                      8 4.810993e+00 8.280379e-06 2.113861e+00
## 761
              South Africa dildo
                                      5 9.453093e+00 1.156276e-05 2.097730e+00
## 762
                                     25 3.334723e+01 2.167551e-05 2.089418e+00
               South Africa wank
## 763
                     India moron
                                    314 3.403144e+02 6.838588e-05 2.034727e+00
## 764
                                     39 3.107084e+01 2.058977e-05 2.023491e+00
                   Australia cum
  765
                 Bangladesh jerk
                                      3 6.660297e+00 9.504145e-06 2.011588e+00
## 766
               Philippines pussy
                                     75 8.829756e+01 3.453511e-05 2.002605e+00
  767
                                      3 6.642105e+00 9.456910e-06 1.997097e+00
                   Malaysia shit
## 768
                  Australia slag
                                    116 1.017657e+02 3.696913e-05 1.990989e+00
## 769
                   Kenya jackass
                                      9 1.433617e+01 1.385592e-05 1.986218e+00
## 770
                Sri Lanka tosser
                                      6 1.054965e+01 1.181353e-05 1.962088e+00
## 771
                    Nigeria shit
                                      9 5.682671e+00 8.613591e-06 1.936532e+00
## 772
                New Zealand cunt
                                    119 1.351551e+02 4.196147e-05 1.931015e+00
## 773
                                     30 3.860274e+01 2.233931e-05 1.917148e+00
                  Singapore turd
## 774
                    Malaysia cum
                                      6 1.046279e+01 1.158796e-05 1.903552e+00
## 775
                                    709 6.732626e+02 9.295481e-05 1.896972e+00
                 Malaysia bloody
## 776
                     India boner
                                     11 1.661231e+01 1.457303e-05 1.896067e+00
## 777
                      Ghana turd
                                      9 1.417625e+01 1.344066e-05 1.890032e+00
## 778
                   Pakistan fart
                                     53 6.399043e+01 2.854145e-05 1.887618e+00
## 779
                 New Zealand cum
                                     28 2.164102e+01 1.651205e-05 1.868516e+00
## 780
                     Canada turd
                                    116 1.022621e+02 3.567992e-05 1.845541e+00
## 781
              New Zealand nympho
                                      7 1.163104e+01 1.202488e-05 1.843903e+00
  782
                                     20 1.479109e+01 1.352550e-05 1.834402e+00
                 Singapore dildo
## 783
                                      5 9.048357e+00 1.051183e-05 1.811290e+00
                 Sri Lanka dildo
## 784
                   Sri Lanka jap
                                     26 1.999024e+01 1.560518e-05 1.806741e+00
## 785
                                     11 7.357604e+00 9.457683e-06 1.803175e+00
              United States kike
## 786
                  Nigeria tranny
                                     12 8.197127e+00 9.874392e-06 1.764258e+00
## 787
                                     54 6.464216e+01 2.763707e-05 1.752040e+00
               Philippines prick
## 788
                 Hong Kong pikey
                                      1 2.888041e-01 1.846625e-06 1.751359e+00
## 789
                 Bangladesh pedo
                                     32 2.536487e+01 1.722928e-05 1.735664e+00
## 790
                                      1 3.437701e+00 6.329560e-06 1.728593e+00
                   Hong Kong sod
## 791
                   Malaysia dork
                                     15 2.098435e+01 1.553925e-05 1.706627e+00
## 792
                Tanzania jackass
                                      5 8.883908e+00 1.008482e-05 1.697985e+00
## 793
                                      5 2.827039e+00 5.642147e-06 1.670214e+00
                    Ireland gook
```

```
## 794
                South Africa cum
                                      4 7.545518e+00 9.206138e-06 1.665982e+00
## 795
                     Jamaica eff
                                     10 6.676857e+00 8.628709e-06 1.653964e+00
## 796
                   Singapore eff
                                      5 8.799480e+00 9.865596e-06 1.640557e+00
## 797
                                      5 8.763479e+00 9.772117e-06 1.616227e+00
                  Pakistan dildo
##
  798
                Pakistan jackass
                                     12 1.727807e+01 1.370515e-05 1.612334e+00
## 799
                      Ghana dork
                                      5 8.695741e+00 9.596230e-06 1.570712e+00
## 800
                                      1 3.237772e+00 5.810437e-06 1.546627e+00
                  Jamaica pecker
                                      1 3.235267e+00 5.803932e-06 1.544360e+00
## 801
                  Nigeria pecker
## 802
                      Kenya puke
                                     37 3.018314e+01 1.770141e-05 1.539589e+00
## 803
                New Zealand frig
                                     65 7.578411e+01 2.800650e-05 1.534582e+00
## 804
             United States queef
                                     13 1.821883e+01 1.355136e-05 1.494946e+00
## 805
             New Zealand spastic
                                     12 1.698050e+01 1.293247e-05 1.460817e+00
##
  806
                  Sri Lanka shit
                                      2 4.585042e+00 6.712156e-06 1.457444e+00
## 807
                   Canada retard
                                    161 1.770552e+02 4.170666e-05 1.455875e+00
## 808
              South Africa pussy
                                     89 7.832361e+01 2.772695e-05 1.455313e+00
## 809
                  Sri Lanka slut
                                     48 5.710339e+01 2.364050e-05 1.451256e+00
## 810
                                      5 8.506386e+00 9.104552e-06 1.445355e+00
                 Philippines cum
## 811
                 Ireland poofter
                                      2 4.552012e+00 6.626392e-06 1.430744e+00
## 812
                                     19 1.446404e+01 1.177808e-05 1.422487e+00
                Philippines jerk
## 813
              Bangladesh jackass
                                      6 9.675034e+00 9.542487e-06 1.395951e+00
## 814
                 Hong Kong prick
                                     45 3.780539e+01 1.868267e-05 1.369180e+00
## 815
                New Zealand fuck
                                   3005 3.069662e+03 1.692430e-04 1.362077e+00
## 816
                                      9 6.115685e+00 7.489260e-06 1.360318e+00
                   Tanzania jerk
## 817
                                      1 3.025625e+00 5.259588e-06 1.356135e+00
                 Australia queef
## 818
                  Sri Lanka slag
                                     18 2.365557e+01 1.468562e-05 1.352133e+00
## 819
                       Ghana jap
                                      8 1.200029e+01 1.038709e-05 1.333492e+00
## 820
                 Nigeria spastic
                                      4 7.023714e+00 7.851233e-06 1.301711e+00
## 821
                                      1 3.381299e-01 1.718551e-06 1.295573e+00
                  Sri Lanka knob
## 822
                  Jamaica darkie
                                      4 2.281539e+00 4.462020e-06 1.294349e+00
## 823
                    Jamaica frig
                                     25 3.137116e+01 1.654411e-05 1.293918e+00
## 824
                   Malaysia jerk
                                     13 1.779065e+01 1.243954e-05 1.290024e+00
## 825
                   Ghana jackass
                                      7 1.070932e+01 9.631541e-06 1.284775e+00
## 826
                   Pakistan jerk
                                      8 1.189423e+01 1.011170e-05 1.274990e+00
## 827
                                     68 5.930799e+01 2.257232e-05 1.273875e+00
                  Sri Lanka pimp
## 828
                      Kenya cunt
                                     43 3.624802e+01 1.753320e-05 1.257701e+00
## 829
                                      5 8.203475e+00 8.318018e-06 1.250964e+00
                  Jamaica tranny
## 830
                  Hong Kong fart
                                     53 4.550994e+01 1.945028e-05 1.232719e+00
## 831
                   Ireland lesbo
                                      1 2.874955e+00 4.868367e-06 1.222786e+00
## 832
                     Ireland cum
                                     20 2.558710e+01 1.450790e-05 1.219977e+00
## 833
                  Sri Lanka fart
                                     75 6.607059e+01 2.318924e-05 1.206805e+00
## 834
                                     30 3.663934e+01 1.724073e-05 1.203102e+00
                   Malaysia frig
## 835
                 Sri Lanka prick
                                     63 5.488525e+01 2.107299e-05 1.199760e+00
  836
##
                    Ireland tits
                                      6 9.343603e+00 8.681896e-06 1.196507e+00
## 837
                                      1 3.522965e-01 1.681767e-06 1.190815e+00
                    Jamaica kike
## 838
                    Ireland fuck
                                   3695 3.629391e+03 1.719749e-04 1.186024e+00
## 839
                 Hong Kong skank
                                      4 6.838136e+00 7.369368e-06 1.177955e+00
## 840
              Great Britain dick
                                     10 7.107441e+00 7.510685e-06 1.177203e+00
## 841
              New Zealand tranny
                                     15 1.981734e+01 1.250890e-05 1.171034e+00
## 842
               South Africa puke
                                     46 3.923952e+01 1.755541e-05 1.164746e+00
## 843
                   Nigeria nonce
                                      6 3.889025e+00 5.481213e-06 1.145843e+00
## 844
                                      2 9.557737e-01 2.711346e-06 1.140865e+00
               Philippines lesbo
## 845
                    Kenya nympho
                                      5 3.119395e+00 4.883041e-06 1.133769e+00
## 846
         South Africa arse(hole)
                                     13 1.743665e+01 1.152030e-05 1.128877e+00
## 847
                   Nigeria skank
                                     16 1.230407e+01 9.596806e-06 1.110192e+00
```

```
## 848
             Malaysia arse(hole)
                                     19 2.417805e+01 1.344567e-05 1.108947e+00
## 849
                                      5 7.965435e+00 7.699929e-06 1.103996e+00
                   Canada darkie
             South Africa pecker
## 850
                                      1 2.727125e+00 4.484523e-06 1.093812e+00
## 851
                 New Zealand hoe
                                      1 2.715259e+00 4.453712e-06 1.083548e+00
## 852
                  Hong Kong shit
                                      5 3.158213e+00 4.782250e-06 1.074082e+00
## 853
                                      4 6.674486e+00 6.944440e-06 1.071675e+00
             Philippines spastic
## 854
                                     10 7.235303e+00 7.178686e-06 1.056424e+00
                    Ireland jiss
## 855
                                    249 2.655979e+02 4.312632e-05 1.037248e+00
                   Ireland pussy
## 856
                   Tanzania frig
                                      9 1.259508e+01 9.334944e-06 1.026161e+00
## 857
           South Africa fag(got)
                                     42 4.901761e+01 1.822358e-05 1.004676e+00
## 858
                Bangladesh nonce
                                      3 1.701750e+00 3.370929e-06 9.904239e-01
## 859
                     Nigeria cum
                                      6 8.951464e+00 7.663670e-06 9.731523e-01
##
  860
                Philippines pimp
                                     78 6.985113e+01 2.116243e-05 9.506517e-01
## 861
                   Tanzania jiss
                                      2 1.017036e+00 2.552279e-06 9.500344e-01
## 862
                 Australia dildo
                                     45 3.892583e+01 1.577322e-05 9.478427e-01
## 863
                  Ghana fag(got)
                                     23 2.816576e+01 1.341390e-05 9.474291e-01
## 864
                                      3 5.214038e+00 5.748839e-06 9.401472e-01
                South Africa sod
## 865
                Australia pecker
                                      8 1.122972e+01 8.386239e-06 9.288842e-01
## 866
                                      1 2.531219e+00 3.975845e-06 9.262856e-01
                    Nigeria jiss
## 867
                  Hong Kong pimp
                                     47 4.085181e+01 1.596550e-05 9.253016e-01
##
  868
                   Nigeria dildo
                                      8 1.121447e+01 8.346643e-06 9.213845e-01
## 869
               Great Britain eff
                                    107 9.754350e+01 2.456008e-05 9.167749e-01
## 870
           Great Britain spastic
                                     93 1.026903e+02 2.516754e-05 9.144123e-01
## 871
               Pakistan fag(got)
                                     39 4.544172e+01 1.672793e-05 9.131637e-01
## 872
                  Malaysia prick
                                     71 7.950933e+01 2.209909e-05 9.106950e-01
## 873
                 Singapore pussy
                                    133 1.225515e+02 2.713810e-05 8.908102e-01
## 874
                                     92 1.015072e+02 2.469188e-05 8.904391e-01
                    Ghana online
  875
                    Tanzania sod
                                      1 2.485339e+00 3.856716e-06 8.876985e-01
## 876
                                      5 3.293579e+00 4.430769e-06 8.841058e-01
                 Tanzania tranny
## 877
                  Australia jiss
                                      6 8.785949e+00 7.233898e-06 8.834007e-01
## 878
                  Tanzania lesbo
                                      1 4.041201e-01 1.547207e-06 8.786318e-01
## 879
                     Ireland eff
                                     15 1.907053e+01 1.056969e-05 8.688403e-01
## 880
                 Pakistan pecker
                                      4 2.528179e+00 3.821618e-06 8.568454e-01
## 881
                                      4 2.533179e+00 3.808633e-06 8.493526e-01
                    Jamaica jiss
## 882
                     India dildo
                                     13 1.676265e+01 9.770169e-06 8.445884e-01
##
  883
                                      2 3.783498e+00 4.630909e-06 8.407208e-01
                      India jiss
## 884
            Great Britain pecker
                                     41 4.730124e+01 1.636323e-05 8.394214e-01
## 885
                 Malaysia pecker
                                      2 3.781494e+00 4.625704e-06 8.392767e-01
## 886
               New Zealand pussy
                                    211 2.246371e+02 3.542936e-05 8.278658e-01
## 887
                 Canada bullshit
                                      1 2.401344e+00 3.638621e-06 8.177779e-01
## 888
                                      9 6.671690e+00 6.045575e-06 8.125418e-01
                     Nigeria eff
## 889
                    Nigeria fart
                                     90 8.188745e+01 2.106876e-05 8.037060e-01
  890
                   Sri Lanka sod
                                      3 4.990798e+00 5.169185e-06 7.941168e-01
## 891
                                      2 3.707872e+00 4.434543e-06 7.866581e-01
                   Hong Kong eff
## 892
                     Canada pimp
                                    271 2.568267e+02 3.682556e-05 7.821689e-01
## 893
                                     85 7.725301e+01 2.011914e-05 7.768743e-01
                  Canada jackass
## 894
                   Nigeria whore
                                    117 1.078702e+02 2.371231e-05 7.727243e-01
## 895
                  Hong Kong fuck
                                    729 7.056603e+02 6.071296e-05 7.719616e-01
## 896
                  Hong Kong piss
                                     96 1.049104e+02 2.314228e-05 7.567954e-01
## 897
                Philippines puke
                                     50 4.423639e+01 1.496696e-05 7.509463e-01
## 898
                                      4 6.119465e+00 5.503291e-06 7.340728e-01
                New Zealand jiss
## 899
                   Tanzania puke
                                     15 1.870403e+01 9.617994e-06 7.335220e-01
## 900
                Sri Lanka darkie
                                      3 1.839427e+00 3.013449e-06 7.322552e-01
## 901
                New Zealand slag
                                     78 7.088043e+01 1.848941e-05 7.151241e-01
```

```
## 902
                   Tanzania shag
                                     10 1.305308e+01 7.927609e-06 7.141073e-01
                Bangladesh lesbo
## 903
                                      1 4.401077e-01 1.453765e-06 7.122788e-01
## 904
                  Australia shit
                                     16 1.972475e+01 9.671822e-06 7.033672e-01
## 905
                                      2 3.572732e+00 4.083645e-06 6.923234e-01
                    Canada fanny
## 906
                    Canada lesbo
                                      2 3.514163e+00 3.931568e-06 6.524139e-01
## 907
                 Australia lesbo
                                      5 3.491106e+00 3.917888e-06 6.521608e-01
## 908
                                     59 5.315725e+01 1.517284e-05 6.422034e-01
                  Pakistan prick
## 909
                                      6 4.335692e+00 4.321434e-06 6.388650e-01
                       Ghana cum
## 910
              Philippines tranny
                                     10 7.789556e+00 5.739547e-06 6.272583e-01
## 911
                 Bangladesh slag
                                     10 1.282914e+01 7.346121e-06 6.238946e-01
## 912
               Philippines boner
                                      8 1.056130e+01 6.650611e-06 6.211599e-01
## 913
                                    108 1.164719e+02 2.200402e-05 6.162280e-01
                Hong Kong online
## 914
                    Nigeria frig
                                     27 3.134689e+01 1.128763e-05 6.027844e-01
## 915
                                      1 2.133658e+00 2.943565e-06 6.023365e-01
               South Africa jiss
## 916
                 Philippines sod
                                      4 5.878008e+00 4.876334e-06 6.000188e-01
## 917
                  Australia gook
                                      2 3.432921e+00 3.720619e-06 5.981092e-01
## 918
                                      3 1.933041e+00 2.770378e-06 5.889170e-01
                 Tanzania nympho
## 919
                 Bangladesh dork
                                     10 7.855922e+00 5.567223e-06 5.851723e-01
## 920
               New Zealand queef
                                      1 2.107366e+00 2.875296e-06 5.818916e-01
## 921
                    India darkie
                                      2 3.407654e+00 3.655014e-06 5.814821e-01
## 922
                 Tanzania tosser
                                      7 5.253562e+00 4.534699e-06 5.805674e-01
## 923
                  Malaysia lesbo
                                      2 1.175594e+00 2.140582e-06 5.781294e-01
## 924
                                      1 4.790371e-01 1.352685e-06 5.665580e-01
                      Ghana gook
## 925
                 Australia idiot
                                   2389 2.425969e+03 9.659956e-05 5.633754e-01
## 926
                                    375 3.897831e+02 3.842327e-05 5.606704e-01
                  Hong Kong crap
## 927
               Bangladesh tranny
                                      5 3.586878e+00 3.669214e-06 5.567278e-01
## 928
                New Zealand tits
                                     10 7.902621e+00 5.445969e-06 5.566508e-01
## 929
                Australia retard
                                    166 1.758935e+02 2.570037e-05 5.564852e-01
## 930
                                     17 1.420061e+01 7.268903e-06 5.518490e-01
                      Ghana slag
## 931
                  Ireland nympho
                                     11 1.375187e+01 7.145495e-06 5.506725e-01
## 932
               Philippines whore
                                    110 1.025067e+02 1.946149e-05 5.477599e-01
## 933
                   Jamaica prick
                                     62 6.807710e+01 1.578202e-05 5.424901e-01
## 934
                     Ghana lesbo
                                      1 4.871564e-01 1.331603e-06 5.398853e-01
## 935
             United States fanny
                                     18 2.137209e+01 8.756129e-06 5.320478e-01
## 936
                Hong Kong tranny
                                      3 4.555652e+00 4.039307e-06 5.312200e-01
               United States hoe
## 937
                                     27 2.347426e+01 9.155163e-06 5.295522e-01
## 938
                  Bangladesh hoe
                                      1 4.914536e-01 1.320445e-06 5.262337e-01
## 939
                  Singapore dike
                                     55 4.994479e+01 1.312760e-05 5.116689e-01
## 940
            Philippines fag(got)
                                     50 5.525965e+01 1.365867e-05 5.006171e-01
## 941
               Sri Lanka spastic
                                      4 5.667058e+00 4.328589e-06 4.903924e-01
## 942
                                      6 7.977826e+00 5.135542e-06 4.903335e-01
                     Kenya skank
## 943
               South Africa damn
                                    614 5.969437e+02 4.435543e-05 4.873426e-01
## 944
                New Zealand dork
                                     48 4.340362e+01 1.193586e-05 4.867490e-01
## 945
                                      3 4.465527e+00 3.805294e-06 4.809669e-01
                  Tanzania boner
## 946
                      Ghana shag
                                     13 1.573515e+01 7.102126e-06 4.754357e-01
## 947
                     Ghana prick
                                     29 3.294801e+01 1.025191e-05 4.730721e-01
## 948
                     Kenya boner
                                      9 7.206129e+00 4.657884e-06 4.465607e-01
## 949
                                     33 3.700771e+01 1.040704e-05 4.340104e-01
              Great Britain jiss
## 950
              New Zealand pecker
                                      6 7.821568e+00 4.729808e-06 4.242257e-01
## 951
                   Tanzania slag
                                     14 1.178010e+01 5.764154e-06 4.183281e-01
## 952
          Great Britain bullshit
                                      8 1.004845e+01 5.318953e-06 4.175918e-01
## 953
                                     67 6.196086e+01 1.308627e-05 4.098230e-01
               South Africa pimp
## 954
                    India online
                                    302 3.132536e+02 2.924383e-05 4.042845e-01
## 955
                  Pakistan pussy
                                     78 7.260981e+01 1.399829e-05 4.001404e-01
```

```
## 956
                South Africa jap
                                     18 2.088441e+01 7.489796e-06 3.983751e-01
## 957
                Philippines tits
                                      2 3.106265e+00 2.872445e-06 3.939849e-01
## 958
                    Ireland twat
                                    101 9.492143e+01 1.578694e-05 3.892593e-01
## 959
               Bangladesh nympho
                                      3 2.105182e+00 2.323413e-06 3.803470e-01
                  Hong Kong puke
## 960
                                     29 2.587126e+01 8.124337e-06 3.783741e-01
## 961
                  Australia damn
                                   2428 2.458088e+03 7.862418e-05 3.682773e-01
## 962
                                     40 3.637695e+01 9.408151e-06 3.608458e-01
                   Pakistan puke
## 963
                      Kenya jerk
                                      8 9.869027e+00 4.853064e-06 3.539622e-01
## 964
                      India jerk
                                     20 2.275110e+01 7.143673e-06 3.326678e-01
## 965
                  Hong Kong twat
                                     16 1.845552e+01 6.376065e-06 3.267075e-01
## 966
                      Canada sod
                                     19 2.161210e+01 6.782714e-06 3.157059e-01
## 967
            United States pecker
                                     63 6.761988e+01 1.199766e-05 3.156366e-01
## 968
            Great Britain nympho
                                     75 7.033916e+01 1.210412e-05 3.088389e-01
## 969
             Hong Kong ass(hole)
                                     83 7.812617e+01 1.265748e-05 3.040489e-01
## 970
                                      4 3.039054e+00 2.495121e-06 3.038502e-01
                  Pakistan nonce
## 971
                Singapore tranny
                                      9 1.081142e+01 4.703497e-06 3.034981e-01
## 972
                                    157 1.639613e+02 1.808277e-05 2.955563e-01
             Great Britain dildo
## 973
              United States jiss
                                     49 5.290467e+01 1.013990e-05 2.881878e-01
## 974
                     Canada dick
                                      1 1.698512e+00 1.813698e-06 2.872626e-01
## 975
                    India pecker
                                      6 4.835862e+00 3.022729e-06 2.802432e-01
## 976
                  Australia dick
                                      1 1.687368e+00 1.784762e-06 2.800068e-01
## 977
                 Hong Kong whore
                                     64 5.995015e+01 1.051710e-05 2.735825e-01
## 978
                Philippines frig
                                     27 2.978828e+01 7.240347e-06 2.609923e-01
## 979
                                     71 6.683625e+01 1.081308e-05 2.593925e-01
                Singapore retard
                                      3 4.010651e+00 2.624188e-06 2.546757e-01
## 980
                       Kenya sod
## 981
                      India tits
                                      6 4.885974e+00 2.892610e-06 2.540032e-01
## 982
                  Nigeria darkie
                                      3 2.279773e+00 1.870083e-06 2.275341e-01
  983
                                     50 4.677013e+01 8.387384e-06 2.230491e-01
##
                  Sri Lanka pedo
## 984
                 Nigeria poofter
                                      1 1.592489e+00 1.538407e-06 2.204367e-01
## 985
                  Bangladesh cum
                                      3 3.916959e+00 2.380912e-06 2.146597e-01
## 986
                    Nigeria jerk
                                     17 1.522084e+01 4.619780e-06 2.079654e-01
## 987
                   Sri Lanka cum
                                      6 7.222456e+00 3.174172e-06 2.069099e-01
## 988
                      Ghana shit
                                      2 2.752434e+00 1.953712e-06 2.056930e-01
## 989
                                      1 1.567020e+00 1.472276e-06 2.051738e-01
                    Ghana pecker
## 990
                  Tanzania nonce
                                      1 1.562598e+00 1.460794e-06 2.025578e-01
## 991
                                     52 4.886217e+01 8.148414e-06 2.015045e-01
               South Africa pedo
## 992
                       India cum
                                     15 1.338005e+01 4.206347e-06 1.961299e-01
## 993
            Great Britain tranny
                                    115 1.198462e+02 1.258699e-05 1.959615e-01
## 994
                  Sri Lanka dike
                                     33 3.055342e+01 6.353058e-06 1.959108e-01
## 995
            Hong Kong arse(hole)
                                     10 1.149627e+01 3.885183e-06 1.947429e-01
## 996
                                     16 1.783974e+01 4.777106e-06 1.897241e-01
               Sri Lanka jackass
## 997
                     India fanny
                                      1 1.528433e+00 1.372085e-06 1.826979e-01
                                     95 9.092773e+01 1.057617e-05 1.823797e-01
## 998
              South Africa whore
## 999
                   Singapore hoe
                                      2 1.481319e+00 1.346762e-06 1.816148e-01
## 1000
                  Tanzania skank
                                      4 4.943736e+00 2.450448e-06 1.801549e-01
                                      3 3.820680e+00 2.130922e-06 1.762817e-01
## 1001
                   Malaysia tits
## 1002
                      India slut
                                    110 1.057876e+02 1.094050e-05 1.677344e-01
## 1003
                                    113 1.088061e+02 1.089249e-05 1.616506e-01
                  Australia frig
## 1004
                    Kenya darkie
                                      1 1.478180e+00 1.241603e-06 1.546877e-01
## 1005
                    Ireland cock
                                    386 3.785357e+02 1.940010e-05 1.471866e-01
## 1006
                                     31 3.320758e+01 5.732496e-06 1.467563e-01
                    Nigeria twat
## 1007
                Sri Lanka pecker
                                      2 2.610363e+00 1.584822e-06 1.427170e-01
## 1008
                  Australia knob
                                      1 1.454627e+00 1.180447e-06 1.420887e-01
                                      4 4.790132e+00 2.051608e-06 1.303323e-01
## 1009
               South Africa shit
```

```
## 1010
                Hong Kong retard
                                     30 2.816306e+01 4.769972e-06 1.198146e-01
## 1011
                                      1 1.406756e+00 1.056147e-06 1.176111e-01
                  Hong Kong jiss
## 1012
                  Australia turd
                                    105 1.015912e+02 8.853369e-06 1.143809e-01
## 1013
                   Ireland nonce
                                     10 1.111649e+01 2.899062e-06 1.121356e-01
## 1014
                New Zealand turd
                                     68 7.075885e+01 7.164685e-06 1.075661e-01
## 1015
                                      4 3.401975e+00 1.552788e-06 1.051252e-01
                   Ghana spastic
## 1016
                                      5 4.325851e+00 1.750451e-06 1.050607e-01
                       Kenya eff
## 1017
                Bangladesh prick
                                     28 2.976595e+01 4.585656e-06 1.047701e-01
## 1018
                    Tanzania cum
                                      3 3.596669e+00 1.549269e-06 9.898440e-02
## 1019
                                      2 2.491628e+00 1.276522e-06 9.700393e-02
                   Ireland queef
## 1020
                 Bangladesh shit
                                      2 2.486609e+00 1.263490e-06 9.522522e-02
## 1021
                                      9 9.954826e+00 2.479275e-06 9.158299e-02
                    Tanzania jap
## 1022
               New Zealand fanny
                                      2 2.472102e+00 1.225823e-06 9.015816e-02
## 1023
            South Africa poofter
                                      1 1.342367e+00 8.889621e-07 8.731996e-02
## 1024
                                      4 3.455593e+00 1.413568e-06 8.576782e-02
                     Canada gook
## 1025
               New Zealand lesbo
                                      2 2.431576e+00 1.120596e-06 7.659950e-02
## 1026
                                     27 2.845251e+01 3.771732e-06 7.415123e-02
                Australia tranny
## 1027
                     Kenya dildo
                                      8 7.271343e+00 1.891999e-06 7.301837e-02
## 1028
                                      1 1.304445e+00 7.904971e-07 7.105475e-02
                  Singapore gook
## 1029
                     India queef
                                      1 1.302927e+00 7.865531e-07 7.042951e-02
## 1030
                   Tanzania damn
                                    289 2.845410e+02 1.158641e-05 6.987674e-02
## 1031
                   Pakistan gook
                                      1 7.728629e-01 5.897640e-07 6.675346e-02
## 1032
                                     16 1.706056e+01 2.753874e-06 6.592922e-02
                Philippines dork
## 1033
                                      1 7.767447e-01 5.796849e-07 6.416903e-02
                     India pikey
## 1034
                                      2 2.391049e+00 1.015368e-06 6.395501e-02
                New Zealand gook
## 1035
               Sri Lanka poofter
                                      1 1.284894e+00 7.397308e-07 6.316823e-02
## 1036
                       India hoe
                                      2 1.678771e+00 8.340773e-07 6.146656e-02
## 1037
                                    304 3.083389e+02 1.127503e-05 6.105669e-02
                   Ireland whore
## 1038
                                    329 3.246501e+02 1.130418e-05 5.828427e-02
                    Canada pussy
## 1039
                 Australia fanny
                                      4 3.549291e+00 1.170280e-06 5.723364e-02
## 1040
                Australia online
                                    721 7.274301e+02 1.672726e-05 5.683785e-02
## 1041
                      Kenya pedo
                                     39 3.758491e+01 3.674655e-06 5.327905e-02
## 1042
                  Pakistan fanny
                                      1 7.990616e-01 5.217387e-07 5.052956e-02
## 1043
                                     19 1.805492e+01 2.454031e-06 4.947038e-02
                  Hong Kong shag
## 1044
               Malaysia bullshit
                                      1 8.033225e-01 5.106753e-07 4.815257e-02
## 1045
              New Zealand darkie
                                      5 5.511571e+00 1.328317e-06 4.748287e-02
## 1046
                    Ghana nympho
                                      2 2.330231e+00 8.574528e-07 4.679911e-02
## 1047
               Singapore jackass
                                     28 2.916209e+01 3.017614e-06 4.630888e-02
## 1048
                 Sri Lanka lesbo
                                      1 8.115119e-01 4.894115e-07 4.377974e-02
## 1049
                                      4 4.440687e+00 1.144259e-06 4.373305e-02
                   Pakistan shit
## 1050
                                     21 2.007677e+01 2.397301e-06 4.245488e-02
                 Ireland spastic
                                     42 4.334188e+01 3.484603e-06 4.154536e-02
## 1051
                  Tanzania whore
                                      6 6.516564e+00 1.341285e-06 4.094777e-02
## 1052
                  Ireland darkie
                                     10 1.065688e+01 1.705632e-06 4.048910e-02
## 1053
               Philippines dildo
## 1054
                    Ireland fart
                                    231 2.340692e+02 7.974155e-06 4.024560e-02
## 1055
                                      3 2.673767e+00 8.470711e-07 3.980444e-02
                Hong Kong nympho
## 1056
              United States pimp
                                   1544 1.536338e+03 1.997480e-05 3.821448e-02
## 1057
                 Sri Lanka fanny
                                      1 8.250371e-01 4.542932e-07 3.710382e-02
## 1058
                  Malaysia fanny
                                      1 1.195187e+00 5.068060e-07 3.187619e-02
## 1059
                   Australia eff
                                     24 2.315767e+01 2.187252e-06 3.063883e-02
## 1060
                                     30 3.096891e+01 2.515988e-06 3.031397e-02
                 Bangladesh slut
## 1061
                      India puke
                                     71 6.958129e+01 3.684361e-06 2.892653e-02
## 1062
                    Ireland dike
                                    110 1.082421e+02 4.565807e-06 2.855067e-02
                                      2 1.781514e+00 5.673016e-07 2.679515e-02
## 1063
                 Pakistan darkie
```

```
## 1064
                 Pakistan tranny
                                      6 6.405592e+00 1.053140e-06 2.568149e-02
## 1065
                                     13 1.358810e+01 1.527047e-06 2.545289e-02
                    Canada nonce
## 1066
               Philippines nonce
                                      4 3.695658e+00 7.902323e-07 2.506287e-02
                                   1054 1.059145e+03 1.339476e-05 2.498872e-02
## 1067
            United States retard
## 1068
              South Africa nonce
                                      3 3.278203e+00 7.223608e-07 2.360949e-02
## 1069
                    Canada skank
                                     42 4.298992e+01 2.570627e-06 2.279482e-02
## 1070
                Hong Kong pecker
                                      2 1.798039e+00 5.243964e-07 2.268495e-02
## 1071
                                      3 3.271324e+00 7.045014e-07 2.250372e-02
                    Jamaica tits
## 1072
              South Africa fanny
                                      1 8.619412e-01 3.584713e-07 2.211315e-02
## 1073
                                     18 1.742141e+01 1.502379e-06 1.921579e-02
                  Hong Kong frig
## 1074
                   Nigeria queef
                                      1 8.716781e-01 3.331893e-07 1.889059e-02
## 1075
                    Kenya tranny
                                      5 5.314928e+00 8.177225e-07 1.866053e-02
                                      6 6.339966e+00 8.827373e-07 1.822986e-02
## 1076
                 Philippines eff
## 1077
                    Pakistan hoe
                                      1 8.776578e-01 3.176628e-07 1.705403e-02
## 1078
                      Canada cum
                                     32 3.127605e+01 1.879899e-06 1.675746e-02
## 1079
                Singapore pecker
                                      4 4.267084e+00 6.934937e-07 1.671728e-02
## 1080
                       Ghana eff
                                      3 3.231471e+00 6.010200e-07 1.658028e-02
## 1081
                     Canada tits
                                     11 1.142103e+01 1.093235e-06 1.552094e-02
## 1082
                      Kenya fart
                                     54 5.309493e+01 2.350341e-06 1.542803e-02
## 1083
                 Pakistan nympho
                                      4 3.759519e+00 6.244152e-07 1.538252e-02
## 1084
               Hong Kong poofter
                                      1 8.850449e-01 2.984822e-07 1.493108e-02
## 1085
                     Ireland hoe
                                      3 3.210366e+00 5.462218e-07 1.378471e-02
## 1086
                                      1 1.123124e+00 3.196923e-07 1.349757e-02
                     Nigeria hoe
## 1087
                      Kenya twat
                                     21 2.153143e+01 1.379950e-06 1.311676e-02
## 1088
                                      2 2.161373e+00 4.190078e-07 1.204845e-02
                 Hong Kong nonce
## 1089
                  Singapore pimp
                                     98 9.694904e+01 2.729508e-06 1.139274e-02
## 1090
                    Ireland wank
                                    112 1.130816e+02 2.809098e-06 1.034448e-02
## 1091
                                      1 9.064791e-01 2.428282e-07 9.648503e-03
              Singapore bullshit
## 1092
                                     23 2.254722e+01 1.175711e-06 9.092407e-03
                      Ghana puke
## 1093
                    Ireland dork
                                     52 5.131794e+01 1.771196e-06 9.065044e-03
                                     77 7.781591e+01 2.118944e-06 8.554930e-03
## 1094
                Philippines fart
## 1095
                 Tanzania darkie
                                      1 9.160056e-01 2.180923e-07 7.701975e-03
## 1096
                      Kenya tits
                                      2 2.119450e+00 3.101534e-07 6.732039e-03
## 1097
                 Sri Lanka nonce
                                      3 3.137846e+00 3.579205e-07 6.055584e-03
## 1098
                     India nonce
                                      6 5.813057e+00 4.854064e-07 6.011943e-03
## 1099
                                      6 6.176682e+00 4.587627e-07 5.053922e-03
                 Hong Kong boner
## 1100
              Great Britain kike
                                      5 5.146767e+00 3.810877e-07 4.185286e-03
           Great Britain poofter
## 1101
                                     23 2.328300e+01 7.348445e-07 3.439703e-03
## 1102
                   Jamaica nonce
                                      4 3.892037e+00 2.803286e-07 2.994819e-03
## 1103
                 Bangladesh damn
                                    309 3.098798e+02 2.286333e-06 2.498089e-03
## 1104
              Philippines pecker
                                      3 3.074405e+00 1.931958e-07 1.800730e-03
## 1105
                Bangladesh dildo
                                      5 4.907201e+00 2.409565e-07 1.754906e-03
               South Africa dork
                                     15 1.513343e+01 3.464566e-07 1.176380e-03
## 1106
                                      2 2.042305e+00 1.098454e-07 8.763147e-04
## 1107
                  Sri Lanka jiss
## 1108
                                      3 2.958578e+00 1.075534e-07 5.799362e-04
                   Malaysia jiss
## 1109
                   Nigeria fanny
                                      1 1.022545e+00 5.853956e-08 4.970906e-04
                                      6 5.959546e+00 1.050395e-07 2.745998e-04
## 1110
                     Ghana skank
## 1111
               South Africa dike
                                     32 3.192008e+01 2.075176e-07 2.000761e-04
                 New Zealand jap
## 1112
                                     60 5.989781e+01 2.653732e-07 1.743370e-04
## 1113
                Philippines pedo
                                     55 5.508443e+01 2.192423e-07 1.293949e-04
##
  1114
                                      3 3.006857e+00 1.780534e-08 1.563877e-05
                Singapore darkie
##
             p.chisq sig.chisq
                                                      p.z sig.z
## 1
        0.000000e+00
                          TRUE 65.025371909 0.000000e+00
                                                           TRUE
## 2
        0.000000e+00
                          TRUE 62.285395244 0.000000e+00 TRUE
```

```
## 3
        0.000000e+00
                           TRUE 45.325756653 0.000000e+00
                                                              TRUE
## 4
        0.000000e+00
                           TRUE 43.954852024 0.000000e+00
                                                             TRUE
##
        8.891045e-09
                           TRUE 38.917110918 0.000000e+00
                                                              TRUE
                          FALSE 37.055278708 0.000000e+00
                                                             TRUE
##
   6
        1.066041e-03
##
        9.999998e-01
                          FALSE 31.354948879 0.000000e+00
                                                              TRUE
  8
        1.000000e+00
                          FALSE 30.516163513 0.000000e+00
##
                                                             TRUE
##
  9
        1.000000e+00
                          FALSE 29.559485804 0.000000e+00
                                                              TRUE
## 10
        1.000000e+00
                          FALSE 29.321085683 0.000000e+00
                                                              TRUE
##
        1.000000e+00
                          FALSE 28.703163609 0.000000e+00
                                                              TRUE
   11
##
   12
        1.000000e+00
                          FALSE 27.464157811 0.000000e+00
                                                              TRUE
##
   13
        1.000000e+00
                          FALSE 25.540342858 0.000000e+00
                                                              TRUE
##
   14
        1.000000e+00
                          FALSE 24.706489996 0.000000e+00
                                                              TRUE
##
                          FALSE 23.794075363 0.000000e+00
                                                             TRUE
   15
        1.000000e+00
        1.000000e+00
##
   16
                          FALSE 23.661843371 0.000000e+00
                                                              TRUE
##
   17
        1.000000e+00
                          FALSE 23.392718622 0.000000e+00
                                                              TRUE
##
                          FALSE 21.597086999 0.000000e+00
                                                              TRUE
   18
        1.000000e+00
##
                          FALSE 21.429269693 0.000000e+00
   19
        1.000000e+00
                                                              TRUE
                          FALSE 21.086495768 0.000000e+00
                                                              TRUE
##
   20
        1.000000e+00
##
   21
        1.000000e+00
                          FALSE 21.035666213 0.000000e+00
                                                             TRUE
##
   22
        1.000000e+00
                          FALSE 21.023889714 0.000000e+00
                                                              TRUE
##
   23
        1.000000e+00
                          FALSE 21.006152941 0.000000e+00
                                                             TRUE
##
   24
        1.000000e+00
                          FALSE 20.981416071 0.000000e+00
                                                              TRUF
##
  25
                          FALSE 20.865991503 0.000000e+00
                                                              TRUE
        1.000000e+00
##
   26
        1.000000e+00
                          FALSE 20.592614472 0.000000e+00
                                                              TRUE
                          FALSE 20.237834681 0.000000e+00
##
   27
        1.000000e+00
                                                             TRUE
##
   28
        1.000000e+00
                          FALSE 20.184502413 0.000000e+00
                                                             TRUE
##
   29
        1.000000e+00
                          FALSE 19.738199175 0.000000e+00
                                                              TRUE
##
   30
        1.000000e+00
                          FALSE 19.443741227 0.000000e+00
                                                              TRUE
##
   31
        1.000000e+00
                          FALSE 19.299233336 0.000000e+00
                                                              TRUE
##
   32
                          FALSE 19.292876763 0.000000e+00
                                                              TRUE
        1.000000e+00
##
   33
        1.000000e+00
                          FALSE 19.181612780 0.000000e+00
                                                              TRUE
##
   34
        1.000000e+00
                          FALSE 18.933579927 0.000000e+00
                                                              TRUE
##
   35
        1.000000e+00
                          FALSE 18.473010989 0.000000e+00
                                                              TRUE
##
   36
                          FALSE 18.294718404 0.000000e+00
                                                              TRUE
        1.000000e+00
   37
                          FALSE 17.995278456 0.000000e+00
                                                              TRUE
##
        1.000000e+00
##
   38
        1.000000e+00
                          FALSE 17.885716806 0.000000e+00
                                                             TRUE
##
   39
        1.000000e+00
                          FALSE 17.729976211 0.000000e+00
                                                              TRUE
##
                          FALSE 17.622483904 0.000000e+00
   40
        1.000000e+00
                                                              TRUE
##
   41
        1.000000e+00
                          FALSE 17.401751252 0.000000e+00
                                                              TRUE
##
        1.000000e+00
                          FALSE 17.009159177 0.000000e+00
   42
                                                             TRUE
##
   43
        1.000000e+00
                          FALSE 16.917488207 0.000000e+00
                                                             TRUE
                                                             TRUE
##
   44
        1.000000e+00
                          FALSE 16.786868492 0.000000e+00
##
   45
        1.000000e+00
                          FALSE 15.830890258 0.000000e+00
                                                             TRUE
##
   46
        1.000000e+00
                          FALSE 15.760335681 0.000000e+00
                                                              TRUE
##
   47
        1.000000e+00
                          FALSE 15.491886721 0.000000e+00
                                                              TRUE
##
   48
        1.000000e+00
                          FALSE 15.423039177 0.000000e+00
                                                              TRUE
##
   49
        1.000000e+00
                          FALSE 15.313922403 0.000000e+00
                                                             TRUE
##
   50
        1.000000e+00
                          FALSE 15.192256270 0.000000e+00
                                                              TRUE
##
   51
        1.000000e+00
                          FALSE 15.134744108 0.000000e+00
                                                             TRUE
##
   52
        1.000000e+00
                          FALSE 14.851821652 0.000000e+00
                                                              TRUE
##
   53
                          FALSE 14.846516220 0.000000e+00
                                                             TRUE
        1.000000e+00
##
  54
        1.000000e+00
                          FALSE 14.755523767 0.000000e+00
                                                              TRUE
##
  55
                          FALSE 14.624462235 0.000000e+00
                                                             TRUE
        1.000000e+00
## 56
        1.000000e+00
                          FALSE 14.622934202 0.000000e+00
                                                             TRUE
```

```
## 57
        1.000000e+00
                          FALSE 14.478664518 0.000000e+00
                                                              TRUE
##
   58
        1.000000e+00
                          FALSE 14.465617543 0.000000e+00
                                                             TRUE
##
   59
        1.000000e+00
                          FALSE 14.365880740 0.000000e+00
                                                              TRUE
                                                             TRUE
##
   60
        1.000000e+00
                          FALSE 13.963713495 0.000000e+00
##
   61
        1.000000e+00
                          FALSE 13.923727010 0.000000e+00
                                                              TRUE
        1.000000e+00
                          FALSE 13.889225354 0.000000e+00
##
   62
                                                             TRUE
##
   63
        1.000000e+00
                          FALSE 13.637778686 0.000000e+00
                                                              TRUE
##
   64
        1.000000e+00
                          FALSE 13.298152221 0.000000e+00
                                                              TRUE
##
   65
        1.000000e+00
                          FALSE 13.283643172 0.000000e+00
                                                              TRUE
##
   66
        1.000000e+00
                          FALSE 13.204225056 0.000000e+00
                                                              TRUE
##
   67
        1.000000e+00
                          FALSE 13.143483297 0.000000e+00
                                                              TRUE
##
   68
        1.000000e+00
                          FALSE 13.117043396 0.000000e+00
                                                              TRUE
##
                          FALSE 12.975428284 0.000000e+00
                                                             TRUE
   69
        1.000000e+00
        1.000000e+00
##
   70
                          FALSE 12.961020998 0.000000e+00
                                                              TRUE
  71
##
        1.000000e+00
                          FALSE 12.940633565 0.000000e+00
                                                              TRUE
##
   72
                          FALSE 12.792904609 0.000000e+00
                                                              TRUE
        1.000000e+00
   73
##
        1.000000e+00
                          FALSE 12.669890078 0.000000e+00
                                                              TRUE
                          FALSE 12.540559852 0.000000e+00
                                                              TRUE
##
   74
        1.000000e+00
##
   75
                          FALSE 12.518446183 0.000000e+00
                                                             TRUE
        1.000000e+00
##
   76
        1.000000e+00
                          FALSE 12.509913134 0.000000e+00
                                                              TRUE
##
   77
        1.000000e+00
                          FALSE 12.459512389 0.000000e+00
                                                             TRUE
##
   78
        1.000000e+00
                          FALSE 12.383300357 0.000000e+00
                                                              TRUE
##
  79
                          FALSE 12.038889931 0.000000e+00
                                                              TRUE
        1.000000e+00
##
   80
        1.000000e+00
                          FALSE 12.014719373 0.000000e+00
                                                              TRUE
##
   81
        1.000000e+00
                          FALSE 11.826623109 0.000000e+00
                                                             TRUE
##
   82
        1.000000e+00
                          FALSE 11.710187495 0.000000e+00
                                                             TRUE
##
   83
        1.000000e+00
                          FALSE 11.649862556 0.000000e+00
                                                              TRUE
##
   84
        1.000000e+00
                          FALSE 11.625481180 0.000000e+00
                                                              TRUE
##
   85
        1.000000e+00
                          FALSE 11.525421628 0.000000e+00
                                                              TRUE
##
   86
                          FALSE 11.365476346 0.000000e+00
                                                              TRUE
        1.000000e+00
##
   87
        1.000000e+00
                          FALSE 11.344753767 0.000000e+00
                                                              TRUE
##
   88
        1.000000e+00
                          FALSE 11.212734797 0.000000e+00
                                                              TRUE
##
   89
        1.000000e+00
                          FALSE 11.139050953 0.000000e+00
                                                              TRUE
##
   90
                          FALSE 11.116538194 0.000000e+00
                                                              TRUE
        1.000000e+00
                                                              TRUE
##
   91
        1.000000e+00
                          FALSE 11.105065654 0.000000e+00
##
   92
        1.000000e+00
                          FALSE 11.067904527 0.000000e+00
                                                             TRUE
##
   93
        1.000000e+00
                          FALSE 10.998933233 0.000000e+00
                                                              TRUE
  94
##
        1.000000e+00
                          FALSE 10.962568193 0.000000e+00
                                                              TRUE
##
   95
        1.000000e+00
                          FALSE 10.912925951 0.000000e+00
                                                              TRUE
##
                          FALSE 10.872595826 0.000000e+00
   96
        1.000000e+00
                                                             TRUE
##
   97
        1.000000e+00
                          FALSE 10.853668851 0.000000e+00
                                                             TRUE
                                                             TRUE
##
   98
        1.000000e+00
                          FALSE 10.777735132 0.000000e+00
##
   99
        1.000000e+00
                          FALSE 10.706166453 0.000000e+00
                                                             TRUE
##
   100
        1.000000e+00
                          FALSE 10.705306683 0.000000e+00
                                                              TRUE
##
   101
        1.000000e+00
                          FALSE 10.616698148 0.000000e+00
                                                              TRUE
##
   102
        1.000000e+00
                          FALSE 10.579374845 0.000000e+00
                                                              TRUE
##
   103
        1.000000e+00
                          FALSE 10.541901456 0.000000e+00
                                                             TRUE
##
   104
        1.000000e+00
                          FALSE 10.389556154 0.000000e+00
                                                              TRUE
##
   105
        1.000000e+00
                          FALSE 10.342453135 0.000000e+00
                                                             TRUE
   106
        1.000000e+00
                          FALSE 10.269400719 0.000000e+00
                                                              TRUE
##
##
                          FALSE 10.225397767 0.000000e+00
                                                             TRUE
   107
        1.000000e+00
##
   108
        1.000000e+00
                          FALSE 10.152887930 0.000000e+00
                                                              TRUE
## 109
        1.000000e+00
                          FALSE 10.146166728 0.000000e+00
                                                             TRUE
        1.000000e+00
                          FALSE 10.022354026 0.000000e+00
                                                             TRUE
## 110
```

```
1.000000e+00
                          FALSE 10.020713024 0.000000e+00
                                                              TRUE
## 111
##
        1.000000e+00
                          FALSE 10.013696943 0.000000e+00
                                                              TRUE
   112
##
   113
        1.000000e+00
                          FALSE
                                  9.952813501 0.000000e+00
                                                              TRUE
                          FALSE
                                                              TRUE
##
   114
        1.000000e+00
                                  9.940777996 0.000000e+00
##
   115
        1.000000e+00
                          FALSE
                                  9.888599964 0.000000e+00
                                                              TRUE
                                                              TRUE
##
        1.000000e+00
                          FALSE
                                  9.874114249 0.000000e+00
   116
##
  117
        1.000000e+00
                          FALSE
                                  9.852890026 0.000000e+00
                                                              TRUE
##
  118
        1.000000e+00
                          FALSE
                                  9.658205225 0.000000e+00
                                                              TRUE
##
   119
        1.000000e+00
                          FALSE
                                  9.632708766 0.000000e+00
                                                              TRUE
##
   120
        1.000000e+00
                          FALSE
                                  9.619349982 0.000000e+00
                                                              TRUE
##
   121
        1.000000e+00
                          FALSE
                                  9.538320240 0.000000e+00
                                                              TRUE
##
   122
        1.000000e+00
                          FALSE
                                  9.525574263 0.000000e+00
                                                              TRUE
##
   123
                          FALSE
                                  9.457197831 0.000000e+00
                                                              TRUE
        1.000000e+00
                          FALSE
##
   124
        1.000000e+00
                                  9.417460280 0.000000e+00
                                                              TRUE
   125
##
        1.000000e+00
                          FALSE
                                  9.361764235 0.000000e+00
                                                              TRUE
                          FALSE
                                  9.359850044 0.000000e+00
                                                              TRUE
##
   126
        1.000000e+00
##
                          FALSE
   127
        1.000000e+00
                                  9.213173056 0.000000e+00
                                                              TRUE
                                  9.187576022 0.000000e+00
                                                              TRUE
##
   128
        1.000000e+00
                          FALSE
##
   129
        1.000000e+00
                          FALSE
                                  9.177900736 0.000000e+00
                                                              TRUE
##
   130
        1.000000e+00
                          FALSE
                                  9.159175945 0.000000e+00
                                                              TRUE
##
   131
        1.000000e+00
                          FALSE
                                  9.039154533 0.000000e+00
                                                              TRUE
##
   132
        1.000000e+00
                          FALSE
                                  9.002192818 0.000000e+00
                                                              TRUF
   133
##
        1.000000e+00
                          FALSE
                                  8.997788396 0.000000e+00
                                                              TRUE
##
   134
        1.000000e+00
                          FALSE
                                  8.902981833 0.000000e+00
                                                              TRUE
##
   135
        1.000000e+00
                          FALSE
                                  8.895877129 0.000000e+00
                                                              TRUE
##
   136
        1.000000e+00
                          FALSE
                                  8.851186989 0.000000e+00
                                                              TRUE
##
   137
        1.000000e+00
                          FALSE
                                  8.814082813 0.000000e+00
                                                              TRUE
##
   138
        1.000000e+00
                          FALSE
                                  8.725374031 0.000000e+00
                                                              TRUE
##
   139
        1.000000e+00
                          FALSE
                                  8.696170124 0.000000e+00
                                                              TRUE
##
   140
                          FALSE
                                  8.684845674 0.000000e+00
                                                              TRUE
        1.000000e+00
##
   141
        1.000000e+00
                          FALSE
                                  8.668320441 0.000000e+00
                                                              TRUE
##
   142
        1.000000e+00
                          FALSE
                                  8.656456666 0.000000e+00
                                                              TRUE
##
   143
        1.000000e+00
                          FALSE
                                  8.579569205 0.000000e+00
                                                              TRUE
   144
                          FALSE
                                  8.531734056 0.000000e+00
                                                              TRUE
##
        1.000000e+00
                          FALSE
                                                              TRUE
##
   145
        1.000000e+00
                                  8.484710651 0.000000e+00
##
   146
        1.000000e+00
                          FALSE
                                  8.431147846 0.000000e+00
                                                              TRUE
##
   147
        1.000000e+00
                          FALSE
                                  8.385325484 0.000000e+00
                                                              TRUE
   148
                          FALSE
##
        1.000000e+00
                                  8.361192887 0.000000e+00
                                                              TRUE
##
   149
        1.000000e+00
                          FALSE
                                  8.353607307 0.000000e+00
                                                              TRUE
   150
##
                          FALSE
                                  8.327642241 0.000000e+00
        1.000000e+00
                                                              TRUE
##
   151
        1.000000e+00
                          FALSE
                                  8.318401844 0.000000e+00
                                                              TRUE
##
   152
        1.000000e+00
                          FALSE
                                  8.314555081 0.000000e+00
                                                              TRUE
##
   153
        1.000000e+00
                          FALSE
                                  8.255505268 1.110223e-16
                                                              TRUE
##
   154
        1.000000e+00
                          FALSE
                                  8.254075252 1.110223e-16
                                                              TRUE
##
   155
        1.000000e+00
                          FALSE
                                  8.204150242 1.110223e-16
                                                              TRUE
##
   156
        1.000000e+00
                          FALSE
                                  8.108692529 2.220446e-16
                                                              TRUE
##
   157
        1.000000e+00
                          FALSE
                                  8.103995068 2.220446e-16
                                                              TRUE
##
   158
        1.000000e+00
                          FALSE
                                  8.048695064 4.440892e-16
                                                              TRUE
##
   159
        1.000000e+00
                          FALSE
                                  8.018315167 5.551115e-16
                                                              TRUE
   160
        1.000000e+00
                          FALSE
                                  7.986414891 6.661338e-16
                                                              TRUE
##
##
                          FALSE
                                  7.964544266 7.771561e-16
                                                              TRUE
   161
        1.000000e+00
##
   162
        1.000000e+00
                          FALSE
                                  7.873223709 1.776357e-15
                                                              TRUE
##
        1.000000e+00
                          FALSE
                                  7.866214782 1.776357e-15
                                                              TRUE
  163
        1.000000e+00
                          FALSE
                                  7.848685416 2.109424e-15
##
  164
                                                              TRUE
```

```
## 165
        1.000000e+00
                          FALSE
                                  7.842531394 2.220446e-15
                                                              TRUE
##
   166
        1.000000e+00
                          FALSE
                                  7.792582658 3.330669e-15
                                                              TRUE
##
   167
        1.000000e+00
                          FALSE
                                  7.735603273 5.107026e-15
                                                              TRUE
                          FALSE
                                                              TRUE
##
   168
        1.000000e+00
                                  7.716040832 5.995204e-15
##
   169
        1.000000e+00
                          FALSE
                                  7.690212607 7.327472e-15
                                                              TRUE
        1.000000e+00
                          FALSE
                                  7.667514632 8.770762e-15
                                                              TRUE
##
   170
##
  171
        1.000000e+00
                          FALSE
                                  7.656134538 9.547918e-15
                                                              TRUE
##
  172
        1.000000e+00
                          FALSE
                                  7.646682779 1.032507e-14
                                                              TRUE
##
   173
        1.000000e+00
                          FALSE
                                  7.622499953 1.243450e-14
                                                              TRUE
##
   174
        1.000000e+00
                          FALSE
                                  7.568150936 1.887379e-14
                                                              TRUE
##
   175
        1.000000e+00
                          FALSE
                                  7.547883705 2.209344e-14
                                                              TRUE
##
   176
        1.000000e+00
                          FALSE
                                  7.543841479 2.287059e-14
                                                              TRUE
##
        1.000000e+00
                          FALSE
                                  7.543486727 2.287059e-14
                                                              TRUE
   177
                          FALSE
##
   178
        1.000000e+00
                                  7.507547929 3.008704e-14
                                                              TRUE
##
   179
        1.000000e+00
                          FALSE
                                  7.469326974 4.030110e-14
                                                              TRUE
   180
                          FALSE
                                  7.428893950 5.473400e-14
                                                              TRUE
##
        1.000000e+00
##
   181
                          FALSE
                                  7.410244727 6.306067e-14
        1.000000e+00
                                                              TRUE
                          FALSE
                                  7.390833513 7.294165e-14
                                                              TRUE
##
   182
        1.000000e+00
##
   183
        1.000000e+00
                          FALSE
                                  7.377731163 8.049117e-14
                                                              TRUE
##
   184
        1.000000e+00
                          FALSE
                                  7.332105616 1.132427e-13
                                                              TRUE
##
   185
        1.000000e+00
                          FALSE
                                  7.136233219 4.796163e-13
                                                              TRUE
##
   186
        1.000000e+00
                          FALSE
                                  7.096346604 6.404877e-13
                                                              TRUF
   187
##
        1.000000e+00
                          FALSE
                                  7.088039994 6.801226e-13
                                                              TRUE
##
   188
        1.000000e+00
                          FALSE
                                  7.047681388 9.096057e-13
                                                              TRUE
##
   189
        1.000000e+00
                          FALSE
                                  7.046981314 9.141576e-13
                                                              TRUE.
##
   190
        1.000000e+00
                          FALSE
                                  7.046210905 9.192647e-13
                                                              TRUE
                          FALSE
                                                              TRUE
##
   191
        1.000000e+00
                                  7.030949486 1.025624e-12
##
   192
        1.000000e+00
                          FALSE
                                  7.028235674 1.045830e-12
                                                              TRUE
##
   193
        1.000000e+00
                          FALSE
                                  7.009274090 1.197820e-12
                                                              TRUE
##
   194
                          FALSE
                                  6.999652977 1.282974e-12
                                                              TRUE
        1.000000e+00
##
   195
        1.000000e+00
                          FALSE
                                  6.998344544 1.295075e-12
                                                              TRUE
##
   196
        1.000000e+00
                          FALSE
                                  6.978836327 1.488143e-12
                                                              TRUE
##
   197
        1.000000e+00
                          FALSE
                                  6.940226173 1.957323e-12
                                                              TRUE
   198
                          FALSE
                                  6.936920305 2.003731e-12
                                                              TRUE
##
        1.000000e+00
                          FALSE
                                  6.926104735 2.162936e-12
                                                              TRUE
##
   199
        1.000000e+00
                          FALSE
##
   200
        1.000000e+00
                                  6.915396130 2.332801e-12
                                                              TRUE
##
   201
        1.000000e+00
                          FALSE
                                  6.896860784 2.658207e-12
                                                              TRUE
  202
                          FALSE
                                  6.846091992 3.794742e-12
##
        1.000000e+00
                                                              TRUE
                          FALSE
##
   203
        1.000000e+00
                                  6.838652038 3.997136e-12
                                                              TRUE
##
   204
        1.000000e+00
                          FALSE
                                  6.793655126 5.466405e-12
                                                              TRUE
##
   205
        1.000000e+00
                          FALSE
                                  6.785310800 5.791811e-12
                                                              TRUE
                          FALSE
                                                              TRUE
##
   206
        1.000000e+00
                                  6.731885775 8.373857e-12
##
   207
        1.000000e+00
                          FALSE
                                  6.710645554 9.688250e-12
                                                              TRUE
##
   208
        1.000000e+00
                          FALSE
                                  6.653863802 1.427480e-11
                                                              TRUE
##
   209
        1.000000e+00
                          FALSE
                                  6.629104940 1.688638e-11
                                                              TRUE
##
   210
        1.000000e+00
                          FALSE
                                  6.628191401 1.699119e-11
                                                              TRUE
##
   211
        1.000000e+00
                          FALSE
                                  6.567269201 2.562317e-11
                                                              TRUE
##
   212
        1.000000e+00
                          FALSE
                                  6.563207882 2.633116e-11
                                                              TRUE
##
  213
        1.000000e+00
                          FALSE
                                  6.539635409 3.083445e-11
                                                              TRUE
##
   214
        1.000000e+00
                          FALSE
                                  6.493507862 4.193024e-11
                                                              TRUE
                          FALSE
                                  6.478385539 4.635459e-11
##
   215
        1.000000e+00
                                                              TRUE
## 216
        1.000000e+00
                          FALSE
                                  6.466223414 5.024126e-11
                                                              TRUE
## 217
        1.000000e+00
                          FALSE
                                  6.456108023 5.371492e-11
                                                              TRUE
## 218
        1.000000e+00
                          FALSE
                                  6.430433846 6.362011e-11
                                                              TRUE
```

```
## 219
        1.000000e+00
                          FALSE
                                  6.373657716 9.228618e-11
                                                              TRUE
##
  220
        1.000000e+00
                          FALSE
                                  6.366015276 9.700107e-11
                                                              TRUE
##
   221
        1.000000e+00
                          FALSE
                                  6.363731321 9.845524e-11
                                                              TRUE
   222
                          FALSE
                                                              TRUE
##
        1.000000e+00
                                  6.360629699 1.004642e-10
##
   223
        1.000000e+00
                          FALSE
                                  6.358565540 1.018232e-10
                                                              TRUE
##
   224
        1.000000e+00
                          FALSE
                                  6.355173917 1.040955e-10
                                                              TRUE
##
   225
        1.000000e+00
                          FALSE
                                  6.351904597 1.063326e-10
                                                              TRUE
##
   226
        1.000000e+00
                          FALSE
                                  6.346448568 1.101711e-10
                                                              TRUE
##
   227
        1.000000e+00
                          FALSE
                                  6.336921619 1.172006e-10
                                                              TRUE
##
   228
        1.000000e+00
                          FALSE
                                  6.280844738 1.683692e-10
                                                              TRUE
##
   229
        1.000000e+00
                          FALSE
                                  6.226679343 2.382124e-10
                                                              TRUE
##
   230
        1.000000e+00
                          FALSE
                                  6.092562959 5.555856e-10
                                                              TRUE
##
   231
        1.000000e+00
                          FALSE
                                  6.047270104 7.366033e-10
                                                              TRUE
                                  6.036201821 7.889195e-10
##
   232
        1.000000e+00
                          FALSE
                                                              TRUE
   233
##
        1.000000e+00
                          FALSE
                                  6.016034931 8.937051e-10
                                                              TRUE
   234
                          FALSE
                                  5.973001061 1.164642e-09
                                                              TRUE
##
        1.000000e+00
##
   235
                          FALSE
                                  5.964108572 1.229866e-09
        1.000000e+00
                                                              TRUE
   236
                          FALSE
                                  5.960545067 1.256990e-09
                                                              TRUE
##
        1.000000e+00
   237
##
        1.000000e+00
                          FALSE
                                  5.952455767 1.320743e-09
                                                              TRUE
##
   238
        1.000000e+00
                          FALSE
                                  5.950708590 1.334920e-09
                                                              TRUE
##
   239
        1.000000e+00
                          FALSE
                                  5.941611257 1.411170e-09
                                                              TRUE
##
   240
        1.000000e+00
                          FALSE
                                  5.931461058 1.501254e-09
                                                              TRUF
##
  241
        1.000000e+00
                          FALSE
                                  5.916708463 1.642241e-09
                                                              TRUE
##
   242
        1.000000e+00
                          FALSE
                                  5.913653048 1.673012e-09
                                                              TRUE
##
   243
        1.000000e+00
                          FALSE
                                  5.901350671 1.802688e-09
                                                              TRUE
##
   244
        1.000000e+00
                          FALSE
                                  5.895806925 1.864274e-09
                                                              TRUE
   245
                                                              TRUE
##
        1.000000e+00
                          FALSE
                                  5.864624952 2.250745e-09
##
   246
        1.000000e+00
                          FALSE
                                  5.853766149 2.402821e-09
                                                              TRUE
##
   247
        1.000000e+00
                          FALSE
                                  5.839036074 2.625185e-09
                                                              TRUE
##
   248
                          FALSE
                                  5.820051949 2.941467e-09
                                                              TRUE
        1.000000e+00
##
   249
        1.000000e+00
                          FALSE
                                  5.818147237 2.975174e-09
                                                              TRUE
##
   250
        1.000000e+00
                          FALSE
                                  5.807456410 3.171453e-09
                                                              TRUE
##
   251
        1.000000e+00
                          FALSE
                                  5.784092067 3.645250e-09
                                                              TRUE
   252
##
        1.000000e+00
                          FALSE
                                  5.776327670 3.817431e-09
                                                              TRUE
   253
                          FALSE
                                  5.764043730 4.106106e-09
                                                              TRUE
##
        1.000000e+00
                          FALSE
##
   254
        1.000000e+00
                                  5.743645390 4.632987e-09
                                                              TRUE
##
   255
        1.000000e+00
                          FALSE
                                  5.704726434 5.826505e-09
                                                              TRUE
   256
                          FALSE
##
        1.000000e+00
                                  5.674672736 6.947702e-09
                                                              TRUE
                          FALSE
##
   257
        1.000000e+00
                                  5.667799865 7.232139e-09
                                                              TRUE
##
   258
        1.000000e+00
                          FALSE
                                  5.627972793 9.116992e-09
                                                              TRUE
##
   259
        1.000000e+00
                          FALSE
                                  5.624995139 9.275660e-09
                                                              TRUE
                          FALSE
                                  5.615887379 9.777800e-09
                                                              TRUE
##
   260
        1.000000e+00
##
   261
        1.000000e+00
                          FALSE
                                  5.605891060 1.035931e-08
                                                              TRUE
##
   262
        1.000000e+00
                          FALSE
                                  5.604862455 1.042102e-08
                                                              TRUE
##
   263
        1.000000e+00
                          FALSE
                                  5.583018607 1.181897e-08
                                                              TRUE
##
   264
        1.000000e+00
                          FALSE
                                  5.575395854 1.234838e-08
                                                              TRUE
##
   265
        1.000000e+00
                          FALSE
                                  5.563192066 1.324420e-08
                                                              TRUE
##
   266
        1.000000e+00
                          FALSE
                                  5.510185671 1.792277e-08
                                                              TRUE
##
   267
        1.000000e+00
                          FALSE
                                  5.501334030 1.884642e-08
                                                              TRUE
##
   268
        1.000000e+00
                          FALSE
                                  5.486053315 2.055064e-08
                                                              TRUE
                          FALSE
##
   269
        1.000000e+00
                                  5.482668540 2.094788e-08
                                                              TRUE
##
  270
        1.000000e+00
                          FALSE
                                  5.453263224 2.472689e-08
                                                              TRUE
## 271
        1.000000e+00
                          FALSE
                                  5.399202589 3.346888e-08
                                                              TRUE
## 272
        1.000000e+00
                          FALSE
                                  5.397739800 3.374282e-08
                                                              TRUE
```

```
## 273
        1.000000e+00
                          FALSE
                                  5.369162419 3.955158e-08
                                                              TRUE
##
  274
        1.000000e+00
                          FALSE
                                  5.367105095 4.000522e-08
                                                              TRUE
##
   275
        1.000000e+00
                          FALSE
                                  5.325888251 5.023044e-08
                                                              TRUE
                          FALSE
                                  5.293467234 6.000938e-08
                                                              TRUE
##
   276
        1.000000e+00
##
   277
        1.000000e+00
                          FALSE
                                  5.258354022 7.267525e-08
                                                              TRUE
   278
        1.000000e+00
                          FALSE
                                  5.251185756 7.556159e-08
##
                                                              TRUE
##
   279
        1.000000e+00
                          FALSE
                                  5.231809135 8.392951e-08
                                                              TRUE
##
   280
        1.000000e+00
                          FALSE
                                  5.200119470 9.958023e-08
                                                              TRUE
##
   281
        1.000000e+00
                          FALSE
                                  5.189962427 1.051683e-07
                                                              TRUE
##
   282
        1.000000e+00
                          FALSE
                                  5.179677206 1.111351e-07
                                                              TRUE
##
   283
        1.000000e+00
                          FALSE
                                  5.170634586 1.166502e-07
                                                              TRUE
##
   284
        1.000000e+00
                          FALSE
                                  5.114100474 1.576198e-07
                                                              TRUE
##
   285
                          FALSE
                                  5.107015051 1.636438e-07
                                                              TRUE
        1.000000e+00
                          FALSE
##
   286
        1.000000e+00
                                  5.079075559 1.896379e-07
                                                              TRUE
   287
##
        1.000000e+00
                          FALSE
                                  5.073374037 1.954116e-07
                                                              TRUE
   288
                          FALSE
                                  5.070970915 1.978956e-07
                                                              TRUE
##
        1.000000e+00
   289
                          FALSE
                                  5.051006258 2.197443e-07
                                                              TRUE
##
        1.000000e+00
   290
                                  5.029514469 2.458617e-07
                                                              TRUE
##
        1.000000e+00
                          FALSE
##
   291
        1.000000e+00
                          FALSE
                                  5.020521948 2.576563e-07
                                                              TRUE
##
   292
        1.000000e+00
                          FALSE
                                  5.003686332 2.812212e-07
                                                              TRUE
##
   293
        1.000000e+00
                          FALSE
                                  4.993573714 2.963607e-07
                                                              TRUE
##
   294
        1.000000e+00
                          FALSE
                                  4.993423258 2.965918e-07
                                                              TRUF
##
   295
        1.000000e+00
                          FALSE
                                  4.958555258 3.550967e-07
                                                              TRUE
##
   296
        1.000000e+00
                          FALSE
                                  4.958259050 3.556384e-07
                                                              TRUE
##
   297
        1.000000e+00
                          FALSE
                                  4.937465034 3.957230e-07
                                                              TRUE
##
   298
        1.000000e+00
                          FALSE
                                  4.935803133 3.991080e-07
                                                              TRUE
   299
                                                              TRUE
##
        1.000000e+00
                          FALSE
                                  4.931950902 4.070619e-07
##
   300
        1.000000e+00
                          FALSE
                                  4.902601404 4.728788e-07
                                                              TRUE
##
   301
        1.000000e+00
                          FALSE
                                  4.886037225 5.144288e-07
                                                              TRUE
##
   302
                          FALSE
                                  4.868938495 5.609966e-07
                                                              TRUE
        1.000000e+00
##
   303
        1.000000e+00
                          FALSE
                                  4.861100311 5.836754e-07
                                                              TRUE
##
   304
        1.000000e+00
                          FALSE
                                  4.851280021 6.133361e-07
                                                              TRUE
##
   305
        1.000000e+00
                          FALSE
                                  4.841169514 6.453860e-07
                                                              TRUE
##
   306
                          FALSE
                                  4.839692826 6.501998e-07
                                                              TRUE
        1.000000e+00
                          FALSE
                                  4.839287070 6.515286e-07
                                                              TRUE
##
   307
        1.000000e+00
                          FALSE
##
   308
        1.000000e+00
                                  4.828849049 6.866223e-07
                                                              TRUE
##
   309
        1.000000e+00
                          FALSE
                                  4.782923197 8.638207e-07
                                                              TRUF
  310
                          FALSE
##
        1.000000e+00
                                  4.746765799 1.033475e-06
                                                              TRUE
                          FALSE
##
   311
        1.000000e+00
                                  4.743793045 1.048766e-06
                                                              TRUE
##
        1.000000e+00
                          FALSE
                                  4.740690600 1.064955e-06
                                                              TRUE
   312
##
   313
        1.000000e+00
                          FALSE
                                  4.737071456 1.084144e-06
                                                              TRUE
                          FALSE
                                                              TRUE
##
   314
        1.000000e+00
                                  4.724148082 1.155410e-06
##
   315
        1.000000e+00
                          FALSE
                                  4.710476383 1.235692e-06
                                                              TRUE
##
   316
        1.000000e+00
                          FALSE
                                  4.688780140 1.374192e-06
                                                              TRUE
##
   317
        1.000000e+00
                          FALSE
                                  4.677005017 1.455476e-06
                                                              TRUE
##
   318
        1.000000e+00
                          FALSE
                                  4.673026849 1.483965e-06
                                                              TRUE
##
   319
        1.000000e+00
                          FALSE
                                  4.664754902 1.544926e-06
                                                              TRUE
##
   320
        1.000000e+00
                          FALSE
                                  4.634996013 1.784722e-06
                                                              TRUE
##
   321
        1.000000e+00
                          FALSE
                                  4.625902943 1.864850e-06
                                                              TRUE
##
   322
        1.000000e+00
                          FALSE
                                  4.607818103 2.034582e-06
                                                              TRUE
##
   323
        1.000000e+00
                          FALSE
                                  4.605459623 2.057779e-06
                                                              TRUE
##
   324
        1.000000e+00
                          FALSE
                                  4.604604102 2.066256e-06
                                                              TRUE
##
  325
        1.000000e+00
                          FALSE
                                  4.588196416 2.235459e-06
                                                              TRUE
## 326
        1.000000e+00
                          FALSE
                                  4.586595864 2.252658e-06
                                                              TRUE
```

```
327
        1.000000e+00
                          FALSE
                                  4.585197973 2.267782e-06
                                                              TRUE
##
   328
        1.000000e+00
                          FALSE
                                  4.577975857 2.347484e-06
                                                              TRUE
##
   329
        1.000000e+00
                          FALSE
                                  4.555411084 2.614161e-06
                                                              TRUE
   330
                          FALSE
                                  4.549425744 2.689626e-06
                                                              TRUE
##
        1.000000e+00
##
   331
        1.000000e+00
                          FALSE
                                  4.546712069 2.724523e-06
                                                              TRUE
   332
        1.000000e+00
                          FALSE
                                  4.539560274 2.818583e-06
##
                                                              TRUE
##
   333
        1.000000e+00
                          FALSE
                                  4.536828399 2.855327e-06
                                                              TRUE
##
   334
        1.000000e+00
                          FALSE
                                  4.523573930 3.040203e-06
                                                              TRUE
##
   335
        1.000000e+00
                          FALSE
                                  4.515255384 3.162025e-06
                                                              TRUE
##
   336
        1.000000e+00
                          FALSE
                                  4.492301113 3.522885e-06
                                                              TRUE
##
   337
        1.000000e+00
                          FALSE
                                  4.486813905 3.614808e-06
                                                              TRUE
##
   338
        1.000000e+00
                          FALSE
                                  4.483633889 3.669126e-06
                                                              TRUE
   339
                          FALSE
                                  4.474267673 3.833682e-06
                                                              TRUE
##
        1.000000e+00
                          FALSE
                                  4.473545061 3.846667e-06
##
   340
        1.000000e+00
                                                              TRUE
   341
##
        1.000000e+00
                          FALSE
                                  4.443095627 4.433687e-06
                                                              TRUE
   342
        1.000000e+00
                          FALSE
                                  4.442593298 4.444054e-06
                                                              TRUE
##
                          FALSE
                                  4.440486351 4.487790e-06
##
   343
        1.000000e+00
                                                              TRUE
   344
                          FALSE
                                  4.403604313 5.323353e-06
                                                              TRUE
##
        1.000000e+00
##
   345
        1.000000e+00
                          FALSE
                                  4.402390276 5.353237e-06
                                                              TRUE
##
   346
        1.000000e+00
                          FALSE
                                  4.387544116 5.731887e-06
                                                              TRUE
##
   347
        1.000000e+00
                          FALSE
                                  4.359870993 6.506957e-06
                                                              TRUE
##
   348
        1.000000e+00
                          FALSE
                                  4.357854330 6.567188e-06
                                                              TRUE
##
   349
        1.000000e+00
                          FALSE
                                  4.346415173 6.919027e-06
                                                              TRUE
##
   350
        1.000000e+00
                          FALSE
                                  4.345691898 6.941867e-06
                                                              TRUE
##
   351
        1.000000e+00
                          FALSE
                                  4.338445728 7.174695e-06
                                                              TRUE
##
   352
        1.000000e+00
                          FALSE
                                  4.337477961 7.206349e-06
                                                              TRUE
   353
                          FALSE
                                                              TRUE
##
        1.000000e+00
                                  4.336144019 7.250198e-06
##
   354
        1.000000e+00
                          FALSE
                                  4.336025523 7.254105e-06
                                                              TRUE
##
   355
        1.000000e+00
                          FALSE
                                  4.333819014 7.327233e-06
                                                              TRUE
##
   356
                          FALSE
                                  4.332269178 7.379018e-06
                                                              TRUE
        1.000000e+00
##
   357
        1.000000e+00
                          FALSE
                                  4.318459454 7.856104e-06
                                                              TRUE
##
   358
        1.000000e+00
                          FALSE
                                  4.316535670 7.924854e-06
                                                              TRUE
##
   359
        1.000000e+00
                          FALSE
                                  4.313633949 8.029638e-06
                                                              TRUE
##
   360
                          FALSE
                                  4.303971969 8.388145e-06
                                                              TRUE
        1.000000e+00
                          FALSE
                                  4.284412932 9.161117e-06
                                                              TRUE
##
   361
        1.000000e+00
                          FALSE
##
   362
        1.000000e+00
                                  4.282661967 9.233531e-06
                                                              TRUE
##
   363
        1.000000e+00
                          FALSE
                                  4.262641917 1.010121e-05
                                                              TRUE
   364
                          FALSE
##
        1.000000e+00
                                  4.250510394 1.066420e-05
                                                              TRUE
##
   365
        1.000000e+00
                          FALSE
                                  4.208081720 1.287739e-05
                                                              TRUE
##
        1.000000e+00
                          FALSE
                                  4.196396021 1.355979e-05
                                                              TRUE
   366
##
   367
        1.000000e+00
                          FALSE
                                  4.191665524 1.384570e-05
                                                              TRUE
                          FALSE
                                                              TRUE
##
   368
        1.000000e+00
                                  4.182377472 1.442382e-05
##
   369
        1.000000e+00
                          FALSE
                                  4.164058060 1.563203e-05
                                                              TRUE
##
   370
        1.000000e+00
                          FALSE
                                  4.141947070 1.721849e-05
                                                              TRUE
##
   371
        1.000000e+00
                          FALSE
                                  4.141611016 1.724374e-05
                                                              TRUE
##
   372
        1.000000e+00
                          FALSE
                                  4.134460169 1.778950e-05
                                                              TRUE
##
   373
        1.000000e+00
                          FALSE
                                  4.124471720 1.857933e-05
                                                              TRUE
##
   374
        1.000000e+00
                          FALSE
                                  4.114763759 1.937881e-05
                                                              TRUE
##
   375
        1.000000e+00
                          FALSE
                                  4.112572219 1.956375e-05
                                                              TRUE
##
   376
        1.000000e+00
                          FALSE
                                  4.108753165 1.989005e-05
                                                              TRUE
##
   377
        1.000000e+00
                          FALSE
                                  4.098348373 2.080543e-05
                                                              TRUE
##
   378
        1.000000e+00
                          FALSE
                                  4.078098098 2.270280e-05
                                                              TRUE
##
  379
        1.000000e+00
                          FALSE
                                  4.046722878 2.596984e-05
                                                              TRUE
  380
        1.000000e+00
                          FALSE
                                  4.017092288 2.946033e-05
##
                                                              TRUE
```

```
381
        1.000000e+00
                          FALSE
                                 4.015055937 2.971585e-05
                                                             TRUE
                          FALSE
                                 4.013724610 2.988404e-05
##
   382
        1.000000e+00
                                                             TRUE
##
   383
        1.000000e+00
                          FALSE
                                 4.011133562 3.021396e-05
                                                             TRUE
   384
                          FALSE
                                 4.002780013 3.130125e-05
                                                             TRUE
##
        1.000000e+00
##
   385
        1.000000e+00
                          FALSE
                                 4.001152263 3.151739e-05
                                                             TRUE
   386
        1.000000e+00
                          FALSE
                                 4.000502502 3.160406e-05
                                                             TRUE
##
##
   387
        1.000000e+00
                          FALSE
                                 3.998982783 3.180765e-05
                                                             TRUE
##
   388
        1.000000e+00
                          FALSE
                                 3.974239357 3.530227e-05
                                                             TRUE
##
   389
        1.000000e+00
                          FALSE
                                 3.946535387 3.964510e-05
                                                             TRUE
##
   390
        1.000000e+00
                          FALSE
                                 3.931276745 4.224797e-05
                                                             TRUE
##
   391
        1.000000e+00
                          FALSE
                                 3.920289536 4.422132e-05
                                                             TRUE
##
   392
        1.000000e+00
                          FALSE
                                 3.880700082 5.207811e-05 FALSE
##
   393
        1.000000e+00
                          FALSE
                                 3.869820264 5.445781e-05 FALSE
        1.000000e+00
##
   394
                          FALSE
                                 3.864574454 5.564152e-05 FALSE
   395
                          FALSE
##
        1.000000e+00
                                 3.860834819 5.650014e-05 FALSE
##
   396
        1.000000e+00
                          FALSE
                                 3.858282376 5.709334e-05 FALSE
##
   397
        1.000000e+00
                          FALSE
                                 3.831833395 6.359593e-05 FALSE
        1.000000e+00
   398
                          FALSE
                                 3.807344268 7.023357e-05 FALSE
##
                                 3.806022648 7.060973e-05 FALSE
##
   399
        1.000000e+00
                          FALSE
##
   400
        1.000000e+00
                          FALSE
                                 3.806001372 7.061580e-05 FALSE
##
   401
        1.000000e+00
                          FALSE
                                 3.792831674 7.446956e-05 FALSE
                                 3.771801577 8.103656e-05 FALSE
##
   402
        1.000000e+00
                          FALSE
                                 3.764620223 8.340120e-05 FALSE
##
   403
        1.000000e+00
                          FALSE
##
   404
        1.000000e+00
                          FALSE
                                 3.742245264 9.119169e-05 FALSE
##
   405
        1.000000e+00
                          FALSE
                                 3.740846704 9.170068e-05 FALSE
   406
        1.000000e+00
                          FALSE
                                 3.730337830 9.561160e-05 FALSE
   407
                          FALSE
                                 3.707813077 1.045284e-04 FALSE
##
        1.000000e+00
##
   408
        1.000000e+00
                          FALSE
                                 3.691520752 1.114586e-04 FALSE
##
   409
        1.000000e+00
                          FALSE
                                 3.684843914 1.144214e-04 FALSE
##
  410
        1.000000e+00
                          FALSE
                                 3.677509885 1.177610e-04 FALSE
##
   411
        1.000000e+00
                          FALSE
                                 3.676362113 1.182918e-04 FALSE
##
   412
        1.000000e+00
                          FALSE
                                 3.671125147 1.207425e-04 FALSE
##
   413
        1.000000e+00
                          FALSE
                                 3.656137155 1.280222e-04 FALSE
                                 3.653512541 1.293386e-04 FALSE
##
  414
        1.000000e+00
                          FALSE
   415
                          FALSE
                                 3.648987151 1.316381e-04 FALSE
##
        1.000000e+00
                          FALSE
                                 3.632163158 1.405277e-04 FALSE
##
  416
        1.000000e+00
## 417
        1.000000e+00
                          FALSE
                                 3.624191994 1.449331e-04 FALSE
## 418
        1.000000e+00
                          FALSE
                                 3.608265422 1.541255e-04 FALSE
                          FALSE
                                 3.598356565 1.601172e-04 FALSE
##
  419
        1.000000e+00
##
  420
        1.000000e+00
                          FALSE
                                 3.591827714 1.641835e-04 FALSE
   421
        1.000000e+00
                          FALSE
                                 3.584575673 1.688133e-04 FALSE
   422
                          FALSE
                                 3.576740029 1.739529e-04 FALSE
##
        1.000000e+00
##
   423
        1.000000e+00
                          FALSE
                                 3.564708722 1.821302e-04 FALSE
  424
                                 3.562229879 1.838591e-04 FALSE
##
        1.000000e+00
                          FALSE
##
  425
        1.000000e+00
                          FALSE
                                 3.558684445 1.863585e-04 FALSE
   426
##
        1.000000e+00
                          FALSE
                                 3.558210295 1.866952e-04 FALSE
##
   427
        1.000000e+00
                          FALSE
                                 3.548898149 1.934233e-04 FALSE
##
   428
        1.000000e+00
                          FALSE
                                 3.529096074 2.084909e-04 FALSE
##
   429
        1.000000e+00
                          FALSE
                                 3.500244466 2.324158e-04 FALSE
##
   430
        1.000000e+00
                          FALSE
                                 3.497207920 2.350776e-04 FALSE
                          FALSE
                                 3.491332726 2.403087e-04 FALSE
##
   431
        1.000000e+00
##
  432
        1.000000e+00
                          FALSE
                                 3.488581746 2.427952e-04 FALSE
## 433
        1.000000e+00
                          FALSE
                                 3.485259996 2.458295e-04 FALSE
## 434
        1.000000e+00
                          FALSE
                                 3.483811454 2.471638e-04 FALSE
```

```
## 435
        1.000000e+00
                          FALSE
                                 3.466224221 2.639115e-04 FALSE
                          FALSE
                                 3.449340036 2.809793e-04 FALSE
##
  436
        1.000000e+00
                                 3.440912758 2.898777e-04 FALSE
##
   437
        1.000000e+00
                          FALSE
  438
                          FALSE
                                 3.427168969 3.049547e-04 FALSE
##
        1.000000e+00
##
   439
        1.000000e+00
                          FALSE
                                 3.426630505 3.055600e-04 FALSE
##
   440
        1.000000e+00
                          FALSE
                                 3.424925751 3.074837e-04 FALSE
  441
        1.000000e+00
                          FALSE
                                 3.394427707 3.438610e-04 FALSE
## 442
        1.000000e+00
                          FALSE
                                 3.384744943 3.562221e-04 FALSE
##
   443
        1.000000e+00
                          FALSE
                                 3.375403655 3.685375e-04 FALSE
##
   444
        1.000000e+00
                          FALSE
                                 3.370302976 3.754279e-04 FALSE
   445
        1.000000e+00
                          FALSE
                                 3.367047233 3.798884e-04 FALSE
##
   446
        1.000000e+00
                          FALSE
                                 3.359005702 3.911173e-04 FALSE
##
   447
        1.000000e+00
                          FALSE
                                 3.356398044 3.948241e-04 FALSE
        1.000000e+00
##
   448
                          FALSE
                                 3.348737291 4.059037e-04 FALSE
   449
                          FALSE
                                 3.347284361 4.080373e-04 FALSE
##
        1.000000e+00
##
   450
        1.000000e+00
                          FALSE
                                 3.339408970 4.197843e-04 FALSE
##
   451
        1.000000e+00
                          FALSE
                                 3.328496078 4.365812e-04 FALSE
   452
        1.000000e+00
                          FALSE
                                 3.318388000 4.526931e-04 FALSE
##
                                 3.318330995 4.527855e-04 FALSE
##
   453
        1.000000e+00
                          FALSE
##
   454
        1.000000e+00
                          FALSE
                                 3.309225817 4.677717e-04 FALSE
##
   455
        1.000000e+00
                          FALSE
                                 3.296828118 4.889166e-04 FALSE
                                 3.295092714 4.919461e-04 FALSE
##
   456
        1.000000e+00
                          FALSE
                                 3.287273183 5.058132e-04 FALSE
##
   457
        1.000000e+00
                          FALSE
##
   458
        1.000000e+00
                          FALSE
                                 3.278673713 5.214808e-04 FALSE
##
   459
        1.000000e+00
                          FALSE
                                 3.276808441 5.249379e-04 FALSE
   460
        1.000000e+00
                          FALSE
                                 3.262479544 5.522107e-04 FALSE
                          FALSE
                                 3.259538076 5.579690e-04 FALSE
##
   461
        1.000000e+00
##
   462
        1.000000e+00
                          FALSE
                                 3.241868542 5.937439e-04 FALSE
                                 3.228921419 6.212902e-04 FALSE
##
   463
        1.000000e+00
                          FALSE
##
   464
        1.000000e+00
                          FALSE
                                 3.228592691 6.220047e-04 FALSE
##
   465
        1.000000e+00
                          FALSE
                                 3.216845625 6.480416e-04 FALSE
##
   466
        1.000000e+00
                          FALSE
                                 3.211625945 6.599305e-04 FALSE
##
   467
        1.000000e+00
                          FALSE
                                 3.204091227 6.774477e-04 FALSE
        1.000000e+00
##
   468
                          FALSE
                                 3.172026866 7.568950e-04 FALSE
                          FALSE
                                 3.163592445 7.791743e-04 FALSE
##
   469
        1.000000e+00
                          FALSE
                                 3.138014904 8.504811e-04 FALSE
##
  470
        1.000000e+00
##
  471
        1.000000e+00
                          FALSE
                                 3.125788546 8.866450e-04 FALSE
## 472
        1.000000e+00
                          FALSE
                                 3.123663331 8.930735e-04 FALSE
                          FALSE
                                 3.105387156 9.501506e-04 FALSE
##
  473
        1.000000e+00
##
  474
        1.000000e+00
                          FALSE
                                 3.103356038 9.566965e-04 FALSE
  475
        1.000000e+00
                          FALSE
                                 3.082656269 1.025810e-03 FALSE
  476
                          FALSE
                                 3.078054541 1.041784e-03 FALSE
##
        1.000000e+00
##
  477
        1.000000e+00
                          FALSE
                                 3.071183042 1.066062e-03 FALSE
                                 3.052389980 1.135135e-03 FALSE
##
  478
        1.000000e+00
                          FALSE
##
  479
        1.000000e+00
                          FALSE
                                 3.036509644 1.196672e-03 FALSE
   480
                                 3.035195373 1.201900e-03 FALSE
##
        1.000000e+00
                          FALSE
##
   481
        1.000000e+00
                          FALSE
                                 3.024924563 1.243476e-03 FALSE
##
   482
        1.000000e+00
                          FALSE
                                 3.018654436 1.269500e-03 FALSE
##
   483
        1.000000e+00
                          FALSE
                                 3.016530299 1.278428e-03 FALSE
##
   484
        1.000000e+00
                          FALSE
                                 3.006701401 1.320495e-03 FALSE
                          FALSE
                                 3.000924414 1.345807e-03 FALSE
##
   485
        1.000000e+00
##
   486
        1.000000e+00
                          FALSE
                                 2.999359218 1.352741e-03 FALSE
##
  487
        1.000000e+00
                          FALSE
                                 2.998407480 1.356973e-03 FALSE
## 488
        1.000000e+00
                          FALSE
                                 2.997934369 1.359081e-03 FALSE
```

```
## 489
        1.000000e+00
                          FALSE
                                 2.983888360 1.423053e-03 FALSE
                          FALSE
##
  490
        1.000000e+00
                                 2.981882400 1.432410e-03 FALSE
##
   491
        1.000000e+00
                          FALSE
                                 2.974952249 1.465171e-03 FALSE
  492
                          FALSE
                                 2.965780295 1.509580e-03 FALSE
##
        1.000000e+00
##
   493
        1.000000e+00
                          FALSE
                                 2.960752520 1.534442e-03 FALSE
##
   494
        1.000000e+00
                          FALSE
                                 2.957530800 1.550569e-03 FALSE
   495
        1.000000e+00
                          FALSE
                                 2.952846993 1.574290e-03 FALSE
## 496
        1.000000e+00
                         FALSE
                                 2.941949974 1.630763e-03 FALSE
##
   497
        1.000000e+00
                          FALSE
                                 2.933973631 1.673263e-03 FALSE
##
   498
        1.000000e+00
                         FALSE
                                 2.931576210 1.686233e-03 FALSE
   499
        1.000000e+00
                          FALSE
                                 2.908544725 1.815576e-03 FALSE
##
   500
        1.000000e+00
                          FALSE
                                 2.902301805 1.852157e-03 FALSE
##
   501
        1.000000e+00
                          FALSE
                                 2.900655122 1.861917e-03 FALSE
        1.000000e+00
##
   502
                          FALSE
                                 2.883277414 1.967803e-03 FALSE
   503
                          FALSE
                                 2.856557213 2.141314e-03 FALSE
##
        1.000000e+00
##
   504
        1.000000e+00
                          FALSE
                                 2.851772815 2.173808e-03 FALSE
##
   505
        1.000000e+00
                          FALSE
                                 2.849384411 2.190196e-03 FALSE
        1.000000e+00
   506
                          FALSE
                                 2.843121059 2.233705e-03 FALSE
##
                                 2.835812841 2.285461e-03 FALSE
##
  507
        1.000000e+00
                          FALSE
##
   508
        1.000000e+00
                          FALSE
                                 2.833412346 2.302697e-03 FALSE
                                 2.820712309 2.395858e-03 FALSE
##
  509
        1.000000e+00
                          FALSE
                                 2.812811955 2.455518e-03 FALSE
## 510
        1.000000e+00
                          FALSE
                                 2.811915168 2.462374e-03 FALSE
## 511
        1.000000e+00
                          FALSE
                                 2.809567035 2.480409e-03 FALSE
##
  512
        1.000000e+00
                          FALSE
## 513
        1.000000e+00
                         FALSE
                                 2.809261113 2.482768e-03 FALSE
  514
        1.000000e+00
                         FALSE
                                 2.801712482 2.541608e-03 FALSE
## 515
                         FALSE
                                 2.799427397 2.559666e-03 FALSE
        1.000000e+00
##
  516
        1.000000e+00
                          FALSE
                                 2.789147609 2.642349e-03 FALSE
                                 2.785698525 2.670626e-03 FALSE
## 517
        1.000000e+00
                          FALSE
## 518
        1.000000e+00
                          FALSE
                                 2.775884593 2.752587e-03 FALSE
## 519
        1.000000e+00
                          FALSE
                                 2.771417930 2.790637e-03 FALSE
##
  520
        1.000000e+00
                          FALSE
                                 2.760877974 2.882311e-03 FALSE
##
   521
        1.000000e+00
                          FALSE
                                 2.748243725 2.995773e-03 FALSE
  522
        1.000000e+00
##
                          FALSE
                                 2.731062604 3.156524e-03 FALSE
   523
                          FALSE
                                 2.723137700 3.233255e-03 FALSE
##
        1.000000e+00
                          FALSE
                                 2.718953124 3.274444e-03 FALSE
##
  524
        1.000000e+00
## 525
        1.000000e+00
                          FALSE
                                 2.715415385 3.309634e-03 FALSE
  526
        1.000000e+00
                         FALSE
                                 2.706813392 3.396622e-03 FALSE
##
                          FALSE
                                 2.704871320 3.416543e-03 FALSE
##
   527
        1.000000e+00
                                 2.676033894 3.724956e-03 FALSE
##
  528
        1.000000e+00
                         FALSE
   529
        1.000000e+00
                         FALSE
                                 2.662161528 3.882031e-03 FALSE
   530
                          FALSE
                                 2.661468982 3.890025e-03 FALSE
##
        1.000000e+00
##
   531
        1.000000e+00
                          FALSE
                                 2.646265997 4.069290e-03 FALSE
                                 2.644602214 4.089350e-03 FALSE
##
   532
        1.000000e+00
                         FALSE
##
   533
        1.000000e+00
                          FALSE
                                 2.623576232 4.350599e-03 FALSE
   534
                                 2.621682603 4.374844e-03 FALSE
##
        1.000000e+00
                          FALSE
##
   535
        1.000000e+00
                          FALSE
                                 2.620343269 4.392065e-03 FALSE
##
   536
        1.000000e+00
                          FALSE
                                 2.620187819 4.394068e-03 FALSE
   537
##
        1.000000e+00
                          FALSE
                                 2.619856472 4.398339e-03 FALSE
##
   538
        1.000000e+00
                          FALSE
                                 2.618649150 4.413935e-03 FALSE
   539
                                 2.611374915 4.508949e-03 FALSE
##
        1.000000e+00
                          FALSE
## 540
        1.000000e+00
                          FALSE
                                 2.610347240 4.522518e-03 FALSE
## 541
        1.000000e+00
                         FALSE
                                 2.608258073 4.550216e-03 FALSE
## 542
        1.000000e+00
                         FALSE
                                 2.607685849 4.557829e-03 FALSE
```

```
## 543
        1.000000e+00
                          FALSE
                                 2.605475337 4.587344e-03 FALSE
                          FALSE
                                 2.604891626 4.595166e-03 FALSE
## 544
        1.000000e+00
##
   545
        1.000000e+00
                          FALSE
                                 2.591914958 4.772168e-03 FALSE
   546
                          FALSE
                                 2.571543986 5.062308e-03 FALSE
##
        1.000000e+00
##
   547
        1.000000e+00
                          FALSE
                                 2.570796398 5.073248e-03 FALSE
                                 2.557671345 5.268782e-03 FALSE
   548
        1.000000e+00
                          FALSE
##
##
   549
        1.000000e+00
                          FALSE
                                 2.540250169 5.538660e-03 FALSE
## 550
        1.000000e+00
                          FALSE
                                 2.536083738 5.604996e-03 FALSE
##
   551
        1.000000e+00
                          FALSE
                                 2.524580408 5.791825e-03 FALSE
##
   552
        1.000000e+00
                          FALSE
                                 2.522683684 5.823155e-03 FALSE
##
   553
        1.000000e+00
                          FALSE
                                 2.522180284 5.831496e-03 FALSE
##
   554
        1.000000e+00
                          FALSE
                                 2.502593243 6.164357e-03 FALSE
##
   555
        1.000000e+00
                          FALSE
                                 2.498523147 6.235600e-03 FALSE
##
   556
        1.000000e+00
                          FALSE
                                 2.498004708 6.244727e-03 FALSE
   557
                          FALSE
                                 2.496905315 6.264120e-03 FALSE
##
        1.000000e+00
##
   558
        1.000000e+00
                          FALSE
                                 2.492680747 6.339139e-03 FALSE
##
   559
        1.000000e+00
                          FALSE
                                 2.483990103 6.495971e-03 FALSE
        1.000000e+00
   560
                          FALSE
                                 2.482657130 6.520327e-03 FALSE
##
                                 2.465029526 6.850098e-03 FALSE
##
   561
        1.000000e+00
                          FALSE
##
   562
        1.000000e+00
                          FALSE
                                 2.460983107 6.927844e-03 FALSE
##
   563
        1.000000e+00
                          FALSE
                                 2.455800792 7.028553e-03 FALSE
                                 2.443835148 7.266033e-03 FALSE
##
   564
        1.000000e+00
                          FALSE
                                 2.443617244 7.270422e-03 FALSE
##
   565
        1.000000e+00
                          FALSE
##
   566
        1.000000e+00
                          FALSE
                                 2.428237154 7.586209e-03 FALSE
##
   567
        1.000000e+00
                          FALSE
                                 2.421112267 7.736549e-03 FALSE
   568
        1.000000e+00
                          FALSE
                                 2.418739086 7.787203e-03 FALSE
                          FALSE
                                 2.411937188 7.934007e-03 FALSE
##
   569
        1.000000e+00
##
   570
        1.000000e+00
                          FALSE
                                 2.406951517 8.043153e-03 FALSE
                                 2.393120073 8.352886e-03 FALSE
##
   571
        1.000000e+00
                          FALSE
##
   572
        1.000000e+00
                          FALSE
                                 2.382938828 8.587524e-03 FALSE
##
  573
        1.000000e+00
                          FALSE
                                 2.372436692 8.835596e-03 FALSE
##
   574
        1.000000e+00
                          FALSE
                                 2.371912156 8.848149e-03 FALSE
##
   575
        1.000000e+00
                          FALSE
                                 2.371126579 8.866978e-03 FALSE
        1.000000e+00
##
  576
                          FALSE
                                 2.365905095 8.993027e-03 FALSE
   577
        1.000000e+00
                          FALSE
                                 2.364364030 9.030528e-03 FALSE
##
                          FALSE
                                 2.362832104 9.067942e-03 FALSE
##
  578
        1.000000e+00
##
  579
        1.000000e+00
                          FALSE
                                 2.357340241 9.203187e-03 FALSE
  580
        1.000000e+00
                          FALSE
                                 2.354332823 9.277994e-03 FALSE
##
   581
                          FALSE
                                 2.348850305 9.415738e-03 FALSE
##
        1.000000e+00
                                 2.326644784 9.992089e-03 FALSE
##
   582
        1.000000e+00
                          FALSE
   583
        1.000000e+00
                          FALSE
                                 2.317641181 1.023442e-02 FALSE
                          FALSE
                                 2.315005879 1.030631e-02 FALSE
##
   584
        1.000000e+00
##
   585
        1.000000e+00
                          FALSE
                                 2.313209659 1.035556e-02 FALSE
                                 2.312241328 1.038219e-02 FALSE
##
   586
        1.000000e+00
                          FALSE
##
   587
        1.000000e+00
                          FALSE
                                 2.300406441 1.071260e-02 FALSE
                                 2.295482776 1.085274e-02 FALSE
##
   588
        1.000000e+00
                          FALSE
##
   589
        1.000000e+00
                          FALSE
                                 2.290305661 1.100180e-02 FALSE
##
   590
        1.000000e+00
                          FALSE
                                 2.288954521 1.104100e-02 FALSE
##
   591
        1.000000e+00
                          FALSE
                                 2.286122627 1.112354e-02 FALSE
##
   592
        1.000000e+00
                          FALSE
                                 2.268275756 1.165620e-02 FALSE
                                 2.266672864 1.170511e-02 FALSE
##
   593
        1.000000e+00
                          FALSE
##
  594
        1.000000e+00
                          FALSE
                                 2.265112092 1.175290e-02 FALSE
## 595
        1.000000e+00
                          FALSE
                                 2.258124676 1.196894e-02 FALSE
## 596
        1.000000e+00
                          FALSE
                                 2.255255689 1.205864e-02 FALSE
```

```
## 597
        1.000000e+00
                          FALSE
                                 2.252965866 1.213065e-02 FALSE
##
  598
        1.000000e+00
                          FALSE
                                 2.246486987 1.233642e-02 FALSE
##
   599
        1.000000e+00
                          FALSE
                                 2.239771491 1.255288e-02 FALSE
  600
                          FALSE
                                 2.232256496 1.279901e-02 FALSE
##
        1.000000e+00
##
   601
        1.000000e+00
                          FALSE
                                 2.224773961 1.304821e-02 FALSE
                                 2.224769252 1.304837e-02 FALSE
   602
        1.000000e+00
                          FALSE
##
##
   603
        1.000000e+00
                          FALSE
                                 2.220788162 1.318266e-02 FALSE
##
  604
        1.000000e+00
                          FALSE
                                 2.220425348 1.319495e-02 FALSE
##
   605
        1.000000e+00
                          FALSE
                                 2.207334322 1.364536e-02 FALSE
##
   606
        1.000000e+00
                          FALSE
                                 2.207025953 1.365612e-02 FALSE
##
   607
        1.000000e+00
                          FALSE
                                 2.195412200 1.406702e-02 FALSE
                                 2.189877437 1.426656e-02 FALSE
##
   608
        1.000000e+00
                          FALSE
##
   609
        1.000000e+00
                          FALSE
                                 2.189311793 1.428709e-02 FALSE
        1.000000e+00
##
   610
                          FALSE
                                 2.186031423 1.440665e-02 FALSE
## 611
                                 2.178974429 1.466678e-02 FALSE
        1.000000e+00
                          FALSE
##
   612
        1.000000e+00
                          FALSE
                                 2.172621490 1.490441e-02 FALSE
##
        1.000000e+00
                          FALSE
                                 2.171269414 1.495541e-02 FALSE
  613
        1.000000e+00
                          FALSE
                                 2.164167859 1.522573e-02 FALSE
   614
                                 2.162395147 1.529387e-02 FALSE
##
  615
        1.000000e+00
                          FALSE
##
   616
        1.000000e+00
                          FALSE
                                 2.155114326 1.557644e-02 FALSE
                                 2.148721101 1.582826e-02 FALSE
##
  617
        1.000000e+00
                          FALSE
                                 2.140628500 1.615200e-02 FALSE
##
  618
        1.000000e+00
                          FALSE
                                 2.136709212 1.631083e-02 FALSE
## 619
        1.000000e+00
                          FALSE
##
   620
        1.000000e+00
                          FALSE
                                 2.124071084 1.683210e-02 FALSE
##
  621
        1.000000e+00
                          FALSE
                                 2.120657328 1.697533e-02 FALSE
   622
        1.000000e+00
                          FALSE
                                 2.113008707 1.730001e-02 FALSE
   623
                          FALSE
                                 2.110501481 1.740759e-02 FALSE
##
        1.000000e+00
##
   624
        1.000000e+00
                          FALSE
                                 2.104879797 1.765089e-02 FALSE
   625
                                 2.100077547 1.786101e-02 FALSE
##
        1.000000e+00
                          FALSE
##
   626
        1.000000e+00
                          FALSE
                                 2.086119391 1.848390e-02 FALSE
##
   627
        1.000000e+00
                          FALSE
                                 2.081929893 1.867444e-02 FALSE
##
   628
        1.000000e+00
                          FALSE
                                 2.080624208 1.873416e-02 FALSE
##
   629
        1.000000e+00
                          FALSE
                                 2.077634328 1.887153e-02 FALSE
        1.000000e+00
##
   630
                          FALSE
                                 2.076307099 1.893278e-02 FALSE
   631
                          FALSE
                                 2.075308047 1.897900e-02 FALSE
##
        1.000000e+00
                                 2.071027675 1.917810e-02 FALSE
                          FALSE
##
   632
        1.000000e+00
##
   633
        1.000000e+00
                          FALSE
                                 2.064124452 1.950296e-02 FALSE
  634
                          FALSE
                                 2.058848057 1.975440e-02 FALSE
##
        1.000000e+00
   635
                          FALSE
                                 2.046502219 2.035349e-02 FALSE
##
        1.000000e+00
                                 2.034331874 2.095907e-02 FALSE
##
   636
        1.000000e+00
                          FALSE
   637
        1.000000e+00
                          FALSE
                                 2.030246930 2.116572e-02 FALSE
   638
                          FALSE
                                 2.022238918 2.157584e-02 FALSE
##
        1.000000e+00
##
   639
        1.000000e+00
                          FALSE
                                 2.020930823 2.164346e-02 FALSE
                                 2.011430695 2.213999e-02 FALSE
##
   640
        1.000000e+00
                          FALSE
##
  641
        1.000000e+00
                          FALSE
                                 2.009944736 2.221852e-02 FALSE
   642
                                 2.004852430 2.248941e-02 FALSE
##
        1.000000e+00
                          FALSE
##
   643
        1.000000e+00
                          FALSE
                                 1.974094758 2.418548e-02 FALSE
##
   644
        1.000000e+00
                          FALSE
                                 1.965428491 2.468233e-02 FALSE
##
   645
        1.000000e+00
                          FALSE
                                 1.961461318 2.491262e-02 FALSE
##
   646
        1.000000e+00
                          FALSE
                                 1.958809615 2.506754e-02 FALSE
                          FALSE
                                 1.949776493 2.560138e-02 FALSE
##
   647
        1.000000e+00
##
  648
        1.000000e+00
                          FALSE
                                 1.946433414 2.580135e-02 FALSE
## 649
        1.000000e+00
                          FALSE
                                 1.946358746 2.580583e-02 FALSE
## 650
        1.000000e+00
                          FALSE
                                 1.946297325 2.580952e-02 FALSE
```

```
## 651
        1.000000e+00
                          FALSE
                                 1.945034759 2.588540e-02 FALSE
                          FALSE.
                                 1.940222104 2.617635e-02 FALSE
##
   652
        1.000000e+00
##
   653
        1.000000e+00
                          FALSE
                                 1.939486625 2.622106e-02 FALSE
                          FALSE
                                 1.934893983 2.650165e-02 FALSE
##
   654
        1.000000e+00
##
   655
        1.000000e+00
                          FALSE
                                 1.932673276 2.663823e-02 FALSE
   656
        1.000000e+00
                          FALSE
                                 1.932108383 2.667306e-02 FALSE
##
##
   657
        1.000000e+00
                          FALSE
                                 1.925132168 2.710641e-02 FALSE
##
   658
        1.000000e+00
                          FALSE
                                 1.906519020 2.829145e-02 FALSE
##
   659
        1.000000e+00
                          FALSE
                                 1.904767816 2.840513e-02 FALSE
##
   660
        1.000000e+00
                          FALSE
                                 1.900155058 2.870639e-02 FALSE
##
   661
        1.000000e+00
                          FALSE
                                 1.894386807 2.908684e-02 FALSE
##
   662
        1.000000e+00
                          FALSE
                                 1.889370342 2.942111e-02 FALSE
##
   663
        1.000000e+00
                          FALSE
                                 1.889138792 2.943662e-02 FALSE
##
   664
        1.000000e+00
                          FALSE
                                 1.888622735 2.947120e-02 FALSE
                                 1.887039443 2.957751e-02 FALSE
##
   665
        1.000000e+00
                          FALSE
   666
        1.000000e+00
                          FALSE
                                 1.884656890 2.973809e-02 FALSE
##
        1.000000e+00
                          FALSE
                                 1.884058519 2.977853e-02 FALSE
##
   667
        1.000000e+00
                                 1.880596750 3.001340e-02 FALSE
##
   668
                          FALSE
##
   669
        1.000000e+00
                          FALSE
                                 1.874903116 3.040303e-02 FALSE
##
   670
        1.000000e+00
                          FALSE
                                 1.870452052 3.071053e-02 FALSE
##
   671
        1.000000e+00
                          FALSE
                                 1.863900845 3.116782e-02 FALSE
                                 1.854451914 3.183727e-02 FALSE
##
   672
        1.000000e+00
                          FALSE
##
  673
        1.000000e+00
                          FALSE
                                 1.849274448 3.220910e-02 FALSE
##
   674
        1.000000e+00
                          FALSE
                                 1.846579794 3.240403e-02 FALSE
##
  675
        1.000000e+00
                          FALSE
                                 1.845361077 3.249252e-02 FALSE
   676
        1.000000e+00
                          FALSE
                                 1.825633019 3.395278e-02 FALSE
   677
                          FALSE
                                 1.818524491 3.449200e-02 FALSE
##
        1.000000e+00
##
   678
        1.000000e+00
                          FALSE
                                 1.817978779 3.453369e-02 FALSE
##
   679
        1.000000e+00
                          FALSE
                                 1.808304880 3.527953e-02 FALSE
##
   680
        1.000000e+00
                          FALSE
                                 1.805957083 3.546252e-02 FALSE
##
   681
        1.000000e+00
                          FALSE
                                 1.803896903 3.562374e-02 FALSE
##
   682
        1.000000e+00
                          FALSE
                                 1.801623358 3.580234e-02 FALSE
##
   683
        1.000000e+00
                          FALSE
                                 1.799869104 3.594065e-02 FALSE
        1.000000e+00
##
   684
                          FALSE
                                 1.794297021 3.638289e-02 FALSE
   685
                          FALSE
                                 1.790882356 3.665609e-02 FALSE
##
        1.000000e+00
                          FALSE
                                 1.786990955 3.696948e-02 FALSE
##
   686
        1.000000e+00
##
   687
        1.000000e+00
                          FALSE
                                 1.786320730 3.702367e-02 FALSE
   688
                          FALSE
                                 1.782507756 3.733323e-02 FALSE
##
        1.000000e+00
                          FALSE
                                 1.779614777 3.756951e-02 FALSE
##
   689
        1.000000e+00
##
   690
        1.000000e+00
                          FALSE
                                 1.778479913 3.766253e-02 FALSE
##
   691
        1.000000e+00
                          FALSE
                                 1.769048116 3.844292e-02 FALSE
   692
                          FALSE
                                 1.765093295 3.877404e-02 FALSE
##
        1.000000e+00
##
   693
        1.000000e+00
                          FALSE
                                 1.752311438 3.986014e-02 FALSE
                                 1.751803774 3.990378e-02 FALSE
##
   694
        1.000000e+00
                          FALSE
##
   695
        1.000000e+00
                          FALSE
                                 1.750670690 4.000133e-02 FALSE
                                 1.749579142 4.009548e-02 FALSE
##
   696
        1.000000e+00
                          FALSE
##
   697
        1.000000e+00
                          FALSE
                                 1.749310707 4.011866e-02 FALSE
##
   698
        1.000000e+00
                          FALSE
                                 1.744507961 4.053528e-02 FALSE
##
   699
        1.000000e+00
                          FALSE
                                 1.743717317 4.060420e-02 FALSE
##
   700
        1.000000e+00
                          FALSE
                                 1.736410083 4.124568e-02 FALSE
                          FALSE
                                 1.729126487 4.189323e-02 FALSE
##
  701
        1.000000e+00
##
  702
        1.000000e+00
                          FALSE
                                 1.725241382 4.224199e-02 FALSE
## 703
        1.000000e+00
                          FALSE
                                 1.725032163 4.226084e-02 FALSE
## 704
        1.000000e+00
                          FALSE
                                 1.712950348 4.336084e-02 FALSE
```

```
## 705
        1.000000e+00
                          FALSE
                                 1.709038951 4.372187e-02 FALSE
                          FALSE.
##
  706
        1.000000e+00
                                 1.705532651 4.404756e-02 FALSE
##
   707
        1.000000e+00
                          FALSE
                                 1.704025282 4.418818e-02 FALSE
  708
                          FALSE
                                 1.692899587 4.523729e-02 FALSE
##
        1.000000e+00
##
   709
        1.000000e+00
                          FALSE
                                 1.692684754 4.525774e-02 FALSE
##
  710
        1.000000e+00
                          FALSE
                                 1.689836368 4.552963e-02 FALSE
  711
        1.000000e+00
                          FALSE
                                 1.687033947 4.579841e-02 FALSE
## 712
        1.000000e+00
                          FALSE
                                 1.682922777 4.619502e-02 FALSE
##
  713
        1.000000e+00
                          FALSE
                                 1.679627194 4.651494e-02 FALSE
##
  714
        1.000000e+00
                          FALSE
                                 1.669073436 4.755141e-02 FALSE
  715
        1.000000e+00
                          FALSE
                                 1.665437442 4.791276e-02 FALSE
##
  716
        1.000000e+00
                          FALSE
                                 1.663127172 4.814349e-02 FALSE
##
   717
        1.000000e+00
                          FALSE
                                 1.663015699 4.815465e-02 FALSE
##
  718
        1.000000e+00
                          FALSE
                                 1.658552761 4.860297e-02 FALSE
  719
                                 1.654973328 4.896495e-02 FALSE
##
        1.000000e+00
                          FALSE
##
   720
        1.000000e+00
                          FALSE
                                 1.641968067 5.029831e-02 FALSE
##
  721
        1.000000e+00
                          FALSE
                                 1.628839166 5.167354e-02 FALSE
        1.000000e+00
   722
                          FALSE
                                 1.620700263 5.254097e-02 FALSE
##
  723
                                 1.612200236 5.345919e-02 FALSE
##
        1.000000e+00
                          FALSE
##
   724
        1.000000e+00
                          FALSE
                                 1.608584359 5.385363e-02 FALSE
##
  725
        1.000000e+00
                          FALSE
                                 1.607592483 5.396223e-02 FALSE
                                 1.607410284 5.398220e-02 FALSE
##
  726
        1.000000e+00
                          FALSE
##
  727
        1.000000e+00
                          FALSE
                                 1.595983385 5.524625e-02 FALSE
##
   728
        1.000000e+00
                          FALSE
                                 1.595070788 5.534820e-02 FALSE
##
  729
        1.000000e+00
                          FALSE
                                 1.594062587 5.546101e-02 FALSE
   730
        1.000000e+00
                          FALSE
                                 1.587133164 5.624124e-02 FALSE
   731
                          FALSE
                                 1.582786646 5.673505e-02 FALSE
##
        1.000000e+00
##
   732
        1.000000e+00
                          FALSE
                                 1.582051865 5.681887e-02 FALSE
##
   733
        1.000000e+00
                          FALSE
                                 1.581962913 5.682902e-02 FALSE
                                 1.577540567 5.733560e-02 FALSE
##
   734
        1.000000e+00
                          FALSE
##
   735
        1.000000e+00
                          FALSE
                                 1.559819179 5.940131e-02 FALSE
##
   736
        1.000000e+00
                          FALSE
                                 1.556077061 5.984488e-02 FALSE
##
   737
        1.000000e+00
                          FALSE
                                 1.554146920 6.007469e-02 FALSE
   738
        1.000000e+00
##
                          FALSE
                                 1.552964602 6.021580e-02 FALSE
   739
                          FALSE
                                 1.552231681 6.030340e-02 FALSE
##
        1.000000e+00
                          FALSE
                                 1.551101792 6.043865e-02 FALSE
##
  740
        1.000000e+00
##
  741
        1.000000e+00
                          FALSE
                                 1.542732907 6.144780e-02 FALSE
  742
        1.000000e+00
                          FALSE
                                 1.541993457 6.153759e-02 FALSE
##
                          FALSE
                                 1.537524751 6.208243e-02 FALSE
##
   743
        1.000000e+00
                                 1.536302449 6.223211e-02 FALSE
##
  744
        1.000000e+00
                          FALSE
   745
        1.000000e+00
                          FALSE
                                 1.533976509 6.251772e-02 FALSE
  746
                          FALSE
                                 1.527936156 6.326420e-02 FALSE
##
        1.000000e+00
##
   747
        1.000000e+00
                          FALSE
                                 1.527183081 6.335775e-02 FALSE
  748
                                 1.524898397 6.364222e-02 FALSE
##
        1.000000e+00
                          FALSE
##
   749
        1.000000e+00
                          FALSE
                                 1.524290714 6.371805e-02 FALSE
   750
                                 1.523645226 6.379868e-02 FALSE
##
        1.000000e+00
                          FALSE
##
   751
        1.000000e+00
                          FALSE
                                 1.510639857 6.544012e-02 FALSE
##
   752
        1.000000e+00
                          FALSE
                                 1.501479998 6.661573e-02 FALSE
  753
##
        1.000000e+00
                          FALSE
                                 1.490762095 6.801198e-02 FALSE
##
   754
        1.000000e+00
                          FALSE
                                 1.490702223 6.801985e-02 FALSE
                          FALSE
                                 1.480609561 6.935532e-02 FALSE
##
   755
        1.000000e+00
##
  756
        1.000000e+00
                          FALSE
                                 1.478386142 6.965223e-02 FALSE
##
  757
        1.000000e+00
                          FALSE
                                 1.476137070 6.995355e-02 FALSE
## 758
        1.000000e+00
                          FALSE
                                 1.473299498 7.033515e-02 FALSE
```

```
## 759
        1.000000e+00
                          FALSE
                                 1.471327130 7.060133e-02 FALSE
                          FALSE.
##
  760
        1.000000e+00
                                 1.453912226 7.298532e-02 FALSE
##
   761
        1.000000e+00
                          FALSE
                                 1.448354213 7.375901e-02 FALSE
   762
                          FALSE
                                 1.445481866 7.416129e-02 FALSE
##
        1.000000e+00
##
   763
        1.000000e+00
                          FALSE
                                 1.426438557 7.687090e-02 FALSE
   764
        1.000000e+00
                          FALSE
                                 1.422494695 7.744135e-02 FALSE
##
##
   765
        1.000000e+00
                          FALSE
                                 1.418304534 7.805094e-02 FALSE
##
  766
        1.000000e+00
                          FALSE
                                 1.415134347 7.851455e-02 FALSE
##
   767
        1.000000e+00
                          FALSE
                                 1.413186998 7.880037e-02 FALSE
##
   768
        1.000000e+00
                          FALSE
                                 1.411024044 7.911876e-02 FALSE
##
   769
        1.000000e+00
                          FALSE
                                 1.409332289 7.936847e-02 FALSE
##
   770
        1.000000e+00
                          FALSE
                                 1.400745650 8.064507e-02 FALSE
##
   771
        1.000000e+00
                          FALSE
                                 1.391593354 8.202279e-02 FALSE
        1.000000e+00
##
   772
                          FALSE
                                 1.389609685 8.232372e-02 FALSE
  773
                                 1.384611201 8.308569e-02 FALSE
##
        1.000000e+00
                          FALSE
##
   774
        1.000000e+00
                          FALSE
                                 1.379692676 8.384064e-02 FALSE
##
   775
        1.000000e+00
                          FALSE
                                 1.377306126 8.420881e-02 FALSE
        1.000000e+00
   776
                                 1.376977490 8.425960e-02 FALSE
##
                          FALSE
##
   777
        1.000000e+00
                          FALSE
                                 1.374784467 8.459914e-02 FALSE
##
   778
        1.000000e+00
                          FALSE
                                 1.373906096 8.473542e-02 FALSE
##
  779
        1.000000e+00
                          FALSE
                                 1.366936636 8.582258e-02 FALSE
                                 1.358507030 8.715143e-02 FALSE
##
   780
        1.000000e+00
                          FALSE
                                 1.357903784 8.724711e-02 FALSE
  781
        1.000000e+00
                          FALSE
##
##
   782
        1.000000e+00
                          FALSE
                                 1.354400916 8.780425e-02 FALSE
##
  783
        1.000000e+00
                          FALSE
                                 1.345841656 8.917679e-02 FALSE
##
   784
        1.000000e+00
                          FALSE
                                 1.344150602 8.944985e-02 FALSE
   785
                          FALSE
                                 1.342823691 8.966454e-02 FALSE
##
        1.000000e+00
##
   786
        1.000000e+00
                          FALSE
                                 1.328253691 9.204716e-02 FALSE
##
   787
        1.000000e+00
                          FALSE
                                 1.323646302 9.281027e-02 FALSE
##
   788
        1.000000e+00
                          FALSE
                                 1.323389028 9.285302e-02 FALSE
##
   789
        1.000000e+00
                          FALSE
                                 1.317446000 9.384459e-02 FALSE
##
   790
        1.000000e+00
                          FALSE
                                 1.314759615 9.429535e-02 FALSE
##
   791
        1.000000e+00
                          FALSE
                                 1.306379265 9.571181e-02 FALSE
        1.000000e+00
##
   792
                          FALSE
                                 1.303067389 9.627588e-02 FALSE
   793
                          FALSE
                                 1.292367535 9.811495e-02 FALSE
##
        1.000000e+00
                          FALSE
                                 1.290729300 9.839878e-02 FALSE
##
   794
        1.000000e+00
##
   795
        1.000000e+00
                          FALSE
                                 1.286065176 9.921016e-02 FALSE
  796
                          FALSE
                                 1.280842201 1.001245e-01 FALSE
##
        1.000000e+00
                          FALSE
                                 1.271309323 1.018093e-01 FALSE
##
   797
        1.000000e+00
##
   798
        1.000000e+00
                          FALSE
                                 1.269777254 1.020820e-01 FALSE
   799
        1.000000e+00
                          FALSE
                                 1.253280474 1.050518e-01 FALSE
                          FALSE
                                 1.243634483 1.068171e-01 FALSE
##
   800
        1.000000e+00
##
   801
        1.000000e+00
                          FALSE
                                 1.242722937 1.069850e-01 FALSE
                                 1.240801750 1.073395e-01 FALSE
##
   802
        1.000000e+00
                          FALSE
##
   803
        1.000000e+00
                          FALSE
                                 1.238782532 1.077130e-01 FALSE
##
   804
        1.000000e+00
                          FALSE
                                 1.222679941 1.107253e-01 FALSE
##
   805
        1.000000e+00
                          FALSE
                                 1.208642659 1.134001e-01 FALSE
##
   806
        1.000000e+00
                          FALSE
                                 1.207246488 1.136686e-01 FALSE
##
   807
        1.000000e+00
                          FALSE
                                 1.206596584 1.137938e-01 FALSE
##
   808
        1.000000e+00
                          FALSE
                                 1.206363482 1.138387e-01 FALSE
##
   809
        1.000000e+00
                          FALSE
                                 1.204680794 1.141633e-01 FALSE
## 810
        1.000000e+00
                          FALSE
                                 1.202228976 1.146374e-01 FALSE
## 811
        1.000000e+00
                          FALSE
                                 1.196137211 1.158215e-01 FALSE
## 812
        1.000000e+00
                          FALSE
                                 1.192680600 1.164972e-01 FALSE
```

```
## 813
        1.000000e+00
                          FALSE
                                 1.181503857 1.187013e-01 FALSE
##
  814
        1.000000e+00
                          FALSE
                                 1.170119643 1.209764e-01 FALSE
        1.000000e+00
##
   815
                          FALSE
                                 1.167080556 1.215889e-01 FALSE
  816
                          FALSE
                                 1.166326620 1.217412e-01 FALSE
##
        1.000000e+00
##
   817
        1.000000e+00
                          FALSE
                                 1.164532159 1.221042e-01 FALSE
##
  818
        1.000000e+00
                          FALSE
                                 1.162812620 1.224528e-01 FALSE
##
  819
        1.000000e+00
                          FALSE
                                 1.154769246 1.240925e-01 FALSE
## 820
        1.000000e+00
                          FALSE
                                 1.140925504 1.269505e-01 FALSE
##
   821
        1.000000e+00
                          FALSE
                                 1.138232328 1.275117e-01 FALSE
##
   822
        1.000000e+00
                          FALSE
                                 1.137694597 1.276240e-01 FALSE
##
   823
        1.000000e+00
                          FALSE
                                 1.137505192 1.276636e-01 FALSE
   824
##
        1.000000e+00
                          FALSE
                                 1.135792142 1.280218e-01 FALSE
##
   825
        1.000000e+00
                          FALSE
                                 1.133478976 1.285066e-01 FALSE
                          FALSE
                                 1.129154358 1.294164e-01 FALSE
##
   826
        1.000000e+00
   827
                                 1.128660928 1.295204e-01 FALSE
##
        1.000000e+00
                          FALSE
##
   828
        1.000000e+00
                          FALSE
                                 1.121472847 1.310433e-01 FALSE
##
   829
        1.000000e+00
                          FALSE
                                 1.118465075 1.316842e-01 FALSE
        1.000000e+00
   830
                                 1.110278986 1.334394e-01 FALSE
##
                          FALSE
##
   831
        1.000000e+00
                          FALSE
                                 1.105796740 1.344073e-01 FALSE
##
   832
        1.000000e+00
                          FALSE
                                 1.104525651 1.346826e-01 FALSE
##
   833
        1.000000e+00
                          FALSE
                                 1.098546917 1.359829e-01 FALSE
                                 1.096860137 1.363513e-01 FALSE
##
   834
        1.000000e+00
                          FALSE
##
  835
        1.000000e+00
                          FALSE
                                 1.095335517 1.366848e-01 FALSE
##
   836
        1.000000e+00
                          FALSE
                                 1.093849463 1.370105e-01 FALSE
##
   837
        1.000000e+00
                          FALSE
                                 1.091244596 1.375826e-01 FALSE
##
   838
        1.000000e+00
                          FALSE
                                 1.089047399 1.380665e-01 FALSE
   839
                          FALSE
                                 1.085336449 1.388863e-01 FALSE
##
        1.000000e+00
##
   840
        1.000000e+00
                          FALSE
                                 1.084989735 1.389631e-01 FALSE
                                 1.082143113 1.395945e-01 FALSE
##
   841
        1.000000e+00
                          FALSE
##
   842
        1.000000e+00
                          FALSE
                                 1.079234200 1.402417e-01 FALSE
##
   843
        1.000000e+00
                          FALSE
                                 1.070440744 1.422105e-01 FALSE
##
   844
        1.000000e+00
                          FALSE
                                 1.068112694 1.427348e-01 FALSE
##
   845
        1.000000e+00
                          FALSE
                                 1.064786080 1.434864e-01 FALSE
                                 1.062486328 1.440075e-01 FALSE
##
   846
        1.000000e+00
                          FALSE
   847
                          FALSE
                                 1.053656685 1.460201e-01 FALSE
##
        1.000000e+00
                          FALSE
##
   848
        1.000000e+00
                                 1.053065593 1.461555e-01 FALSE
##
   849
        1.000000e+00
                          FALSE
                                 1.050712014 1.466954e-01 FALSE
  850
                          FALSE
                                 1.045854629 1.478141e-01 FALSE
##
        1.000000e+00
                          FALSE
                                 1.040936281 1.489526e-01 FALSE
##
   851
        1.000000e+00
##
   852
        1.000000e+00
                          FALSE
                                 1.036379305 1.500126e-01 FALSE
##
   853
        1.000000e+00
                          FALSE
                                 1.035217196 1.502837e-01 FALSE
                          FALSE
                                 1.027824949 1.520161e-01 FALSE
##
   854
        1.000000e+00
##
   855
        1.000000e+00
                          FALSE
                                 1.018453532 1.542312e-01 FALSE
##
   856
        1.000000e+00
                          FALSE
                                 1.012996254 1.555310e-01 FALSE
##
   857
        1.000000e+00
                          FALSE
                                 1.002335206 1.580909e-01 FALSE
   858
##
        1.000000e+00
                          FALSE
                                 0.995200421 1.598194e-01 FALSE
##
   859
        1.000000e+00
                          FALSE
                                 0.986484797 1.619476e-01 FALSE
##
   860
        1.000000e+00
                          FALSE
                                 0.975013678 1.647767e-01 FALSE
##
   861
        1.000000e+00
                          FALSE
                                 0.974697077 1.648553e-01 FALSE
##
   862
        1.000000e+00
                          FALSE
                                 0.973572143 1.651345e-01 FALSE
                          FALSE
##
   863
        1.000000e+00
                                 0.973359697 1.651873e-01 FALSE
##
   864
        1.000000e+00
                          FALSE
                                 0.969611897 1.661200e-01 FALSE
##
  865
        1.000000e+00
                          FALSE
                                 0.963786374 1.675765e-01 FALSE
## 866
        1.000000e+00
                          FALSE
                                 0.962437343 1.679150e-01 FALSE
```

```
## 867
        1.000000e+00
                          FALSE
                                 0.961925984 1.680434e-01 FALSE
                          FALSE
##
  868
        1.000000e+00
                                 0.959887771 1.685559e-01 FALSE
##
  869
        1.000000e+00
                          FALSE
                                 0.957483630 1.691616e-01 FALSE
  870
                          FALSE
                                 0.956249091 1.694732e-01 FALSE
##
        1.000000e+00
##
  871
        1.000000e+00
                          FALSE
                                 0.955595968 1.696382e-01 FALSE
##
  872
        1.000000e+00
                          FALSE
                                 0.954303400 1.699650e-01 FALSE
##
  873
        1.000000e+00
                          FALSE
                                 0.943827417 1.726289e-01 FALSE
## 874
        1.000000e+00
                          FALSE
                                 0.943630825 1.726792e-01 FALSE
##
  875
        1.000000e+00
                          FALSE
                                 0.942177508 1.730509e-01 FALSE
##
  876
        1.000000e+00
                          FALSE
                                 0.940268988 1.735398e-01 FALSE
##
  877
        1.000000e+00
                          FALSE
                                 0.939893959 1.736360e-01 FALSE
##
  878
        1.000000e+00
                          FALSE
                                 0.937353631 1.742883e-01 FALSE
##
  879
        1.000000e+00
                          FALSE
                                 0.932116009 1.756383e-01 FALSE
##
  880
        1.000000e+00
                          FALSE
                                 0.925659465 1.773115e-01 FALSE
  881
                          FALSE
                                 0.921603274 1.783678e-01 FALSE
##
        1.000000e+00
##
   882
        1.000000e+00
                          FALSE
                                 0.919014933 1.790439e-01 FALSE
##
   883
        1.000000e+00
                          FALSE
                                 0.916908299 1.795953e-01 FALSE
        1.000000e+00
   884
                          FALSE
                                 0.916199425 1.797812e-01 FALSE
##
  885
                                 0.916120484 1.798019e-01 FALSE
##
        1.000000e+00
                          FALSE
##
   886
        1.000000e+00
                          FALSE
                                 0.909871332 1.814452e-01 FALSE
##
  887
        1.000000e+00
                          FALSE
                                 0.904310706 1.829153e-01 FALSE
                                 0.901411025 1.836849e-01 FALSE
##
  888
        1.000000e+00
                          FALSE
##
  889
        1.000000e+00
                          FALSE
                                 0.896496520 1.849938e-01 FALSE
##
  890
        1.000000e+00
                          FALSE
                                 0.891132323 1.864291e-01 FALSE
##
  891
        1.000000e+00
                          FALSE
                                 0.886937504 1.875563e-01 FALSE
  892
        1.000000e+00
                          FALSE
                                 0.884403142 1.882393e-01 FALSE
  893
                          FALSE
                                 0.881404710 1.890494e-01 FALSE
##
        1.000000e+00
##
   894
        1.000000e+00
                          FALSE
                                 0.879047393 1.896878e-01 FALSE
##
  895
        1.000000e+00
                          FALSE
                                 0.878613426 1.898055e-01 FALSE
##
  896
        1.000000e+00
                          FALSE
                                 0.869939903 1.921666e-01 FALSE
##
  897
        1.000000e+00
                          FALSE
                                 0.866571603 1.930884e-01 FALSE
##
   898
        1.000000e+00
                          FALSE
                                 0.856780472 1.957831e-01 FALSE
##
   899
        1.000000e+00
                          FALSE
                                 0.856458995 1.958720e-01 FALSE
        1.000000e+00
##
  900
                          FALSE
                                 0.855719116 1.960766e-01 FALSE
   901
                          FALSE
                                 0.845650092 1.988740e-01 FALSE
##
        1.000000e+00
                          FALSE
##
  902
        1.000000e+00
                                 0.845048685 1.990418e-01 FALSE
##
  903
        1.000000e+00
                          FALSE
                                 0.843966110 1.993442e-01 FALSE
  904
                          FALSE
                                 0.838669911 2.008273e-01 FALSE
##
        1.000000e+00
                          FALSE
                                 0.832059737 2.026876e-01 FALSE
##
  905
        1.000000e+00
                                 0.807721415 2.096255e-01 FALSE
##
  906
        1.000000e+00
                          FALSE
                                 0.807564705 2.096706e-01 FALSE
  907
        1.000000e+00
                          FALSE
  908
                          FALSE
                                 0.801375920 2.114570e-01 FALSE
##
        1.000000e+00
##
  909
        1.000000e+00
                          FALSE
                                 0.799290302 2.120611e-01 FALSE
##
                                 0.791996398 2.141814e-01 FALSE
  910
        1.000000e+00
                          FALSE
## 911
        1.000000e+00
                          FALSE
                                 0.789869973 2.148019e-01 FALSE
## 912
                                 0.788136972 2.153083e-01 FALSE
        1.000000e+00
                          FALSE
##
  913
        1.000000e+00
                          FALSE
                                 0.785001922 2.162262e-01 FALSE
##
  914
        1.000000e+00
                          FALSE
                                 0.776391888 2.187588e-01 FALSE
##
  915
        1.000000e+00
                          FALSE
                                 0.776103380 2.188440e-01 FALSE
##
  916
        1.000000e+00
                          FALSE
                                 0.774608797 2.192854e-01 FALSE
                          FALSE
                                 0.773375199 2.196502e-01 FALSE
##
  917
        1.000000e+00
## 918
        1.000000e+00
                          FALSE
                                 0.767409261 2.214191e-01 FALSE
## 919
        1.000000e+00
                          FALSE
                                 0.764965562 2.221460e-01 FALSE
## 920
        1.000000e+00
                          FALSE
                                 0.762818221 2.227859e-01 FALSE
```

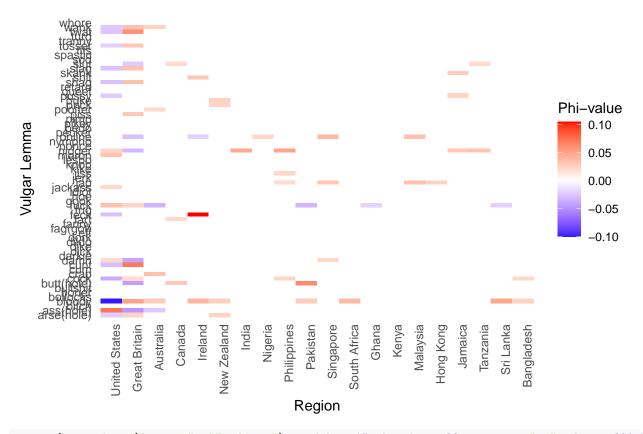
```
## 921
        1.000000e+00
                          FALSE
                                 0.762549723 2.228660e-01 FALSE
                          FALSE
                                 0.761949717 2.230450e-01 FALSE
  922
        1.000000e+00
        1.000000e+00
  923
                          FALSE
                                 0.760348240 2.235232e-01 FALSE
  924
                          FALSE
                                 0.752700503 2.258150e-01 FALSE
##
        1.000000e+00
##
  925
        1.000000e+00
                          FALSE
                                 0.750583352 2.264517e-01 FALSE
##
  926
        1.000000e+00
                          FALSE
                                 0.748779272 2.269951e-01 FALSE
  927
        1.000000e+00
                          FALSE
                                 0.746141913 2.277908e-01 FALSE
## 928
        1.000000e+00
                          FALSE
                                 0.746090344 2.278064e-01 FALSE
##
  929
        1.000000e+00
                          FALSE
                                 0.745979337 2.278399e-01 FALSE
##
  930
        1.000000e+00
                          FALSE
                                 0.742865419 2.287816e-01 FALSE
  931
        1.000000e+00
                          FALSE
                                 0.742073093 2.290215e-01 FALSE
##
  932
        1.000000e+00
                          FALSE
                                 0.740108011 2.296172e-01 FALSE
##
  933
        1.000000e+00
                          FALSE
                                 0.736539263 2.307013e-01 FALSE
##
  934
        1.000000e+00
                          FALSE
                                 0.734768879 2.312401e-01 FALSE
  935
                          FALSE
                                 0.729416040 2.328736e-01 FALSE
##
        1.000000e+00
##
   936
        1.000000e+00
                          FALSE
                                 0.728848439 2.330472e-01 FALSE
##
  937
        1.000000e+00
                          FALSE
                                 0.727703374 2.333976e-01 FALSE
        1.000000e+00
##
   938
                          FALSE
                                 0.725419660 2.340973e-01 FALSE
  939
                                 0.715310383 2.372086e-01 FALSE
##
        1.000000e+00
                          FALSE
##
  940
        1.000000e+00
                          FALSE
                                 0.707542977 2.396146e-01 FALSE
##
  941
        1.000000e+00
                          FALSE
                                 0.700280210 2.418762e-01 FALSE
  942
                                 0.700238155 2.418893e-01 FALSE
        1.000000e+00
                          FALSE
                                 0.698099298 2.425575e-01 FALSE
## 943
        1.000000e+00
                          FALSE
##
  944
        1.000000e+00
                          FALSE
                                 0.697673989 2.426905e-01 FALSE
##
  945
        1.000000e+00
                          FALSE
                                 0.693517759 2.439923e-01 FALSE
  946
        1.000000e+00
                          FALSE
                                 0.689518438 2.452485e-01 FALSE
##
  947
                          FALSE
                                 0.687802368 2.457886e-01 FALSE
        1.000000e+00
##
  948
        1.000000e+00
                          FALSE
                                 0.668251973 2.519864e-01 FALSE
##
  949
        1.000000e+00
                          FALSE
                                 0.658794678 2.550138e-01 FALSE
##
  950
        1.000000e+00
                          FALSE
                                 0.651326133 2.574180e-01 FALSE
##
  951
        1.000000e+00
                          FALSE
                                 0.646782868 2.588862e-01 FALSE
##
  952
        1.000000e+00
                          FALSE
                                 0.646213433 2.590706e-01 FALSE
##
   953
        1.000000e+00
                          FALSE
                                 0.640174170 2.610297e-01 FALSE
        1.000000e+00
##
  954
                          FALSE
                                 0.635833732 2.624424e-01 FALSE
   955
                          FALSE
                                 0.632566513 2.635084e-01 FALSE
##
        1.000000e+00
                                 0.631169607 2.639648e-01 FALSE
                          FALSE
##
  956
        1.000000e+00
##
  957
        1.000000e+00
                          FALSE
                                 0.627682164 2.651061e-01 FALSE
  958
                          FALSE
                                 0.623906481 2.663445e-01 FALSE
##
        1.000000e+00
                          FALSE
                                 0.616722763 2.687088e-01 FALSE
##
  959
        1.000000e+00
                                 0.615121172 2.692374e-01 FALSE
##
  960
        1.000000e+00
                          FALSE
  961
        1.000000e+00
                          FALSE
                                 0.606858538 2.719724e-01 FALSE
                          FALSE
                                 0.600704412 2.740184e-01 FALSE
##
  962
        1.000000e+00
##
  963
        1.000000e+00
                          FALSE
                                 0.594947193 2.759394e-01 FALSE
                                 0.576773648 2.820462e-01 FALSE
##
  964
        1.000000e+00
                          FALSE
##
  965
        1.000000e+00
                          FALSE
                                 0.571583348 2.838021e-01 FALSE
                                 0.561877125 2.870999e-01 FALSE
##
  966
        1.000000e+00
                          FALSE
##
  967
        1.000000e+00
                          FALSE
                                 0.561815446 2.871209e-01 FALSE
##
  968
        1.000000e+00
                          FALSE
                                 0.555732803 2.891968e-01 FALSE
##
  969
        1.000000e+00
                          FALSE
                                 0.551406254 2.906776e-01 FALSE
##
  970
        1.000000e+00
                          FALSE
                                 0.551226075 2.907394e-01 FALSE
                          FALSE
##
  971
        1.000000e+00
                                 0.550906639 2.908488e-01 FALSE
## 972
        1.000000e+00
                          FALSE
                                 0.543650878 2.933409e-01 FALSE
## 973
        1.000000e+00
                          FALSE
                                 0.536831278 2.956921e-01 FALSE
## 974
       1.000000e+00
                          FALSE
                                 0.535968830 2.959900e-01 FALSE
```

```
## 975
        1.000000e+00
                         FALSE
                                0.529380036 2.982709e-01 FALSE
## 976
        1.000000e+00
                         FALSE.
                                0.529156670 2.983484e-01 FALSE
  977
        1.000000e+00
                         FALSE
                                0.523051104 3.004693e-01 FALSE
                         FALSE
                                0.510874009 3.047196e-01 FALSE
##
  978
        1.000000e+00
##
  979
        1.000000e+00
                         FALSE
                                0.509305938 3.052689e-01 FALSE
##
  980
        1.000000e+00
                         FALSE
                                0.504654004 3.069009e-01 FALSE
  981
        1.000000e+00
                         FALSE
                                0.503987254 3.071352e-01 FALSE
## 982
        1.000000e+00
                         FALSE
                                0.477005360 3.166792e-01 FALSE
##
  983
        1.000000e+00
                         FALSE
                                 0.472280706 3.183632e-01 FALSE
##
  984
        1.000000e+00
                         FALSE
                                0.469506889 3.193537e-01 FALSE
  985
        1.000000e+00
                         FALSE
                                0.463313782 3.215697e-01 FALSE
##
  986
        1.000000e+00
                         FALSE
                                0.456032235 3.241834e-01 FALSE
##
  987
                         FALSE
                                0.454873525 3.246001e-01 FALSE
        1.000000e+00
                         FALSE
                                0.453533888 3.250822e-01 FALSE
##
  988
        1.000000e+00
  989
##
        1.000000e+00
                         FALSE
                                0.452961117 3.252884e-01 FALSE
##
  990
                         FALSE
                                 0.450064192 3.263321e-01 FALSE
        1.000000e+00
##
                         FALSE
                                0.448892488 3.267546e-01 FALSE
  991
        1.000000e+00
  992
                                0.442865504 3.289315e-01 FALSE
##
        1.000000e+00
                         FALSE
                                0.442675440 3.290003e-01 FALSE
##
  993
        1.000000e+00
                         FALSE
##
  994
        1.000000e+00
                         FALSE
                                0.442618103 3.290210e-01 FALSE
##
  995
        1.000000e+00
                         FALSE
                                0.441296841 3.294991e-01 FALSE
  996
        1.000000e+00
                         FALSE
                                0.435573319 3.315732e-01 FALSE
## 997
        1.000000e+00
                         FALSE
                                0.427431723 3.345325e-01 FALSE
##
  998
        1.000000e+00
                         FALSE
                                 0.427059347 3.346681e-01 FALSE
## 999
        1.000000e+00
                         FALSE
                                0.426162871 3.349946e-01 FALSE
  1000 1.000000e+00
                         FALSE
                                0.424446561 3.356201e-01 FALSE
                         FALSE
  1001 1.000000e+00
                                0.419859107 3.372942e-01 FALSE
## 1002 1.000000e+00
                         FALSE
                                0.409553896 3.410666e-01 FALSE
## 1003 1.000000e+00
                         FALSE
                                0.402057927 3.438207e-01 FALSE
## 1004 1.000000e+00
                         FALSE
                                0.393303624 3.470476e-01 FALSE
## 1005 1.000000e+00
                         FALSE
                                 0.383649026 3.506193e-01 FALSE
  1006 1.000000e+00
                         FALSE
                                0.383087848 3.508273e-01 FALSE
  1007 1.000000e+00
                         FALSE
                                0.377779037 3.527974e-01 FALSE
## 1008 1.000000e+00
                         FALSE
                                0.376946482 3.531067e-01 FALSE
                         FALSE
                                 0.361015652 3.590439e-01 FALSE
  1009 1.000000e+00
                         FALSE
## 1010 1.000000e+00
                                0.346142492 3.646178e-01 FALSE
## 1011 1.000000e+00
                         FALSE
                                0.342944786 3.658200e-01 FALSE
## 1012 1.000000e+00
                         FALSE
                                0.338202423 3.676053e-01 FALSE
## 1013 1.000000e+00
                         FALSE
                                 0.334866589 3.688629e-01 FALSE
## 1014 1.000000e+00
                         FALSE
                                0.327972654 3.714662e-01 FALSE
  1015 1.000000e+00
                         FALSE
                                0.324230188 3.728819e-01 FALSE
                         FALSE
                                0.324130626 3.729196e-01 FALSE
## 1016 1.000000e+00
## 1017 1.000000e+00
                         FALSE
                                0.323682160 3.730893e-01 FALSE
## 1018 1.000000e+00
                         FALSE
                                0.314617861 3.765259e-01 FALSE
## 1019 1.000000e+00
                         FALSE
                                0.311454539 3.777275e-01 FALSE
## 1020 1.000000e+00
                         FALSE
                                 0.308585846 3.788183e-01 FALSE
## 1021 1.000000e+00
                         FALSE
                                 0.302626808 3.810871e-01 FALSE
## 1022 1.000000e+00
                         FALSE
                                0.300263483 3.819881e-01 FALSE
## 1023 1.000000e+00
                         FALSE
                                0.295499502 3.838062e-01 FALSE
## 1024 1.000000e+00
                         FALSE
                                0.292861432 3.848140e-01 FALSE
                         FALSE
## 1025 1.000000e+00
                                0.276766156 3.909798e-01 FALSE
## 1026 1.000000e+00
                         FALSE
                                0.272307242 3.926929e-01 FALSE
## 1027 1.000000e+00
                         FALSE
                                0.270219110 3.934958e-01 FALSE
## 1028 1.000000e+00
                         FALSE
                                0.266560971 3.949036e-01 FALSE
```

```
## 1029 1.000000e+00
                         FALSE 0.265385589 3.953562e-01 FALSE
## 1030 1.000000e+00
                         FALSE
                                0.264342083 3.957582e-01 FALSE
## 1031 1.000000e+00
                         FALSE
                                0.258366908 3.980619e-01 FALSE
## 1032 1.000000e+00
                         FALSE.
                                0.256766853 3.986794e-01 FALSE
## 1033 1.000000e+00
                         FALSE
                                0.253316060 4.000120e-01 FALSE
## 1034 1.000000e+00
                         FALSE
                                0.252893271 4.001753e-01 FALSE
## 1035 1.000000e+00
                         FALSE
                                0.251332915 4.007784e-01 FALSE
## 1036 1.000000e+00
                         FALSE
                                0.247924500 4.020964e-01 FALSE
## 1037 1.000000e+00
                         FALSE
                                0.247096517 4.024168e-01 FALSE
## 1038 1.000000e+00
                         FALSE
                                0.241421347 4.046143e-01 FALSE
## 1039 1.000000e+00
                         FALSE
                                0.239235524 4.054615e-01 FALSE
## 1040 1.000000e+00
                         FALSE
                                0.238406904 4.057828e-01 FALSE
## 1041 1.000000e+00
                         FALSE
                                0.230822549 4.087263e-01 FALSE
## 1042 1.000000e+00
                         FALSE
                                0.224787809 4.110722e-01 FALSE
                                0.222419382 4.119937e-01 FALSE
## 1043 1.000000e+00
                         FALSE
## 1044 1.000000e+00
                         FALSE
                                0.219436942 4.131548e-01 FALSE
## 1045 1.000000e+00
                         FALSE
                                0.217905644 4.137513e-01 FALSE
## 1046 1.000000e+00
                                0.216331026 4.143649e-01 FALSE
                         FALSE
## 1047 1.000000e+00
                         FALSE
                                0.215194985 4.148077e-01 FALSE
## 1048 1.000000e+00
                         FALSE
                                0.209236080 4.171320e-01 FALSE
## 1049 1.000000e+00
                         FALSE
                                0.209124492 4.171755e-01 FALSE
## 1050 1.000000e+00
                         FALSE
                                0.206045821 4.183776e-01 FALSE
## 1051 1.000000e+00
                         FALSE
                                0.203826778 4.192444e-01 FALSE
## 1052 1.000000e+00
                         FALSE
                                0.202355556 4.198194e-01 FALSE
## 1053 1.000000e+00
                         FALSE.
                                0.201219036 4.202637e-01 FALSE
## 1054 1.000000e+00
                         FALSE
                                0.200613052 4.205006e-01 FALSE
                                0.199510504 4.209317e-01 FALSE
## 1055 1.000000e+00
                         FALSE
## 1056 1.000000e+00
                         FALSE
                                0.195485231 4.225065e-01 FALSE
## 1057 1.000000e+00
                         FALSE
                                0.192623525 4.236269e-01 FALSE
## 1058 1.000000e+00
                         FALSE
                                0.178539041 4.291498e-01 FALSE
## 1059 1.000000e+00
                         FALSE
                                0.175039511 4.305243e-01 FALSE
## 1060 1.000000e+00
                         FALSE
                                0.174109063 4.308899e-01 FALSE
  1061 1.000000e+00
                         FALSE
                                0.170078009 4.324744e-01 FALSE
## 1062 1.000000e+00
                         FALSE
                                0.168969436 4.329103e-01 FALSE
                         FALSE
                                0.163692232 4.349867e-01 FALSE
## 1063 1.000000e+00
                                0.160254455 4.363403e-01 FALSE
## 1064 1.000000e+00
                         FALSE
## 1065 1.000000e+00
                         FALSE
                                0.159539634 4.366219e-01 FALSE
## 1066 1.000000e+00
                                0.158312583 4.371052e-01 FALSE
                         FALSE
                                0.158078194 4.371976e-01 FALSE
## 1067 1.000000e+00
                         FALSE
## 1068 1.000000e+00
                         FALSE
                                0.153653792 4.389414e-01 FALSE
## 1069 1.000000e+00
                         FALSE
                                0.150979528 4.399959e-01 FALSE
## 1070 1.000000e+00
                         FALSE
                                0.150615223 4.401396e-01 FALSE
## 1071 1.000000e+00
                         FALSE
                                0.150012388 4.403774e-01 FALSE
## 1072 1.000000e+00
                         FALSE
                                0.148704899 4.408932e-01 FALSE
## 1073 1.000000e+00
                         FALSE
                                0.138621013 4.448748e-01 FALSE
## 1074 1.000000e+00
                         FALSE
                                0.137443033 4.453403e-01 FALSE
## 1075 1.000000e+00
                         FALSE
                                0.136603557 4.456721e-01 FALSE
## 1076 1.000000e+00
                         FALSE
                                0.135017983 4.462988e-01 FALSE
## 1077 1.000000e+00
                         FALSE
                                0.130591074 4.480494e-01 FALSE
## 1078 1.000000e+00
                         FALSE
                                0.129450622 4.485005e-01 FALSE
## 1079 1.000000e+00
                         FALSE
                                0.129295330 4.485620e-01 FALSE
## 1080 1.000000e+00
                         FALSE
                                0.128764424 4.487720e-01 FALSE
## 1081 1.000000e+00
                                0.124583053 4.504268e-01 FALSE
                         FALSE
## 1082 1.000000e+00
                         FALSE
                                0.124209621 4.505747e-01 FALSE
```

```
## 1083 1.000000e+00
                         FALSE 0.124026306 4.506472e-01 FALSE
                        FALSE 0.122192786 4.513732e-01 FALSE
## 1084 1.000000e+00
## 1085 1.000000e+00
                        FALSE 0.117408314 4.532682e-01 FALSE
## 1086 1.000000e+00
                        FALSE 0.116179061 4.537553e-01 FALSE
## 1087 1.000000e+00
                        FALSE 0.114528438 4.544095e-01 FALSE
                        FALSE 0.109765423 4.562977e-01 FALSE
## 1088 1.000000e+00
## 1089 1.000000e+00
                        FALSE 0.106736762 4.574989e-01 FALSE
## 1090 1.000000e+00
                        FALSE 0.101707799 4.594943e-01 FALSE
## 1091 1.000000e+00
                        FALSE
                               0.098226795 4.608761e-01 FALSE
## 1092 1.000000e+00
                        FALSE 0.095354112 4.620168e-01 FALSE
## 1093 1.000000e+00
                        FALSE 0.095210524 4.620738e-01 FALSE
## 1094 1.000000e+00
                        FALSE 0.092492867 4.631532e-01 FALSE
## 1095 1.000000e+00
                        FALSE 0.087760897 4.650334e-01 FALSE
## 1096 1.000000e+00
                        FALSE 0.082049003 4.673039e-01 FALSE
## 1097 1.000000e+00
                        FALSE 0.077817631 4.689866e-01 FALSE
## 1098 1.000000e+00
                        FALSE
                               0.077536719 4.690983e-01 FALSE
## 1099 1.000000e+00
                        FALSE 0.071090939 4.716627e-01 FALSE
## 1100 1.000000e+00
                        FALSE 0.064693786 4.742089e-01 FALSE
## 1101 1.000000e+00
                        FALSE 0.058648982 4.766158e-01 FALSE
## 1102 1.000000e+00
                        FALSE
                               0.054724935 4.781788e-01 FALSE
## 1103 1.000000e+00
                        FALSE 0.049980885 4.800688e-01 FALSE
## 1104 1.000000e+00
                        FALSE 0.042435006 4.830760e-01 FALSE
## 1105 1.000000e+00
                        FALSE 0.041891595 4.832926e-01 FALSE
## 1106 1.000000e+00
                        FALSE
                               0.034298403 4.863196e-01 FALSE
## 1107 1.000000e+00
                        FALSE 0.029602612 4.881920e-01 FALSE
## 1108 1.000000e+00
                        FALSE 0.024081865 4.903937e-01 FALSE
## 1109 1.000000e+00
                        FALSE 0.022295528 4.911061e-01 FALSE
## 1110 1.000000e+00
                        FALSE 0.016571053 4.933894e-01 FALSE
                        FALSE 0.014144827 4.943572e-01 FALSE
## 1111 1.00000e+00
## 1112 1.000000e+00
                        FALSE 0.013203672 4.947326e-01 FALSE
## 1113 1.00000e+00
                        FALSE
                               0.011375189 4.954621e-01 FALSE
## 1114 1.00000e+00
                        FALSE 0.003954588 4.984224e-01 FALSE
##
##
##
  Summary statistics:
##
## Total Chi squared
                               57813.62
## Total degrees of freedom =
                               1216
## p
                                0
## Sum of counts
                                385133
##
## Levels:
##
##
  corpus
          lemma
       20
options(scipen=999)
cfa_res[[1]] %>%
  as.data.frame()
                  %>%
  dplyr::filter(sig.chisq == "TRUE") -> cfares
cfa res[[1]] %>%
  as.data.frame() %>%
  dplyr::mutate(lemma = stringr::str_remove_all(label, ".* "),
                corpus = stringr::str_replace_all(label, "^(\\w+ {0,1}\\w*) \\w+.*$", "\\1")) %>%
```

```
dplyr::group_by(corpus) %>%
 dplyr::mutate(corpus_total = sum(n)) %>%
 dplyr::ungroup() %>%
 dplyr::group_by(lemma) %>%
 dplyr::mutate(lemma_total = sum(n)) %>%
 dplyr::ungroup() %>%
 dplyr::mutate(total = sum(n)) %>%
 dplyr::rowwise() %>%
 dplyr::mutate(phi = (sqrt(chisq / total))) %>%
 dplyr::mutate(phi = ifelse(n > expected, phi, -phi)) %>%
 dplyr::mutate(phi = ifelse(is.na(phi), 0, phi)) %>%
 mutate(phi = ifelse(phi < -0.02 | phi > 0.02, phi, 0),
        phi = ifelse(is.na(phi), 0, phi)) %>%
 dplyr::mutate(corpus = factor(corpus, levels = c("United States", "Great Britain", "Australia", "Cana
# inspect
Fig6dat
## # A tibble: 1,114 x 16
## # Rowwise:
                                                              z p.z sig.z lemma
##
     label
                                 Q chisq p.chisq sig.chisq
                n expected
##
      <chr> <int>
                     <dbl>
                             <dbl> <dbl>
                                         <dbl> <lgl>
                                                           <dbl> <dbl> <lgl> <chr>
##
              546
                      56.6 1.27e-3 4228. 0
                                                 TRUE
                                                            65.0
                                                                    0 TRUE feck
   1 Irela~
## 2 Unite~ 5205 12039. 1.83e-2 3879. 0
                                                 TRUE
                                                                    O TRUE bloo~
                                                            62.3
## 3 Unite~ 5395 2938. 6.43e-3 2054. 0
                                                 TRUE
                                                            45.3
                                                                    0 TRUE ass(~
## 4 Great~ 2074
                     817. 3.27e-3 1932. 0
                                                            44.0
                                                                    O TRUE cunt
                                                 TRUE
## 5 Pakis~
             842
                     240. 1.57e-3 1515. 8.89e-9 TRUE
                                                            38.9
                                                                    O TRUE butt~
## 6 Great~ 1302
                     486. 2.12e-3 1373. 1.07e-3 FALSE
                                                            37.1
                                                                    O TRUE twat
## 7 Great~ 11299
                    8422. 7.64e-3 983. 1.00e+0 FALSE
                                                           31.4
                                                                    O TRUE bloo~
## 8 Phili~
              284
                      55.9 5.92e-4 931. 1.00e+0 FALSE
                                                            30.5
                                                                    O TRUE nigg~
## 9 Sri L~ 1102
                     465. 1.66e-3 874. 1.00e+0 FALSE
                                                           29.6
                                                                    O TRUE bloo~
## 10 Great~
             726
                   2055. 3.47e-3 860. 1 e+0 FALSE
                                                            29.3
                                                                    0 TRUE ass(~
## # i 1,104 more rows
## # i 5 more variables: corpus <fct>, corpus_total <int>, lemma_total <int>,
## # total <int>, phi <dbl>
# Create heatmap
ggplot(Fig6dat, aes(x = corpus, y = lemma, fill = phi)) +
 geom_tile() +
 scale_fill_gradient2(low = "blue", mid = "white", high = "red", midpoint = 0) +
 theme_minimal() +
 labs(
   title = "",
   x = "Region",
   y = "Vulgar Lemma",
   fill = "Phi-value"
 theme(axis.text.x = element_text(angle = 90, hjust = 1),
   panel.background = element_rect(fill = "white", color = NA), # Set panel background to white
   plot.background = element_rect(fill = "white", color = NA),
   panel.grid = element_blank()) # Set plot background to white
```



ggsave(here::here("images", "Fig6.png"), width = 15, height = 22, units = "cm", dpi = 600,bg = "white")

13.2 Table 2

```
Table2 <- Fig6dat %>%
  dplyr::filter(sig.chisq == T) %>%
  dplyr::select(-label, -z, -p.z, -sig.z, -corpus_total, -lemma_total, -total, -sig.chisq) %>%
  dplyr::mutate(type = ifelse(phi < 0, "Avoided", "Preferred"),</pre>
                p.chisq = ifelse(p.chisq < 0.001, "< .001***", p.chisq),</pre>
                Q = round(Q, 5),
                expected = round(expected, 1),
                chisq = round(chisq, 1),
                phi = round(phi, 3)) %>%
  dplyr::arrange(-phi) %>%
  dplyr::relocate(any_of(c("corpus", "lemma", "type", "n", "expected", "chisq", "Q"))) %>%
  dplyr::rename(Region = corpus,
                `Vulgar lemma` = lemma,
                `Observed frequency` = n,
                `Expected frequency` = expected,
                `Q-value`
                            = Q,
                `X2-value` = chisq,
                `Bonferroni-corrected p-value` = p.chisq,
                Type = type,
                `Phi-value` = phi)
# save
```

```
writexl::write_xlsx(Table2, here::here("tables", "Table2.xlsx"))
# inspect
Table2
## # A tibble: 5 x 9
## # Rowwise:
##
     Region
                    'Vulgar lemma' Type
                                            `Observed frequency` `Expected frequency`
##
     <fct>
                   <chr>
                                   <chr>
                                                           <int>
                                                                                 <dbl>
## 1 Ireland
                   feck
                                                                                  56.6
                                   Prefer~
                                                             546
## 2 United States ass(hole)
                                   Prefer~
                                                            5395
                                                                                2938.
## 3 Great Britain cunt
                                                            2074
                                                                                 817.
                                   Prefer~
## 4 Pakistan
                   butt(hole)
                                                                                 240.
                                   Prefer~
                                                             842
## 5 United States bloody
                                   Avoided
                                                            5205
                                                                               12039.
## # i 4 more variables: `X2-value` <dbl>, `Q-value` <dbl>,
       `Bonferroni-corrected p-value` <chr>, `Phi-value` <dbl>
```

14 Outro

sessionInfo()

```
## R version 4.4.2 (2024-10-31 ucrt)
## Platform: x86_64-w64-mingw32/x64
## Running under: Windows 11 x64 (build 26100)
##
## Matrix products: default
##
##
## locale:
## [1] LC_COLLATE=English_United States.utf8
## [2] LC_CTYPE=English_United States.utf8
## [3] LC_MONETARY=English_United States.utf8
## [4] LC NUMERIC=C
## [5] LC_TIME=English_United States.utf8
## time zone: Australia/Brisbane
## tzcode source: internal
## attached base packages:
## [1] parallel stats
                           graphics grDevices utils
                                                         datasets methods
## [8] base
##
## other attached packages:
                          writexl_1.5.2
## [1] cfa_0.10-1
                                            ggrepel_0.9.6
                                                              ggflags_0.0.4
## [5] usethis_3.1.0
                          stringi_1.8.7
                                            here_1.0.1
                                                              quanteda_4.2.0
## [9] lubridate_1.9.4
                         forcats_1.0.0
                                            stringr_1.5.1
                                                              dplyr_1.1.4
                                                              tibble_3.2.1
## [13] purrr_1.0.4
                          readr_2.1.5
                                            tidyr_1.3.1
## [17] ggplot2_3.5.1
                          tidyverse_2.0.0
                                            data.table_1.17.0
##
## loaded via a namespace (and not attached):
## [1] fastmatch_1.1-6
                          gtable_0.3.6
                                            xfun_0.52
                                                              grImport2_0.3-3
## [5] lattice_0.22-6
                                                              tools_4.4.2
                          tzdb_0.5.0
                                            vctrs_0.6.5
## [9] generics_0.1.3
                          pkgconfig_2.0.3
                                            Matrix_1.7-1
                                                              lifecycle_1.0.4
## [13] compiler_4.4.2
                         farver_2.1.2
                                            textshaping_1.0.0 munsell_0.5.1
```

##	[17]	${\tt htmltools_0.5.8.1}$	yaml_2.3.10	pillar_1.10.1	crayon_1.5.3
##	[21]	stopwords_2.3	tidyselect_1.2.1	digest_0.6.37	bookdown_0.42
##	[25]	labeling_0.4.3	rprojroot_2.0.4	fastmap_1.2.0	grid_4.4.2
##	[29]	colorspace_2.1-1	cli_3.6.4	magrittr_2.0.3	base64enc_0.1-3
##	[33]	XML_3.99-0.18	utf8_1.2.4	withr_3.0.2	scales_1.3.0
##	[37]	<pre>timechange_0.3.0</pre>	rmarkdown_2.29	jpeg_0.1-11	ragg_1.3.3
##	[41]	png_0.1-8	hms_1.1.3	evaluate_1.0.3	knitr_1.50
##	[45]	rlang_1.1.5	Rcpp_1.0.14	glue_1.8.0	rstudioapi_0.17.1
##	[49]	R6 2.6.1	systemfonts 1.2.2	fs 1.6.5	