

NAME

addletters - Tool for diddling with letters

SYNOPSIS

```
addletters [options] text ...
```

DESCRIPTION

Tool for diddling with letters

OPTIONS

- a** Use ASCII value of each letter (instead of 1-26)
- d** Use delta between letters
- m** Multiply them together
- M modulus**
Modulus to use when computing deltas
- n** Just print out the numerical value of each letter
- r** Reverse: e.g. **addletters** 18 05 22 05 18 19 05
- t total** Output additional amount to add to get 'total'
- w** Print single words
- x** Print in hex, not decimal
- D lvl** Set Debug level [0]

EXAMPLE

Add the letters in 'geocaching':

```
$ addletters geocaching  
72
```

NAME

geo-2gpsdrive - Enter a file of waypoints into the GpsDrive SQL database.

SYNOPSIS

```
geo-2gpsdrive [options] waypoint-file
geo-2gpsdrive [options] waypoint-file latitude longitude
```

DESCRIPTION

Enter a file of waypoints into the GpsDrive SQL database (if version of gpsdrive is 2.09 or less) OR sqlite3 database (if version of gpsdrive is 2.10 or greater).

This is useful if you have a file of waypoints from geo-nearest that you need to convert into Gpsdrive format plus one or more other formats, such as Cetus plus GpsDrive. Gpsbabel currently doesn't know how to enter waypoints directly into an SQL database (and its not clear to me whether it should be taught how to do this or not).

OPTIONS

-s Output short names for the caches (gpsbabel option)

-r radius

Display only caches with radius (e.g. **-r 25M**)

-i format

Input format, **-o?** for possibilities [tabsep]

-S Enter waypoints into SQL database

-d For **-S**, just delete selected records

-P For **-S**, purge all records of type **-t** Geocache*

-t type The waypoint type [Geocache]

-V gpsver

Version of gpsdrive (2.09 or 2.10) [2.09]

-D lvl Debug level [0]

-U Retrieve latest version of this script

Defaults can also be set with variables in file \$HOME/.georc:

```
LAT=latitude;          LON=logitude;
OUTFMT=format;        BABELFLAGS=-s;
SQLUSER=gast;         SQLPASS=gast;          SQLDB=geoinfo;
```

EXAMPLES

Display shortnames:

```
geo-2gpsdrive -s caches.tabsep
```

Add caches to a GpsDrive SQL database

```
geo-2gpsdrive -s -S caches.tabsep
```

Purge the existing SQL database of all geocaches, then enter new ones:

```
geo-2gpsdrive -S -P -s caches.tabsep
```

SEE ALSO

geo-newest, geo-found, geo-placed, geo-nearest, <http://geo.rkkda.com/>

NAME

geo-2tangogps - Enter a file of waypoints into the tangogps SQL database.

SYNOPSIS

```
geo-2tangogps [options] waypoint-file
geo-2tangogps [options] waypoint-file latitude longitude
```

DESCRIPTION

Enter a file of waypoints into the tangogps SQL database.

This is useful if you have a file of waypoints from geo-nearest that you need to convert into tangogps format plus one or more other formats, such as Cetus plus tangogps. Gpsbabel currently doesn't know how to enter waypoints directly into an SQL database (and its not clear to me whether it should be taught how to do this or not).

OPTIONS

-s Output short names for the caches (gpsbabel option)

-r radius

Display only caches with radius (e.g. **-r 25M**)

-i format

Input format, **-o?** for possibilities [tabsep]

-S Enter waypoints into SQL database

-d For **-S**, just delete selected records

-P For **-S**, purge all records of type **-t Geocache***

-t type The waypoint type [Geocache]

-D lvl Debug level [0]

-U Retrieve latest version of this script

Defaults can also be set with variables in file \$HOME/.georc:

```
LAT=latitude;          LON=logitude;
OUTFMT=format;        BABELFLAGS=-s;
SQLUSER=gast;         SQLPASS=gast;          SQLDB=~/.tangogps/poi.db
;
```

EXAMPLES

Display shortnames:

```
geo-2tangogps -s caches.tabsep
```

Add caches to a tangogps SQL database

```
geo-2tangogps -s -S caches.tabsep
```

Purge the existing SQL database of all geocaches, then enter new ones:

```
geo-2tangogps -S -P -s caches.tabsep
```

SEE ALSO

geo-newest, geo-found, geo-placed, geo-nearest, <http://geo.rkkda.com/>

NAME

geo-additional - Fetch additional waypoints

SYNOPSIS

geo-additional [*options*] *gid* ...

DESCRIPTION

Fetch additional waypoints from a gc id.

EXAMPLES

Fetch extra waypoints from Halloween Hoopla -- A Social Event:

```

$ geo-additional GC14XXA
geo-waypoint N 44° 53.846 W 093° 09.931 ATEMP01
geo-waypoint N 44° 53.849 W 093° 09.943 ATEMP02
geo-waypoint N 44° 53.848 W 093° 09.942 ATEMP03
geo-waypoint N 44° 54.459 W 093° 08.918 ATEMP04
geo-waypoint N 44° 53.724 W 093° 09.819 ATEMP05
geo-waypoint N 44° 54.518 W 093° 08.811 ATEMP06
geo-waypoint N 44° 53.731 W 093° 09.941 ATEMP07
geo-waypoint N 44° 53.767 W 093° 09.753 ATEMP08
geo-waypoint N 44° 53.689 W 093° 09.937 ATEMP09
geo-waypoint N 44° 53.889 W 093° 09.544 ATEMP10
geo-waypoint N 44° 53.827 W 093° 09.678 ATEMP11
geo-waypoint N 44° 53.794 W 093° 09.968 ATEMP12
geo-waypoint N 44° 53.846 W 093° 09.834 ATEMP13
geo-waypoint N 44° 54.462 W 093° 08.384 ATEMP14
geo-waypoint N 44° 54.463 W 093° 08.372 ATEMP15

```

OPTIONS

-D lvl Debug level

NAME

geo-circles - Compute the intersection of two circles on the earth

SYNOPSIS

```
geo-circles [options] lat1 lon1 radius1 lat2 lon2 radius2
```

DESCRIPTION

Compute the intersection of two circles on the earth.

lat/lon can be specified in DegDec or dotted MinDec format. radius is in meters (m) or feet (ft).

N.B. this program was inspired by Rock Johnson's "Gee" series of math caches. Dyl1231, Seabiskit, and I enjoy these very much. Thanks RJ!

OPTIONS

-D lvl Debug level

EXAMPLES

DegDec input...

```
$ geo-circles -- 44.92592 -93.41415 307      44.92392 -93.41377 114
p3a = 44.923176 -93.414810      44.55.391 -93.24.889
p3b = 44.923455 -93.412518      44.55.407 -93.24.751
```

MinDec input...

```
$ geo-circles -- 44.55.435 -93.24.826 114    44.55.435 -93.24.645 150
p3a = 44.923455 -93.412505      44.55.407 -93.24.750
p3b = 44.924445 -93.412513      44.55.467 -93.24.751
```

NAME

geo-code - Geocode an address into a lat/lon

SYNOPSIS

```
geo-code [options] address citystate_or_zip [country]
geo-code [options] "" citystate_or_zip [country]
geo-code [options] tele-phone-number
```

DESCRIPTION

geo-code [*options*] *address citystate_or_zip* [*country*]

Convert (geocode) a street address into a latitude/longitude.

geo-code [*options*] "" *citystate_or_zip* [*country*]

Convert (geocode) a place name into a latitude/longitude.

geo-code [*options*] *tele-phone-number*

Convert (geocode) a phone number into a latitude/longitude.

In either case, the output can be formatted to any of the output file types that gpsbabel supports, or directly imported into the GpsDrive MySQL waypoint database.

Requires:

curl <http://curl.haxx.se/>

gpsbabel
<http://gpsbabel.sourceforge.net/>

OPTIONS**-o format**

Output format, **-o?** for possibilities [gpsdrive] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "degdec" for just Lat.fraq<tab>Long.fraq. plus "mindec" for just DD MM.MMM<tab>DD MM.MMM. plus "map[,geo-map-opts]" to display a geo-map.

-n name

The waypoint name, e.g. Bob's House. The default is the street *address*. Percent escapes can be used: %d/%D for DegDec lat/lon, %m/%M for MinDec lat/lon, %a for *address*, %c for *citystate_or_zip*, %p for phone

-s Output shortened names (a gpsbabel option)

-t type The waypoint type, e.g. house, cache, bar [new]

-q Quiet. Do not output *address* confirmation on stderr.

-S Alias for **-o gpsdrive.sql**

-a For SQL, delete existing record only if it matches all fields. Otherwise, delete it if it matches just the name and the type.

-D level

Debug level

-U Retrieve latest version of this script

COUNTRIES

at, be, ca, dk, fr, de, it, lu, nl, es, ch, uk, us, fi, no, pt, se

EXAMPLES

Geocode...

```
$ geo-code "123 AnyStreet" 12345
123AnyStreet 42.81020 -73.95070 new
```

```
$ geo-code -t house "123 AnyStreet" 12345
123AnyStreet 42.81020 -73.95070 house
```

```
$ geo-code -n "Bob's House" -t house "123 AnyStreet" 12345
BobsHouse 42.81020 -73.95070 house
```

```
$ geo-code -S -n "Bob" -t house "123 AnyStreet" 12345
[waypoint is added to GpsDrive MySQL database]
```

```
$ geo-code 901-555-1212
123AnyStreet 42.81020 -73.95070 new
```

```
$ geo-code "Schlossplatz 10" "76131 Karlsruhe" de
Schlossplatz10 49.01294 08.40584 new
```

```
$ geo-code "" "Mankato, MN"
MankatoMN 44.16562 -94.00130 new
```

SEE ALSO

geo-nearest, geo-waypoint, geo-pg, <http://geo.rkkda.com/>

NAME

geo-coords - Convert lat/lon from one format to another

SYNOPSIS

geo-coords [*options*] *latitude longitude*

DESCRIPTION

Convert lat/lon from one format to another. Lat/Lon may be in DegDec, MinDec, or DMS formats.

Acceptable formats for lat/lon are:

-93.49130	DegDec (decimal degrees)
W93.49130	DegDec (decimal degrees)
"-93 29.478"	MinDec (decimal minutes)
"W93 29.478"	MinDec (decimal minutes)
-93.29.478	MinDec (decimal minutes)
W93.29.478	MinDec (decimal minutes)
"-93 45 30"	DMS (degrees, minutes, seconds)

OPTIONS

-d	Output DegDec only
-m	Output MinDec only
-l	Lat only
-L	Long only

NAME

geo-count - Count geocache finds or logs

SYNOPSIS

```
geo-count [options] user ...
geo-count [options] GCxxxx ...
```

DESCRIPTION

geo-count [*options*] *user* ...

Report and count geocache finds for "user". "user" can be a user name or a user account number.

geo-count [*options*] *GCxxxx* ...

Count number of log entries for a cache.

Requires: A free login at <http://www.geocaching.com>.

curl <http://curl.haxx.se/>

OPTIONS

- b** Include benchmarks in count
- c** Remove cookie file when done
- o** Include counts of items owned
- s** Only print one output line with totals
- h** Print header line
- t** Include counts of travel bugs
- u username**
Username for <http://www.geocaching.com>
- p password**
Password for <http://www.geocaching.com>
- D lvl** Debug level [0]
- U** Retrieve latest version of this script

Defaults can also be set with variables in file `$HOME/.georc`:

```
PASSWORD=password;  USERNAME=username;
```

EXAMPLES

Report cache finds by type for *user* 'Jeremy':

```
geo-count Jeremy
```

Report totals (found, placed, bugs, bugged) for *user* number 3:

```
geo-count -s 3
```

SEE ALSO

geo-usernum, geo-found, <http://geo.rkkda.com/>

NAME

geo-countries-states - List of Countries and States

COUNTRIES

Here is a list of the countries used by **geo-newest** and **geo-demand**.

.af|af|afg|afghanistan
.ax|ax|aland islands
.al|albania
.ag|ag|antigua and barbuda
.ad|ad|and|andorra
.ai|ai|aia|anguilla
.aq|aq|antarctica
.ar|ar|ra|argentina
.aw|aw|aruba
.at|at|a|austria
.az|azerbaijan
.bs|bs|bahamas
.bb|bb|bds|barbados
.bm|bm|bermuda
.bh|bh|brn|bahrain
.bt|bt|bhutan
.bz|bz|belize
.bo|bo|bol|bolivia
.ba|ba|bih|bosnia
.bw|bw|botswana
.br|br|brazil
.bg|bg|bulgaria
.mm|mm|bur|myanmar|burma
.bf|bf|burkina faso
.kh|kh|k|cambodia
.cm|cm|cam|cameroon
.cv|cv|cape verde
.ky|ky|cayman islands
.td|td|tch|chad
.cn|cn|rc|china
.ck|ck|cook islands
.co|colombia
.cr|cr|costa rica
.hr|hr|croatia
.cu|cu|c|cuba
.cy|cy|cyprus
.cz|cz|czech republic
.dk|dk|denmark
.dm|dm|wd|dominica
.do|do|dom|dominican republic
.ec|ec|ecuador
.eg|eg|et|egypt
.sv|sv|el salvador
.ee|ee|est|estonia
.fo|fo|faroe islands
.gf|gf|french guiana
.fj|fj|ji|fiji
.fi|fi|fin|finland

.fr|fr|france
.pf|pf|french polynesia
.gm|gm|wag|gambia
.ge|ge|georgia
.de|d|germany
.gh|gh|ghana
.gi|gi|gbz|gibraltar
.gd|gd|wg|grenada
.gr|gr|greece
.gl|gl|greenland
.gu|gu|guam
.gt|gt|ca|gca|guatemala
.gg|gg|gbg|gbg|guernsey
.gy|gy|guy|guy|guyana
.ht|ht|rh|haiti
.ba|ba|bih|herzegovina
.hn|hn|honduras
.hk|hk|hong kong
.hu|hu|h|h|hungary
.is|is|iceland
.in|ind|ind|india
.io|io|british indian ocean territory
.id|indonesia
.ir|ir|iran
.iq|iq|irq|iraq
.im|im|gbm|isle of man
.il|israel
.it|it|i|italy
.jm|jm|ja|jamaica
.je|je|gbj|jersey
.jo|jo|hkj|jordan
.jp|jp|j|japan
.kz|kz|kazakhstan
.ke|ke|eak|eak|kenya
.kg|kg|kyrgyzstan
.ki|ki|kiribati
.kw|kw|kwt|kuwait
.la|lao|lao|laos
.lv|lv|latvia
.ly|ly||libya
.lb|lb|rl|lebanon
.ls|ls|lesotho
.lr|lr|lb|liberia
.li|li|liechtenstein
.lt|lt|lithuania
.mo|rc|macau
.mg|mg|rm|madagascar
.ml|ml|rmm|mali
.mt|m|malta
.mw|mw|malawi
.my|my|mal|malaysia
.mv|mv|maldive
.gh|gh|ghana
.mp|mp|northern mariana islands

.mh|mh|marshall islands
.mq|mq|martinique
.mr|mr|rim|mauritania
.mx|mx|mex|mex|mexico
.fm|fm|micronesia
.mc|mc|monaco
.mn|mg|mongolia
.ma|morocco
.mz|mz|moc|mozambique
.mu|mu|mauritius
.ms|montserrat
.na|na|nam|namibia
.np|np|nep|nepal
.nl|nl|netherlands
.kn|kn|nevis and st kitts
.ne|rn|niger
.ni|ni|nic|nicaragua
.ng|ng|ngr|nigeria
.nf|nf|norfolk island
.no|no|n|norway
.an|an|na|netherlands antilles
.om|om|oman
.pk|pk|pakistan
.pa|panama
.py|py|paraguay
.pe|pe|peru
.ph|ph|rp|philippines
.pl|pl|poland
.pt|pt|p|portugal
.pr|pr|puerto rico
.qa|qa|qatar
.re|re|reunion
.ro|ro|romania
.ru|ru|rus|russia
.sj|sj|svalbard and jan mayen
.sa|sa|saudi arabia
.sn|sn|senegal
.sc|sy|seychelles
st barthelemy
.sh|sh|saint helena
.lc|lc|wl|saint lucia
st marten
.vc|vc|saint vincent and the grenadines
.sl|sl|sierra leone
.sg|sg|sgp|singapore
.kr|kr|rok|south korea
.si|si|slo|slovenia
.sk|sk|slovakia
.za|za|south africa|zuid afrika
.es|es|e|spain
.lk|lk|cl|sri lanka
.sd|sud|sudan
.sr|sr|sme|suriname
.sz|sz|swaziland

.ch|ch|switzerland
 .sy|sy|syr|syria
 .tw|tw|rcc|taiwan
 .tz|tz|eat|tanzania
 .tc|tc|turks and caicos islands
 .th|th|t|thailand
 .to|to|tonga
 .tt|tt|trinidad and tobago
 .tn|tn|tunisia
 .tr|tr|turkey
 .ae|ae|uae|united arab emirates
 .ua|ua|ukraine
 .ug|ug|au|uganda
 .uk|uk|.gb|gb|united kingdom|great britain
 .uy|uy|rou|uruguay
 .uz|uz|uzbekistan
 .va|scv|can|vatican city state
 .ve|ve|yv|venezuela
 .vn|vn|vietnam
 .vg|vg|bvi|british virgin islands
 .vi|vi|us virgin islands
 .wf|wf|wallis and futuna islands
 .ws|ws|ws|samoa|western somoa
 .cs|cs|scg|scg|serbia and montenegro
 .cd|cd|democratic republic of the congo|zaire
 .zm|zm|z|zambia
 .zw|z|zw|zimbabwe

STATES

Here is a list of the states used by **geo-newest** and **geo-demand**.

al alabama	espírito santo
ak alaska	evora
az arizona	extremadura
as arkansas	faro
ca california	free state
co colorado	galicia
ct connecticut	gauteng
dc	goias
de delaware	guarda
fl florida	hainaut
ga georgia	hamburg
ha hawaii	hessen
id idaho	islas baleares
il illinois	islas canarias
in indiana	kwazulu natal
ia iowa	la rioja
ks kansas	leiria
ky kentucky	liege
la louisiana	limburg
me maine	limpopo
md maryland	lisboa
ma massachusetts	luxembourg
mi michigan	manitoba

mn minnesota	maranhao
ms mississippi	mato grosso
mo missouri	mato grosso do sul
mt montana	mecklenburg-vorpommern
ne nebraska	melilla
nv nevada	minas gerais
nh new hampshire	mpumalanga
nj new jersey	namur
nm new mexico	new brunswick
ny new york	new south wales
nc north carolina	newfoundland and labrador
nd north dakota	niedersachsen
oh ohio	nordrhein-westfalen
ok oklahoma	north island
or oregon	north west
pa pennsylvania	northern cape
ri rhode island	northern territory
sc south carolina	northwest territories
sd south dakota	nova scotia
tn tennessee	nunavut
tx texas	ontario
ut utah	oost-vlaanderen
vt vermont	pais vasco
va virginia	para
wa washington	paraiba
wv west virginia	parana
wi wisconsin	pernambuco
wy wyoming	piaui
acre	portalegre
alagoas	porto
alberta	prince edward island
amapa	principado de asturias
amazonas	quebec
andalucia	queensland
antwerpen	region de murcia
aragon	rheinland-pfalz
arquipelago da madeira	rio de janeiro
arquipelago dos acores	rio grande do norte
australian capital territory	rio grande do sul
aveiro	rondonia
baden-wuerttemberg	roraima
bahia	saarland
bayern	sachsen
beja	sachsen-anhalt
berlin	santa catarina
brabant wallon	santarem
braga	sao paulo
braganca	saskatchewan
brandenburg	schleswig-holstein
bremen	sergipe
british columbia	setubal
brussels	south australia
cantabria	south island

castelo branco	tasmania
castilla y leon	thuringen
castilla-la mancha	tocantins
cataluna	viana do castelo
ceara	victoria
ceuta	vila real
coimbra	viseu
comunidad de madrid	vlaams-brabant
comunidad foral de navarra	west-vlaanderen
comunidad valenciana	western australia
distrito federal	western cape
eastern cape	yukon territory

EXAMPLES

\$ geo-newest germany berlin

NAME

geo-demand - Perform a Pocket Query

SYNOPSIS

```

geo-demand [options]
geo-demand [options] latitude longitude
geo-demand [options] zipcode
geo-demand [options] GCxxxx
geo-demand [options] state
geo-demand [options] country
geo-demand -o outfmt ....
geo-demand -k glob-pattern

```

DESCRIPTION

Pocket Query with demand by email mode...

```

geo-demand [options]
geo-demand [options] latitude longitude
geo-demand [options] zipcode
geo-demand [options] GCxxxx
geo-demand [options] state
geo-demand [options] country

```

Demand a GPX email of a set of geocaches.

"state" can be al, ak, ..., wy or "allstates"

After the query is entered, this script will start a background process that will wait 20 minutes, and then the query will be deleted. The "-w" option puts that process in the foreground. The "-W" option prevents starting that process at all.

Instant data delivery mode...

```

geo-demand -o outfmt ....

```

Any of the command formats above are allowed, and the -o outfmt option must be specified. In this mode, the data is delivered instantly, just like with geo-nearest, etc.

Delete (kill) PQ's by name

```

geo-demand -k glob-pattern

```

Delete (kill) patterns which match glob-pattern by name.

Requires:

- A subscriber login at <http://www.geocaching.com>.

- curl
<http://curl.haxx.se/>

OPTIONS

- d N[+-]**
 Difficulty level [1+]
- t N[+-]**
 Terrain level [1+]
- e address**
 Email results to this address [account email address]
- z** Do not unzip the email contents.
- n num** Return "num" caches [500]
- r radius**
 Return caches within radius (mi or km) [100mi]
- w** Wait for query to be removed.
- W** Do not delete query.
- T period**
 Placed within last period (week, month, year)
- T mm/dd/yyyy-mm/dd/yyyy**
 Placed between two dates. Also **-mm/dd/yyyy** (oldest) and **mm/dd/yyyy-** (newest)
- q qualifiers**
 Limit by one or more space/comma separated qualifiers:
- Type: these ones OR together....
 traditional, multi, virtual, letterbox, event,
 mystery, webcam, trash, earth, mega, gps, where
- Container: these ones OR together....
 small, other, none, large, regular, micro, unknown
- These ones AND together....
 ifound, notfound, bug, unfound, notowned,
 new, iown, watchlist, updated, active, notactive,
 notign, found7, soc, notsoc
- N name/number**
 Set the demand query name or number (1-20) [1]
- a attributes**
 Set attribute values.
- [~]dog,[~]fee,[~]rappelling,
 [~]boat,[~]scuba,[~]kids,[~]onehour,[~]hiking,
 [~]climbing,[~]wading,[~]swimming,[~]24/7,[~]night,
 [~]winter,[~]cliff,[~]hunting,[~]danger,[~]wheelchair,
 [~]camping,[~]bike,[~]motorcycles,[~]quads,[~]jeeps,
 [~]snowmobiles,[~]campfires,[~]poisonivy,[~]thorns,
 [~]snakes,[~]ticks,[~]mines,[~]parking,[~]public,
 [~]picnic,[~]horses,[~]scenic,[~]flashlight,[~]water,
 [~]restrooms,[~]phone,[~]slealth,[~]stroller,[~]maint,
 [~]livestock.

- c** Remove cookie file when done
- u username**
Username for http://www.geocaching.com
- p password**
Password for http://www.geocaching.com
- U** Retrieve latest version of this script
- D lvl** Debug level [0]
 - 0: Create and run query, then delete it
 - 1: Create query but do not run or delete it
 - 2: More verbose version of -D1
 - 3: Just show what curl command would be executed

Instant Data Options:

- o format**
Output format, **-o?** for possibilities [] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "map[,geo-map-opts]" to display a geo-map.
- O filename**
Output file, if not stdout
- H htmdir**
Also fetch the printable HTML pages (slowly)
- L logdir**
Also fetch the plain text log entries (slowly)
- f** Do not report any found or unavailable caches
- F** Report caches found by the login 'username' as unfound

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password;  USERNAME=username;
LAT=latitude;      LON=logitude;
```

EXAMPLES

Nearest 500 caches to my home location:

```
geo-demand
```

Nearest 500 caches to a lat/lon:

```
geo-demand 44.53 -93.56
geo-demand 44.25.234 -93.51.543
```

Nearest 500 caches to a zip code:

```
geo-demand 55344
```

500 caches in a *state*:

```
geo-demand mn
```

500 caches in a *country*:

```
geo-demand iraq
```

500 caches in a foreign *state*:

```
geo-demand berlin
```

Caches I have not found, and wait until query is deleted before exiting (useful in batch scripts):

```
geo-demand -q notfound -w
```

Generate a query, but do not execute it. Check the gc.com website to see what query would have been run...

```
geo-demand -D1
```

Append to the ignore list any caches that were ever SOCs:

```
ignore=$HOME/.geo-ignore  
geo-demand -o gpsdrive -qsoc mn |  
    awk '{print $1}' >> $ignore  
    sort -u -o $ignore $ignore
```

Delete patterns which match "mn-":

```
geo_demand -k mn-
```

SEE ALSO

geo-countries-states geo-newest, geo-found, geo-placed, geo-nearest, <http://geo.rkkda.com/>

NAME

geo-density - Compute the cache density of a circular area

SYNOPSIS

```
geo-density [options]  
geo-density [options] latitude longitude  
geo-density [options] zipcode
```

DESCRIPTION

Compute the cache density of a circular area.

OPTIONS

-c Remove cookie file when done
-r radius Radius in miles for computing the density [4]
-D lvl Debug level [0]
-U Retrieve latest version of this script
Defaults can also be set with variables in file /home/rick/.georc:
LAT=*latitude* ; LON=*logitude* ;

SEE ALSO

<http://geo.rkkda.com/>

NAME

geo-dist - compute total distance between a set of waypoints

SYNOPSIS

geo-dist [*options*] *latitude longitude* [*label* [*symbol*]] ...

DESCRIPTION

Compute total distance and bearing between a set of waypoints. Acceptable formats for lat/lon are:

- 93.49130 DegDec (decimal degrees)
- W93.49130 DegDec (decimal degrees)
- "-93 29.478" MinDec (decimal minutes)
- "W93 29.478" MinDec (decimal minutes)
- 93.29.478 MinDec (decimal minutes)
- W93.29.478 MinDec (decimal minutes)
- W 93° 29.478 Cut/paste from gc.com (note it is 3 arguments)
- "-93 45 30" DMS (degrees, minutes, seconds)

"*label*" and "*symbol*" are optional, can be any text, and are ignored. They are accepted for compatibility with the command line input format of geo-map.

If a lat/lon of 0/0 appears in the list, it is ignored and a new route is started.

OPTIONS

- t waypts** A file of waypoints to plot in tabsep, GPX, or in extended Tiger format: LONG,LAT:SYMBOL:LABEL:URL
- i** Incremental
- D lvl** Debug level [0]
- U** Retrieve latest version of this script

EXAMPLES

Two waypoints:

```
geo-dist N44.48.938 W093.31.988 N44.49.245 W093.30.507
```

Route in a GPX file:

```
geo-dist -t hardwalk.gpx
```

Four waypoints:

```
$ geo-dist -i 45 w93 44.59.809 -93.0.269 \
    45.0.184 -93.0.269 45.0.375 -93.00.000
```

1	0.31006422mi	0.499km	499m	1637ft	225.0
2	0.43123161mi	0.694km	694m	2277ft	0.0
3	0.31006422mi	0.499km	499m	1637ft	44.9
TOTAL	1.0513601mi	1.692km	1692m	5551ft	0.0

SEE ALSO

geo-code, geo-nearest, geo-pg, geo-waypoint, <http://geo.rkkda.com/>

NAME

geo-firefox - Display a map of a point using aerial photos

SYNOPSIS

geo-firefox [*options*] *lat lon*

DESCRIPTION

Display a map of a point using Bing or MapQuest aerial photos and Firefox.

OPTIONS**-a source**

source: mapquest, bing [mapquest]

-z zoom

Zoom level (max, 1-19) [max]

-D lvl Debug level

EXAMPLE

\$ **geo-firefox** 45.04.337 w93.45.414 #A

\$ **geo-firefox -z** 13 45.03.274 w93.38.288 #B

\$ **geo-firefox** 45.00.601 w93.21.109 #C

\$ **geo-firefox** 44.59.668 w93.15.301 #D

\$ **geo-firefox** 45.035778 w93.512187

SEE ALSO

geo-map, <http://geo.rkkda.com/>

NAME

geo-found - Fetch a list of geocaches found by a specific user

SYNOPSIS

```
geo-found [options] [username]
```

```
geo-found [options] [username] [lat] [lon]
```

DESCRIPTION

Fetch a list of geocaches found by a specific user. Only unique caches are found (i.e. two or more logs on a cache are listed only once). Archived caches have the *lat/lon* set to 0.0, 0.0.

Requires: A free login at <http://www.geocaching.com>. Visit a cache page and click the "Download to EasyGPS" link at least once so you can read and agree to the license terms. Otherwise, you will not get any waypoint data.

curl <http://curl.haxx.se/>

gpsbabel
<http://gpsbabel.sourceforge.net/>

OPTIONS**-b bookmark**

Use list "bookmark" [none]

-c Remove cookie file when done

-f Do not report any found or unavailable caches

-m Do not report any members-only caches

-F Report caches found by the login '*username*' as unfound

-n num Return "num" caches [20]

-s Output short names for the caches (gpsbabel option)

-I term Include only caches with 'term' [*]

-X term

Exclude caches with 'term' [_NoThInG_] terms: unfound, ifound, soc, unavail, regular, multi, virtual, webcam, event, hybrid, cito

-r radius

Display only caches with radius (e.g. **-r 25M**)

-u username

Username for <http://www.geocaching.com>

-p password

Password for <http://www.geocaching.com>

-o format

Output format, **-o?** for possibilities [gpsdrive] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "map[,geo-map-opts]" to display a geo-map.

-O filename

Output file, if not stdout

-S Alias for **-o gpsdrive.sql**

-d For **-S**, just delete selected records

- P** For **-S**, purge all records of type **-t** Geocache*
- t type** For **-ogpsdrive.sql**, the waypoint type [Geocache]
- H htmdir**
Also fetch the printable HTML pages (slowly)
- L logdir**
Also fetch the plain text log entries (slowly) For **-H** or **-L**, the limit is 1500 updated caches/day.
- ! "lpr -Plp"**
Print HTML pages
- D lvl** Debug level [0]
- U** Retrieve latest version of this script

DEFAULTS

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password;  USERNAME=username;  SOC=0|1;
LAT=latitude;      LON=logitude;
NUM=num;           UTFMT=format;        BABELFLAGS=-s;
SQLUSER=gast;      SQLPASS=gast;          SQLDB=geoinfo;
```

EXAMPLES

Show the most recent 50 caches found by Jeremy:

```
geo-found -s -n50 Jeremy
```

Show the most recent caches found by Jeremy that are with a radius of 15 miles of your home location:

```
geo-found -s -r15M Jeremy
```

Show the most recent caches found by Jeremy that are with a radius of 15 miles of a specific location:

```
geo-found -s -r50 Jeremy N47.20.000 W121.30.000
```

Make a FULL backup of all of my cache logs (can take awhile):

```
geo-found -n9999 -L ifound -otabsep > ifound.tabsep
```

Append an incremental backup of all of my cache logs:

```
DIR=ifound; FILE=$DIR.tabsep
geo-found -n40 -L $DIR -otabsep >> $FILE
gpsbabel -itabsep -f$FILE -xduplicate,shortname -otabsep -F$FILE
```

SEE ALSO

geo-found, **geo-nearest**, **geo-newest**, **geo-code**, **geo-waypoint**, <http://geo.rkkda.com/>

NAME

geo-gid - Fetch data about geocaches by gc.com GID

SYNOPSIS

```
geo-gid [options] gid ...
```

DESCRIPTION

Fetch data about geocaches by gc.com GID. Only works with caches that are active (not archived).

Requires: A free login at <http://www.geocaching.com>. Visit a cache page and click the "Download to EasyGPS" link at least once so you can read and agree to the license terms. Otherwise, you will not get any waypoint data.

curl <http://curl.haxx.se/>

gpsbabel
<http://gpsbabel.sourceforge.net/>

OPTIONS**-b bookmark**

Use list "bookmark" [none]

-c Remove cookie file when done

-f Do not report any found or unavailable caches

-m Do not report any members-only caches

-F Report caches found by the login 'username' as unfound

-n num Return "num" caches [20]

-s Output short names for the caches (gpsbabel option)

-I term Include only caches with 'term' [*]

-X term

Exclude caches with 'term' [**-unavail**] terms: unfound, ifound, soc, unavail, regular, multi, virtual, webcam, event, hybrid, cito

-r radius

Display only caches with radius (e.g. **-r 25M**)

-u username

Username for <http://www.geocaching.com>

-p password

Password for <http://www.geocaching.com>

-o format

Output format, **-o?** for possibilities [gpsdrive] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "map[,geo-map-opts]" to display a geo-map.

-O filename

Output file, if not stdout

-S Alias for **-o gpsdrive.sql**

-d For **-S**, just delete selected records

-P For **-S**, purge all records of type **-t Geocache***

-t type For **-ogpsdrive.sql**, the waypoint type [Geocache]

-H htmldir

Also fetch the printable HTML pages (slowly)

-L logdir

Also fetch the plain text log entries (slowly) For **-H** or **-L**, the limit is 1500 updated caches/day.

-! "lpr -Plp"

Print HTML pages

-D lvl Debug level [0]**-U** Retrieve latest version of this script**DEFAULTS**

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password;  USERNAME=username;  SOC=0 | 1;
LAT=latitude;      LON=logitude;
NUM=num;           OUTFMT=format;      BABELFLAGS=-s;
SQLUSER=gast;      SQLPASS=gast;      SQLDB=geoinfo;
```

EXAMPLES

geo-gid GCG000

SEE ALSO

geo-newest, geo-found, geo-placed, geo-nearest <http://geo.rkkda.com/>

NAME

geo-gpx - Fetch GPX **file(s)** by gc.com waypoint name

SYNOPSIS

```
geo-gpx [options] gid ...
```

DESCRIPTION

Fetch GPX **file(s)** by gc.com waypoint name (i.e. GCxxxx)

If no output format is specified, the GPX data is stored into individual files named *<gid>.gpx*.

If an output format is specified with **-o**, the GPX data is combined into a single file with that format and output into stdout or to the filename specified with the **-O** option.

Requires: A subscriber login at <http://www.geocaching.com>.

OPTIONS**-o format**

Output format, **-o?** for possibilities [] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "map[,geo-map-opts]" to display a geo-map.

-O filename

Output file, if not stdout

-u username

Username for <http://www.geocaching.com>

-p password

Password for <http://www.geocaching.com>

-D lvl Debug level [0]**-U** Retrieve latest version of this script

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password;  USERNAME=username;
```

EXAMPLES

Get a gc.com style gpx file for a single cache...

```
geo-gpx GCG000
```

Get a gc.com style gpx file for the 20 newest caches...

```
geo-gpx -ogpx -Onewest.gpx $(geo-newest | awk '{print $1}')
```

SEE ALSO

geo-gid, *geo-newest*, *geo-found*, *geo-placed*, *geo-nearest*, <http://geo.rkkda.com/>

NAME

geo-gpxmail - Process PQ email using gpx2html

SYNOPSIS

```
geo-gpxmail [options]
```

DESCRIPTION

Process PQ email using gpx2html. The results are placed under directory '\$PQDIR/<pqname>'. \$PQDIR can be set on the command line with the **-d** option, or in /home/rick/.georc. The default is PQDIR=/home/rick/Caches.

<pqname> is determined from the subject line of the PQ email. Which means this script could break at any time due to the whims of Jeremy.com.

If a shell script named '\$PQDIR/<pqname>/preconvert.sh' exists, it will be executed before gpx2html is run. This can be used, for example, to copy other GPX files into the current directory for merging. E.G.:
/bin/sh cp ../found/found.gpx .

If a shell script named '\$PQDIR/<pqname>/postconvert.sh' exists, it will be executed after gpx2html is run. This can be used for example, to convert the gpx files to other formats.

The shell variables \$PQDIR and \$PQNAME are available to the scripts for their internal use.

Here is a typical /home/rick/.procmailrc recipe to use this program:

```
#
#       Automagically unpack geocaching locations
#
:0
* ^Subject:.*GEO] Pocket Query:
| geo-gpxmail -k
```

Requires: A subscriber login at <http://www.geocaching.com>.

OPTIONS

- i** Incremental (gpx2html mn20.gpx)
- k** Kill all gpx2html processes
- d pqdir** Base directory for all PQ's [/home/rick/Caches/]
- D lvl** Debug level

EXAMPLES

Request and process the list of caches I have found and place it into directory /home/rick/Caches/found/

```
$ geo-demand -Nfound -qifound
```

Request and process 500 nearest caches I have not found and place it into directory /home/rick/Caches/DemandQuary1/

```
$ geo-demand -qnotfound
```

NAME

geo-html2gpx- Convert gc.com *printable* web pages into GPX

SYNOPSIS

```
geo-html2gpx [options] [gc-com.html]...
```

DESCRIPTION

Convert gc.com *printable* web pages into GPX, including cache description and all logs.

The *printable* web pages can be fetched using geo-nearest, geo-newest, geo-placed, geo-found, or geo-gid with the **-H** option.

OPTIONS

- b** Normalize output by postprocessing with gpsbabel
- e** Encode hints with rot13 (e.g. NORTH = ABEGU)
- i** Incremental, no XML and GPX headers
- l number**
Maximum number of log entries to be exported [unlimited]
- n** No HTML in descriptions (experimental)
- o FMT**
Output FMT instead of GPX by using gpsbabel
- u username**
Indicate found status for username [rickrich]
- w** Do not add "Additional Waypoints" to the GPX output
- D lvl** Debug level

EXAMPLES

Convert into GPX:

```
geo-found -n9999 -H. > /dev/null  
geo-html2gpx *.html > found.gpx
```

NAME

geo-htmltbl2db - Convert HTML tables into text

SYNOPSIS

geo-htmltbl2db [*options*] [*html-file*]

OPTIONS**-F OFS**

Output field separator string [space].

-t nth Process nth table only**-v FMT1=str**

Sprintf style format for field1. Use FMT2...FMT16 for other fields. A "*" in the format, such as "%*s", means use the width of the column in the first row to replace the "*". "%*.*s" and "%-*.s" also work.

-v FMT=str

Default format for all columns [%s].

-v FCOL=num

First column to process [1]

-v LCOL=num

Last column to process [max]

-v FROW=num

First row to process [1]

-v LROW=num

Last row to process [max]

-v FTBL=num

First table to process [1]

-v LTBL=num

Last table to process [max]

-v TSEP=str

Separate multiple tables with "str" []

-h bool Output table header (<th>) lines [1]**-s search**

Process after /search/ string []

-D level

Set debugging level [0]

NAME

geo-intersect - Compute the intersection of two lines

SYNOPSIS

```
geo-intersect [options] point1 point2 point3 point4
```

DESCRIPTION

Compute the intersection of two lines. Line segment *point1-point2* and line segment *point3-point4*.

OPTIONS

-p Planar. Disregard curvature of the surface of the earth.

-D lvl Debug level

EXAMPLE

Compute the intersection:

```
geo-intersect \  
45.04.337 w93.45.414 45.03.274 w93.38.288 \  
45.00.601 w93.21.109 44.59.668 w93.15.301
```

NAME

geo-keyword - Fetch geocaches with **keyword(s)**

SYNOPSIS

```
geo-keyword [options] keyword ...
```

DESCRIPTION

Fetch geocaches with *keyword(s)*.

Requires: A free login at <http://www.geocaching.com>. Visit a cache page and click the "Download to EasyGPS" link at least once so you can read and agree to the license terms. Otherwise, you will not get any waypoint data.

curl <http://curl.haxx.se/>

gpsbabel
<http://gpsbabel.sourceforge.net/>

OPTIONS**-b bookmark**

Use list "bookmark" [none]

-c Remove cookie file when done

-f Do not report any found or unavailable caches

-m Do not report any members-only caches

-F Report caches found by the login 'username' as unfound

-n num Return "num" caches [20]

-s Output short names for the caches (gpsbabel option)

-I term Include only caches with 'term' [*]

-X term

Exclude caches with 'term' [**-unavail**] terms: unfound, ifound, soc, unavail, regular, multi, virtual, webcam, event, hybrid, cito

-r radius

Display only caches with radius (e.g. **-r 25M**)

-u username

Username for <http://www.geocaching.com>

-p password

Password for <http://www.geocaching.com>

-o format

Output format, **-o?** for possibilities [gpsdrive] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "map[,geo-map-opts]" to display a geo-map.

-O filename

Output file, if not stdout

-S Alias for **-o** gpsdrive.sql

-d For **-S**, just delete selected records

-P For **-S**, purge all records of type **-t** Geocache*

- t type** For **-ogpsdrive.sql**, the waypoint type [Geocache]
- H htmldir**
Also fetch the printable HTML pages (slowly)
- L logdir**
Also fetch the plain text log entries (slowly) For **-H** or **-L**, the limit is 1500 updated caches/day.
- ! "lpr -Plp"**
Print HTML pages
- D lvl** Debug level [0]
- U** Retrieve latest version of this script

DEFAULTS

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password;  USERNAME=username;  SOC=0 | 1;
LAT=latitude;      LON=logitude;
NUM=num;           OUTFMT=format;      BABELFLAGS=-s;
SQLUSER=gast;     SQLPASS=gast;      SQLDB=geoinfo;
```

EXAMPLES

geo-keyword Big Stone Lake

SEE ALSO

geo-newest, geo-found, geo-placed, geo-code, geo-map, geo-waypoint, <http://geo.rkkda.com/>

NAME

geo-map - Create and display a map centered about a lat/lon

SYNOPSIS

```
geo-map [options] latitude longitude [label [symbol]] ...
```

DESCRIPTION

Create and display a map centered about a *latitude/longitude*. Lat/Lon may be in DegDec, MinDec, or DMS formats.

I believe that fair use allows you to use the mapblast and expedia maps for yourself, but you CANNOT republish those maps. The tiger and terraserver/toposerver maps have no restrictions.

Acceptable formats for lat/lon are:

```
-93.49130          DegDec (decimal degrees)
W93.49130          DegDec (decimal degrees)
"-93 29.478"      MinDec (decimal minutes)
"W93 29.478"      MinDec (decimal minutes)
-93.29.478        MinDec (decimal minutes)
W93.29.478        MinDec (decimal minutes)
W 93° 29.478      Cut/paste from gc.com (note it is 3 arguments)
"-93 45 30"       DMS (degrees, minutes, seconds)
```

"*label*" can be any text and will be displayed by the waypoint. The default *label* is the coordinates in Min-Dec format, and can be explicitly selected with the *label* "@".

"*symbol*" can be these tiger-style symbols

```
cross, redstar, bluestar
<clr>pin
<clr>dot<size>
  <clr> is red, grn, blu, org, pur, mag, brn, lgr, cyn, gry, wht
  e.g. redden10
```

"*symbol*" can also be these extensions:

```
cross,<color>,<size>
dot,<color>,<diameter>
  <color> is any color allowed by convert(1)
  <size> is the length in pixels of the crosses or the diameter
  of the dot.
```

```
circle,<color>,<radius>
circle,<color>,<radius>,<thick>
  <radius> is in pixels, meters(m), kilometers(km),
  feet(ft), or miles(mi).
```

gc

```
Do geocaching.com circle of radius 0.1miles
hline,<color>,<thick>
vline,<color>,<thick>
xhair,<color>,<thick>
<filename>.{gif,jpg,png}
<filename>.{gif,jpg,png},xsize,ysize
<filename>.{gif,jpg,png},xsize,ysize,xoff,yoff
geocache-event geocache-hybrid geocache-multi geocache-regular
geocache-unknown geocache-virtual geocache-webcam geocache-moving
geocache-ifound-event geocache-ifound-hybrid geocache-ifound-multi
```

geocache-ifound-regular geocache-ifound-unknown geocache-ifound-virtual
 geocache-ifound-webcam geocache-ifound-moving
 geocache-unfound-event geocache-unfound-hybrid
 geocache-unfound-multi geocache-unfound-regular
 geocache-unfound-unknown geocache-unfound-virtual
 geocache-unfound-webcam geocache-unfound-moving

The default *symbol* is "cross,red,10" and can be explicitly selected with the *symbol "@"*.

OPTIONS

-a number

Use map source number/name: [2]

1 mapblast/vicinity

2 expedia 3 tiger

4 terraserver

5 toposerver (free USGS)

6 gc 7 gc-icons

8 multimap (worldwide) 9 multimap-aerial (UK only)

13 tscom OR citipix OR globex OR tscom:citipix OR tscom:airphoto OR tscom:digitalglobe OR tscom:globex OR tscom:getmapping OR tscom:getmappingultra. Best is 22544:1 unless a terraserver.com member who sets TSCOM_EMAIL and TSCOM_PW in \$HOME.georc.

20 osm OR osmmapnik OR osmapnik

21 osma OR osmarender

-a black

Black map

-a white

White map

-a gray Gray map (for no map at all)

-a url Don't generate a map, instead output a URL link.

-a file.gif Overlay existing gif or png image with waypoints.

-c Label map with coordinates

-C Force 1st comand line coordinate to be the center

-m Do not display **marker**(s) (symbols)

-s scale Map scale NNNNN:1 [10K]

Units modifiers: K = 1,000 and M = 1,000,000

N.B. A 1024 pixel map at a scale of 10K is 2.26 miles.

Or specify the scale by image resolution: NNNmpp = meters/pixel, NNNfpp or NNNft = feet/pixel, NNNipp or NNNin = inches/pixel (6in res for some sources)

-s 0 Autoscale. Use bounding box of waypoints.

-r radius

Minimum 'radius' (square circle) for autoscaled map. Units are in degrees unless suffixed with km or mi.

-R radius

Maximum 'radius' (square circle) for autoscaled map. Units are in degrees unless suffixed with km or mi.

- S *symbol***
Set the default *symbol* [cross,red,10]
- W *width***
Width of image in pixels [1280]
- H *height***
Height of image in pixels [1024]
- o *file*** Save map in file, do not display it. Also:
- o *www***
Upload: put-rkkda rkkda/tmp 111.jpg
- o *www:file*** Upload: put-rkkda rkkda/tmp file
- h *file*** Write an HTML imagemap to file. Requires **-t** and **-o**. If the file is *+file*, then append the map to the file.
- i** Use smaller icons and labels. Drop coordinates from *label*.
- t *waypts***
A file of waypoints to plot in tabsep, GPX, LOC, or in extended Tiger format:
LONG,LAT:SYMBOL:LABEL:URL
The map will be centered about the 1st command line coordinate. If there isn't one, it will be centered about the bounding box of the coordinates.
- g *mins*[,*color*]** Add a lat/lon grid every minutes (decimal allowed). Suffix mins with "d" for degrees. Grid lines are red unless "color" is specified.
- T "*title*"**
Title to put on image. **-F "*footer*"** Footer to put on image. Escapes for **-T** and **-F**: %a positional params %A entire command line **-j *dir*[,*amt*]** Jog the center of the picture to n/s/e/w/ne/se/nw/sw by 80%
- P *file*** Output gpsbabel polygon (square) to file
- D *lvl*** Debug level [0]
- U** Retrieve latest version of this script
- Defaults can also be set with variables in file \$HOME/.georc:
- ```
MAPSRC=number; MAPSCALE=scale; MAPWIDTH=width; MAPHEIGHT=height;
MAPTEXTBG=white #Can also use #rrggbbaa and "none" for no box
MAPTEXTFG=black #Can also use #rrggbbaa
```

## EXAMPLES

A single waypoint displayed on a map, *label* is lat/lon:

```
geo-map 45.50.501 W93.23.609
```

Two waypoints, map scale determined automatically:

```
geo-map -s0 N44.48.938 W093.31.988 riley cross N44.49.245 W093.30.507 yo
```

Many waypoints from a Tiger-style waypoint file:

```
geo-map -s0 -t /tmp/mngca/TwinCities.tiger
```

A mailable URL from a Tiger-style waypoint file:

```
geo-map -aurl -s0 -t /tmp/mngca/TwinCities.tiger
```

An HTML imagemap from a Tiger-style waypoint file:

```
geo-map -s0 -t test.tiger -h test.html -o test.gif
```

A GIANT imagemap of Twin Cities area caches:

```
geo-map -a3 -s30k -W7400 -H7000 -m -o map.png 45 -93.25
```

```
geo-nearest -ogpx -n700 45 -93.25 > tc700.gpx
```

```
geo-map -a map.png -t tc700.gpx -s30k -o big.png -h big.html 45 -93.25
```

## SEE ALSO

geo-code, geo-nearest, geo-pg, geo-waypoint, <http://geo.rkkda.com/>

**NAME**

**geo-myfinds** - Schedule a Pocket Query containing your finds

**SYNOPSIS**

**geo-myfinds** [*options*]

**DESCRIPTION**

Schedule a Pocket Query containing your finds. It will be emailed to you.

Crontab Entry: # 3AM on the 1st, 11th, and 21th of the month

```
0 3 1,11,21 *
* /home/rick/bin/geo-myfinds
```

Requires:

- A premium subscriber login at <http://www.geocaching.com>.

- **curl**

<http://curl.haxx.se/>

**OPTIONS**

-**u username**

Username for <http://www.geocaching.com>

-**p password**

Password for <http://www.geocaching.com>

-**U** Retrieve latest version of this script

-**D lvl** Debug level [0]

Defaults can also be set with variables in file `$HOME/.georc`:

```
PASSWORD=password; USERNAME=username;
```

**SEE ALSO**

[geo-demand](#), [geo-newest](#), [geo-found](#), [geo-placed](#), [geo-nearest](#), <http://geo.rkkda.com/>

**NAME**

**geo-nearest** - Fetch a list of nearest geocaches

**SYNOPSIS**

```
geo-nearest [options]
geo-nearest [options] latitude longitude
geo-nearest [options] zipcode
geo-nearest [options] u=<username>
geo-nearest [options] pq=<pocket-query>
geo-nearest [options] -b bookmark
geo-nearest [options] guid=<bookmark-id>
```

**DESCRIPTION**

Fetch a list of nearest geocaches.

Requires: A free login at <http://www.geocaching.com>. Visit a cache page and click the "Download to EasyGPS" link at least once so you can read and agree to the license terms. Otherwise, you will not get any waypoint data.

**curl** <http://curl.haxx.se/>

**gpsbabel**  
<http://gpsbabel.sourceforge.net/>

**OPTIONS**

- b** *bookmark*  
Use list "*bookmark*" [none]
- c** Remove cookie file when done
- f** Do not report any found or unavailable caches
- m** Do not report any members-only caches
- F** Report caches found by the login 'username' as unfound
- n num** Return "num" caches [20]
- s** Output short names for the caches (gpsbabel option)
- I term** Include only caches with 'term' [\*]
- X term**  
Exclude caches with 'term' [**-unavail**] terms: unfound, ifound, soc, unavail, regular, multi, virtual, webcam, event, hybrid, cito
- r radius**  
Display only caches with radius (e.g. **-r 25M**)
- u username**  
Username for <http://www.geocaching.com>
- p password**  
Password for <http://www.geocaching.com>
- o format**  
Output format, **-o?** for possibilities [gpsdrive] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "map[,geo-map-opts]" to display a geo-map.

- O filename**  
Output file, if not stdout
- S** Alias for **-o** gpsdrive.sql
- d** For **-S**, just delete selected records
- P** For **-S**, purge all records of type **-t** Geocache\*
- t type** For **-ogpsdrive.sql**, the waypoint type [Geocache]
- H htmldir**  
Also fetch the printable HTML pages (slowly)
- L logdir**  
Also fetch the plain text log entries (slowly) For **-H** or **-L**, the limit is 1500 updated caches/day.
- ! "lpr -Plp"**  
Print HTML pages
- D lvl** Debug level [0]
- U** Retrieve latest version of this script

## DEFAULTS

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password; USERNAME=username; SOC=0|1;
LAT=latitude; LON=logitude;
NUM=num; OUTFMT=format; BABELFLAGS=-s;
SQLUSER=gast; SQLPASS=gast; SQLDB=geoinfo;
```

## EXAMPLES

Nearest 20 caches, display shortnames:

```
geo-nearest -s
```

Search nearest 500 caches for virtual caches not yet found:

```
geo-nearest -n500 -Ivirtual -Xifound
```

Add nearest 50 caches to a GpsDrive SQL database

```
geo-nearest -n50 -f -s -S
```

Purge the existing SQL database of all geocaches, and fetch 200 fresh ones...

```
geo-nearest -S -P -s -n200
```

640x480 map of nearest caches using map source 2:

```
geo-nearest -omap, "-a2 -W640 -H480"
```

Copy two cachers:

```
geo-nearest -n200 -Xifound -udyl1231 -pPW | awk '{print $1}' >1.foo
geo-nearest -n200 -Xifound -urickrich -pPW |awk '{print $1}' >2.foo
geo-gid -otabsep $(comm -12 1.foo 2.foo) >both
```

Fetch by owner:

```
geo-nearest u=team-deadhead
```

Fetch a *bookmark* list:

geo-nearest(1)

geo-nearest(1)

geo-nearest -b acro

or

geo-nearest guid=baae5bf9-4315-4874-b7fb-ac84c9585641

**SEE ALSO**

geo-newest, geo-found, geo-placed, geo-code, geo-map, geo-waypoint, <http://geo.rkkda.com/>

**NAME**

**geo-newest** - Fetch a list of newest geocaches

**SYNOPSIS**

```
geo-newest [options] [country] [state]
geo-newest [options] [state]
geo-newest [options] [state] [lat] [lon]
```

**DESCRIPTION**

Fetch a list of newest geocaches. "*state*" is only available for USA.

Requires: A free login at <http://www.geocaching.com>. Visit a cache page and click the "Download to EasyGPS" link at least once so you can read and agree to the license terms. Otherwise, you will not get any waypoint data.

**curl** <http://curl.haxx.se/>

**gpsbabel**  
<http://gpsbabel.sourceforge.net/>

**OPTIONS****-b bookmark**

Use list "bookmark" [none]

**-c** Remove cookie file when done

**-f** Do not report any found or unavailable caches

**-m** Do not report any members-only caches

**-F** Report caches found by the login 'username' as unfound

**-n num** Return "num" caches [20]

**-s** Output short names for the caches (gpsbabel option)

**-I term** Include only caches with 'term' [\*]

**-X term**

Exclude caches with 'term' [**-unavail**] terms: unfound, ifound, soc, unavail, regular, multi, virtual, webcam, event, hybrid, cito

**-r radius**

Display only caches with radius (e.g. **-r 25M**)

**-u username**

Username for <http://www.geocaching.com>

**-p password**

Password for <http://www.geocaching.com>

**-o format**

Output format, **-o?** for possibilities [gpsdrive] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "map[,geo-map-opts]" to display a geo-map.

**-O filename**

Output file, if not stdout

**-S** Alias for **-o gpsdrive.sql**

**-d** For **-S**, just delete selected records

- P** For **-S**, purge all records of type **-t** Geocache\*
- t type** For **-ogpsdrive.sql**, the waypoint type [Geocache]
- H htmldir**  
Also fetch the printable HTML pages (slowly)
- L logdir**  
Also fetch the plain text log entries (slowly) For **-H** or **-L**, the limit is 1500 updated caches/day.
- ! "lpr -Plp"**  
Print HTML pages
- D lvl** Debug level [0]
- U** Retrieve latest version of this script

## DEFAULTS

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password; USERNAME=username; SOC=0|1;
LAT=latitude; LON=logitude;
NUM=num; UTFMT=format; BABELFLAGS=-s;
SQLUSER=gast; SQLPASS=gast; SQLDB=geoinfo;
```

## EXAMPLES

Add newest 50 caches to a GpsDrive SQL database

```
geo-newest -n50 -f -s -S MN
```

Purge the existing SQL database of all geocaches, and fetch 200 fresh ones...

```
geo-newest -S -P -s -n200 MN
```

Create a GPX file of all caches in MN, including all logs. This will take several hours to run, and should only be run at night.

```
geo-newest -X "" -n2000 -D1 -H html MN > junk
geo-html2gpx -b html/*.html > all-mn.gpx
```

Fetch *country* Iraq:

```
geo-newest -s Iraq
```

Fetch *country* Germany, *state* Berlin:

```
geo-newest -s Germany Berlin
```

## SEE ALSO

geo-countries-states geo-nearest, geo-found, geo-placed, geo-code, geo-map, geo-waypoint,  
<http://geo.rkkda.com/>

**NAME**

**geo-placed** - Fetch a list of geocaches placed by a user

**SYNOPSIS**

```
geo-placed [options] [username]
```

```
geo-placed [options] [username] [lat] [lon]
```

**DESCRIPTION**

Fetch a list of geocaches placed by a specific user.

Requires: A free login at <http://www.geocaching.com>. Visit a cache page and click the "Download to EasyGPS" link at least once so you can read and agree to the license terms. Otherwise, you will not get any waypoint data.

**curl** <http://curl.haxx.se/>

**gpsbabel**  
<http://gpsbabel.sourceforge.net/>

**OPTIONS****-b bookmark**

Use list "bookmark" [none]

**-c** Remove cookie file when done

**-f** Do not report any found or unavailable caches

**-m** Do not report any members-only caches

**-F** Report caches found by the login '*username*' as unfound

**-n num** Return "num" caches [20]

**-s** Output short names for the caches (gpsbabel option)

**-I term** Include only caches with 'term' [\*]

**-X term**

Exclude caches with 'term' [\_NoThInG\_] terms: unfound, ifound, soc, unavail, regular, multi, virtual, webcam, event, hybrid, cito

**-r radius**

Display only caches with radius (e.g. **-r 25M**)

**-u username**

Username for <http://www.geocaching.com>

**-p password**

Password for <http://www.geocaching.com>

**-o format**

Output format, **-o?** for possibilities [gpsdrive] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "map[,geo-map-opts]" to display a geo-map.

**-O filename**

Output file, if not stdout

**-S** Alias for **-o gpsdrive.sql**

**-d** For **-S**, just delete selected records

**-P** For **-S**, purge all records of type **-t Geocache\***

- t type** For **-ogpsdrive.sql**, the waypoint type [Geocache]
- H htmldir**  
Also fetch the printable HTML pages (slowly)
- L logdir**  
Also fetch the plain text log entries (slowly) For **-H** or **-L**, the limit is 1500 updated caches/day.
- ! "lpr -Plp"**  
Print HTML pages
- D lvl** Debug level [0]
- U** Retrieve latest version of this script

## DEFAULTS

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password; USERNAME=username; SOC=0 | 1;
LAT=latitude; LON=logitude;
NUM=num; UTFMT=format; BABELFLAGS=-s;
SQLUSER=gast; SQLPASS=gast; SQLDB=geoinfo;
```

## EXAMPLES

List the most recent 50 caches placed by dyl1231:

```
geo-placed -s -n50 dyl1231
```

List the most recent caches placed by dyl1231 that are with a radius of 15 miles of your home location:

```
geo-placed -s -r15M dyl1231
```

List the most recent caches placed by dyl1231 that are with a radius of 15 miles of a specific location:

```
geo-placed -s -r50 dyl1231 N47.20.000 W121.30.000
```

Display a map of the 20 newest caches placed by dyl1231:

```
geo-placed -omap, -a2 -F dyl1231
```

Make a backup copy of all of my caches placed (can take awhile):

```
geo-placed -n999 -H descdir -L logdir -otabsep > placed.tabsep
```

## SEE ALSO

geo-found, geo-nearest, geo-newest, geo-code, geo-waypoint, <http://geo.rkkda.com/>

**NAME**

**geo-poi** - Lookup places in Place Guide or POI Factory files

**SYNOPSIS**

```
geo-poi [options] pg.pdb ...
geo-poi [options] lat lon
geo-poi [options] last
geo-poi [options] place.csv ...
```

**DESCRIPTION**

**geo-poi** [*options*] pg.pdb ...

Lookup place locations in Mapopolis in pg.pdb Place Guide files, and format them for output in any of the output file types that gpsbabel supports, or directly import them into the GpsDrive MySQL waypoint database.

**geo-poi** [*options*] lat lon

Like the above, except derive the implied list of searched PDB files by consulting an index of placeguide PDB files in /home/rick/.geopoi. A PDB index can be produced with a command like this:

```
for i in */*.pdb; do pgpdb2txt -r `pwd`/$i; done > ~/.geopoi
```

**geo-poi** [*options*] last

Like the above, except determine the current lat/lon from GpsDrive's lastlong/lastlat values in the \$HOME/.gpsdrive/gpsdriverc file.

**geo-poi** [*options*] places.csv ...

Lookup place locations in POI Factory places.csv files, and format them for output in any of the output file types that gpsbabel supports, or directly import them into the GpsDrive MySQL waypoint database.

Requires:

**curl** <http://curl.haxx.se/>

**gpsbabel**

<http://gpsbabel.sourceforge.net>

**OPTIONS**

**-c category**

Select category [\*] Can use shell-style \* globbing to match the category

**-n name**

Select name [\*] Can use shell-style \* globbing to match the name

**-l**

List available categories in .pdb files and exit With **-c**, list raw records in category and exit

**-t type**

The waypoint type to output [<category-in-pdb-file>]

**-o format**

Output format, **-o?** for possibilities [gpsdrive] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "txt" for raw text records

**-o mindec**

Output *lat/lon* in MinDec (44.56.123) mode.

**-S** Alias for **-o** gpsdrive.sql

**-d** For **-S**, just delete selected records0

**-r radius**

Radius value for implied list of PDB files [5]

**-D lvl** Debug level

**-U** Retrieve latest version of this script

**EXAMPLES**

**geo-poi -cHotels** FredericksburgCityVA-PG.pdb

**geo-poi -cRest\* -t** Restaurant FredericksburgCityVA-PG.pdb

**geo-poi -S -c** Dunn ~/poi/Dunn\_Brothers\_Coffee.csv

**SEE ALSO**

geo-code, geo-waypoint, geo-nearest, <http://geo.rkkda.com/>

**NAME**

**geo-pqs** - Run PQ's to get all caches in a state or country

**SYNOPSIS**

```
geo-pqs [options] state_or_country
geo-pqs [options] country state
```

**DESCRIPTION**

Run pocket queries to get all caches in a *state* or *country*.

**OPTIONS**

```
-c Crontab output
-w Weekly crontab output, with -c
-n NUM
 Limit to NUM (99999)
-d N[+-]
 Difficulty level [1+]
-t N[+-]
 Terrain level [1+]
-f Do not report any found or unavailable caches
-q qualifiers
 Limit by one or more space/comma separated qualifiers:
 Type: these ones OR together....
 traditional, multi, virtual, letterbox, event,
 mystery, webcam, locationless, trash
 Container: these ones OR together....
 small, other, none, large, regular, micro, unknown
```

```
-D lvl Debug level
```

**EXAMPLES**

List PQs:

```
$ geo-pqs mn
geo-demand -n500 -T'11/05/2000-11/10/2003' -Nmn-00 mn #499 caches
geo-demand -n500 -T'11/11/2003-10/17/2004' -Nmn-01 mn #497 caches
geo-demand -n500 -T'10/18/2004-07/27/2005' -Nmn-02 mn #498 caches
geo-demand -n500 -T'07/28/2005-01/28/2006' -Nmn-03 mn #494 caches
geo-demand -n500 -T'01/29/2006-05/09/2006' -Nmn-04 mn #500 caches
geo-demand -n500 -T'05/10/2006-07/27/2006' -Nmn-05 mn #500 caches
geo-demand -n500 -T'07/28/2006-10/05/2006' -Nmn-06 mn #498 caches
geo-demand -n500 -T'10/07/2006-12/23/2006' -Nmn-07 mn #492 caches
geo-demand -n500 -T'12/24/2006-03/31/2007' -Nmn-08 mn #495 caches
geo-demand -n500 -T'04/01/2007-05/27/2007' -Nmn-09 mn #487 caches
geo-demand -n500 -T'05/28/2007-07/13/2007' -Nmn-10 mn #494 caches
geo-demand -n500 -T'07/14/2007-' -Nmn-11 mn #107 caches
```

Crontab for rick:

```
$ crontab -l
34 1 * * 0 geo-demand -n500 -T'11/05/2000-11/10/2003' -Nmn-00 mn
34 1 * * 1 geo-demand -n500 -T'11/11/2003-10/17/2004' -Nmn-01 mn
```

geo-pqs(1)

geo-pqs(1)

```
34 1 * * 2 geo-demand -n500 -T'10/18/2004-07/27/2005' -Nmn-02 mn
34 1 * * 3 geo-demand -n500 -T'07/28/2005-01/28/2006' -Nmn-03 mn
34 1 * * 4 geo-demand -n500 -T'01/26/2006-05/09/2006' -Nmn-04 mn
34 1 * * 5 geo-demand -n500 -T'05/10/2006-07/27/2006' -Nmn-05 mn
34 1 * * 6 geo-demand -n500 -T'07/28/2006-10/05/2006' -Nmn-06 mn
39 1 * * 1,3,5 geo-demand -n500 -T'10/07/2006-12/23/2006' -Nmn-07 mn
39 1 * * 0,2,4,6 geo-demand -n500 -T'12/24/2006-03/31/2007' -Nmn-08 mn
44 1 * * 1,3,5 geo-demand -n500 -T'04/01/2007-05/27/2007' -Nmn-09 mn
44 1 * * 0,2,4,6 geo-demand -n500 -T'05/28/2007-07/13/2007' -Nmn-10 mn
49 1 * * * geo-demand -n500 -T'07/14/2007-' -Nmn-11 mn #107 caches 07/23/07
```

Filter:

```
$ geo-pqs -qtrad,small,regular,large -d2- mn
```

Country and State:

```
$ geo-pqs Australia "Northern Territory"
```

**NAME**

**geo-procmail** - procmailrc script for geocaching

**SYNOPSIS**

```
geo-procmail [options]
```

**DESCRIPTION**

This is a procmailrc script for geocaching. It will turn the "http://www.geocaching.com/seek/cache\_details.aspx?..." into "http://www.geocaching.com/seek/cdpf.aspx?" so that you can get the print-friendly pages.

**EXAMPLE**

In \$HOME/.procmailrc:

```
#
GEO: Print friendly, decrypt
#
:0f
* ^Subject:.*GEO] Notify: Surfer Joe
| geo-procmail
```

**OPTIONS**

**-D lvl** Debug level

**NAME**

**geo-project** - Project a waypoint

**SYNOPSIS**

**geo-project** [*options*] *lat1 lon1 distance bearing*

**DESCRIPTION**

Project a waypoint.

lat/lon can be specified in DegDec or dotted MinDec format. *distance* is in miles unless suffixed with km, m, or ft. *bearing* is in compass degrees.

**OPTIONS**

- e** Use WGS 1984 ellipsoid calculation method [default]
- u** Use UTM calculation method
- l** Output decimal latitude only (for scripts)
- L** Output decimal longitude only (for scripts)
- D lvl** Debug level

**EXAMPLES**

Project a waypoint 13147.2 feet at 38 degrees:

```
$ geo-project 44.47.151 -93.14.094 13147.2ft 38
wp = 44.814260 -93.203712 44.48.856 -93.12.223
```

**NAME**

**geo-rehides** - Output a new GPX file containing just rehides

**SYNOPSIS**

**geo-rehides** *finder-name* file.gpx > rehides.gpx

Requires: A *subscriber login* at <http://www.geocaching.com>.

**DESCRIPTION**

Output a new GPX file containing just rehides as far as *finder-name* is concerned (e.g. date placed > date found).

**NAME**

**geo-soon** - Outputs a list of submitted but unapproved caches

**SYNOPSIS**

```
geo-soon [options]
geo-soon [options] lat lon
```

**DESCRIPTION**

Outputs a list of submitted but unapproved caches. This script first finds the cache number of the most recently submitted cache, anywhere in the world. Then, beginning "**-n num**" (1000) caches before that, it fetches the LOC information for caches that have been submitted but are not yet (and may never be) approved. It filters these caches to the specified radius around your *lat/lon*.

The exploit that makes this possible is that the LOC info is returned even though the caches aren't approved.

The amount of information available for these caches is very limited. The GC id, cache name and owner, and *lat/lon* are all that you get.

It would be foolish, and unethical, to search for these caches before they are approved. They could be puzzles, multis, virtuals -- there is no way to know. But, you might use this information to keep a closer vigil on new approvals. Whether that is ethical or not is up to you. I'm just the toolsmith -- if a tool \*can\* be written, I'm inclined to write it. Kinda like a gun maker.

Another use is to check up on your approver, to see how long approvals are taking.

IMPORTANT: The **-r** radius flag limits the output to your area! Otherwise, this command will take a long time to run.

**OPTIONS**

- c** Remove cookie file when done
- n num** Search within the last 'num' caches [1000]
- s** Output short names for the caches (gpsbabel option)
- r radius**  
Show only caches within radius (e.g. **-r 25M**) [35]
- u username**  
Username for <http://www.geocaching.com>
- p password**  
Password for <http://www.geocaching.com>
- o format**  
Output format, **-o?** for possibilities [gpsdrive] plus "gpsdrive.sql" for direct insertion into MySQL DB plus "map[,geo-map-opts]" to display a geo-map.
- O filename**  
Output file, if not stdout
- S** Alias for **-o gpsdrive.sql**
- d** For **-S**, just delete selected records
- P** For **-S**, purge all records of type **-t Geocache-soon\***
- t type** For **-ogpsdrive.sql**, the waypoint type [Geocache-soon]
- D lvl** Debug level [0]

**-U** Retrieve latest version of this script

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password; USERNAME=username; SOC=0 | 1;
LAT=latitude; LON=logitude;
NUM=num; OUTFMT=format; BABELFLAGS=-s;
SQLUSER=gast; SQLPASS=gast; SQLDB=geoinfo;
```

## EXAMPLES

**geo-soon**

**geo-soon** N33.48.566 W117.50.099

## SEE ALSO

geo-newest, geo-found, geo-placed, geo-nearest, <http://geo.rkkda.com/>

**NAME**

**geo-state** - Get a state

**SYNOPSIS**

*geo-state* [*options*] *state*

**DESCRIPTION**

Get *state* by:

```
cd ~/Caches
geo-newest -n4000 -H $ss/tmp $SS >/dev/null
geo-html2gpx $ss/tmp/*.html >$ss/$ss.gpx
(cd $ss; gpx2html)
geo-2gpsdrive -s -S -igpx $ss/$ss.gpx
```

**OPTIONS**

**-D lvl** Debug level

**EXAMPLE**

*geo-state* sd

**NAME**

**geo-suffix** - Replace name with name/TypeSizeDiffTerr/gcid/LatLon

**SYNOPSIS**

**geo-suffix** [*options*] [*file*]

**DESCRIPTION**

Process a "tabsep" format on stdin or "*file*" and produce a "tabsep" format on stdout. Replace name with name/TypeSizeDiffTerr/gcid/LatLon.

|      |                            |
|------|----------------------------|
| Type | Tr, Mu, Un, etc.           |
| Size | Mi, Sm, Re, etc.           |
| Diff | 1, 1+, 2, 2+, etc.         |
| Terr | 1, 1+, 2, 2+, etc.         |
| gcid | GC1H6YH equals 1H6YH       |
| Lat  | last 3 digits of latitude  |
| Lon  | last 3 digits of longitude |

For TomTom, nuvi, etc.

**EXAMPLES**

Convert to TomTom:

```
geo-suffix < example.ts |
 gpsbabel -i tabsep -f -
 -o tomtom -F /mnt/tomtom/USA_and_Canada/geocaching.ov2
```

Name change:

```
geo-suffix ~/xxx.ts | awk -F " " '{ print }'
```

OBG:NoMoreM/TrSm22+/1H6YH/132376  
 OBG:MonsterM/TrSm22/1HBZ5/100511  
 GreeniesandG/TrSm22/1HBZM/970265  
 OBG:LoveThe/TrRe1+1+/14XXG/932547  
 OBG:LovePoti/TrUn22/1HC0G/893424  
 OBG:Treasure/TrUn22/1HC1J/052037  
 MarkSpitzenH/TrRe22/1HC1T/968696  
 Psychedelia:N/TrUn1+1+/R70X/916066  
 Plato'sFiveG/UnRe2+2+/1H5EY/469495

**OPTIONS**

**-D lvl** Debug level

**NAME**

**geo-trilateration** - Compute the intersection of three circles

**SYNOPSIS**

**geo-trilateration** [*options*] *lat0 lon0 rad0 lat1 lon1 rad1 lat2 lon2 rad2*

**DESCRIPTION**

Compute the intersection of three circles on the earth.

lat/lon can be specified in DegDec or dotted MinDec format. radius is in meters (m) or feet (ft).

N.B. this program was inspired by Rock Johnson's "Gee" series of math caches. Dyl1231, Seabiskit, and I enjoy these very much. Thanks RJ!

**OPTIONS**

**-D lvl** Debug level

**EXAMPLES**

# DegDec input...

```
$ geo-trilateration 44.92342 -93.41253 382 \
 44.92335 -93.41165 398 \
 44.55.502 -93.24.795 205
p3a = 44.920119 -93.413749 44.55.207 -93.24.825
p3b = 44.926875 -93.412695 44.55.613 -93.24.762 <--
p3a = 44.926874 -93.412796 44.55.612 -93.24.768 <--
p3b = 44.926326 -93.415098 44.55.580 -93.24.906
p3a = 44.926875 -93.412745 44.55.613 -93.24.765 <--
p3b = 44.925423 -93.415801 44.55.525 -93.24.948
```

# MinDec input...

```
$ geo-trilateration 44.53.200 w93.36.000 370m \
 44.53.000 w93.36.200 262m \
 44.53.200 w93.36.200 453m
p3a = 44.885602 -93.604417 44.53.136 -93.36.265
p3b = 44.883374 -93.600012 44.53.002 -93.36.001 <--
p3a = 44.890036 -93.600031 44.53.402 -93.36.002
p3b = 44.883374 -93.600025 44.53.002 -93.36.002 <--
p3a = 44.883374 -93.600012 44.53.002 -93.36.001 <--
p3b = 44.883339 -93.606647 44.53.000 -93.36.399
```

**NAME**

**geo-unk** - Skeleton shell script that does nothing

**SYNOPSIS**

**geo-unk** [*options*]

**DESCRIPTION**

Skeleton shell script that does nothing.

**OPTIONS**

**-D lvl** Debug level

**NAME**

**geo-usernum** - Given a username, print the user account number

**SYNOPSIS**

**geo-usernum** [*options*] [*username*] ...

**DESCRIPTION**

Given a *username*, print the user account number. If no usernames are given on the comand line, then read usernames from stdin, one per line.

Requires: A free login at <http://www.geocaching.com>.

**curl** <http://curl.haxx.se/>

**OPTIONS****-a aliases**

Tab separated alias file [/home/rick/.geo-alias]

**-c** Remove cookie file when done

**-d dbfile**

Database file to cache lookups [/home/rick/.**geo-usernum**]

**-f** Force website lookup

**-u username**

Username for <http://www.geocaching.com>

**-p password**

Password for <http://www.geocaching.com>

**-s sleep** Time to sleep between page fetches [10]

**-D lvl** Debug level [0]

**-U** Retrieve latest version of this script

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password; USERNAME=username;
```

**SEE ALSO**

geo-count, geo-found, geo-placed, <http://geo.rkkda.com/>

**NAME**

**geo-waypoint** - Convert a lat/lon into a waypoint using gpsbabel

**SYNOPSIS**

**geo-waypoint** [*options*] *latitude longitude name*

**DESCRIPTION**

Convert a *latitude/longitude* into a waypoint using gpsbabel. Lat/Lon may be in DegDec, MinDec, or DMS formats.

Acceptable formats for lat/lon are:

- 93.49130            DegDec (decimal degrees)
- W93.49130           DegDec (decimal degrees)
  
- "-93 29.478"        MinDec (decimal minutes)
- "W93 29.478"        MinDec (decimal minutes)
- 93.29.478           MinDec (decimal minutes)
- W93.29.478           MinDec (decimal minutes)
  
- "-93 45 30"         DMS (degrees, minutes, seconds)

**OPTIONS**

- o format**        Output format, **-o?** for possibilities [gpsdrive] plus "gpsdrive.sql" for direct insertion into MySQL DB
- S**                Alias for **-o** gpsdrive.sql
- d**                For **-S**, just delete selected records"
- t type**         The waypoint type [Geocache]
- D lvl**          Debug level [0]
- U**                Retrieve latest version of this script

Defaults can also be set with variables in file \$HOME/.georc:

```
NUM=num; UTFMT=format; BABELFLAGS=-s;
SQLUSER=gast; SQLPASS=gast; SQLDB=geoinfo;
```

**EXAMPLES**

Enter a lat/lon into the GpsDrive waypoint SQL database:

```
geo-waypoint -S "45 50.501" "-93 23.609" Multi Cache leg 2
```

**SEE ALSO**

geo-code, geo-pg, geo-nearest, <http://geo.rkkda.com/>

**NAME**

**gpx2html** - GPX to HTML converter

**SYNOPSIS**

**gpx2html** [*options*] [<gpx-file> ...]

**OPTIONS**

- a**     Use old style index\_names.html
- h|-?**    Help

**NAME**

**gpx-finders** - Output the finders from a GPX file

**SYNOPSIS**

**gpx-finders** [*options*]

**DESCRIPTION**

**gpx-finders** [*options*]

Output the finders from a GPX file.

Options:

-D lvl          Debug level

**gpx-finders -H** [*options*]

Add headers to stdin

Options:

-D lvl          Debug level

**EXAMPLES**

Finder count:

```
$ gpx-finders /home/rick/proj/caches/Backups/mn30.gpx | wc -l
4480
```

Finders:

```
$ gpx-finders mn30.gpx | sort -n -t' ' -k2 | gpx-finders -H
```

**NAME**

**gpx-fff** - Display FTF cache logs for a finder from a GPX file

**SYNOPSIS**

**gpx-fff** [*options*] *finder-name* *gpx-file*

**USAGE**

**-D level**

Debug level

**EXAMPLES**

**NAME**

**gpx-loghistory** - print all logs from a GPX file in reverse cron order

**SYNOPSIS**

```
gpx-loghistory [options] file.gpx ...
```

**USAGE**

- f fspec** Output into page/day format. %d format specifier needed.
- F** Output Found logs only.
- H** Output HTML **page(s)**.
- n num** Stop after "num" logs. [no limit] With **-f**, stop after "num" days
- u file** Save finders to file
- D level**  
Debug level [0]

**NAME**

**gpx-logs** - Display cache logs for a finder from a GPX file

**SYNOPSIS**

**gpx-logs** [*options*] *finder-name* *gpx-file*

**USAGE**

**-D level**

Debug level

**EXAMPLES**

**NAME**

**gpx-merge** - GPX file merge

**SYNOPSIS**

`gpx-merge [options] file(s) ...`

**DESCRIPTION**

GPX file merge. Output to stdout.

**OPTIONS**

**-D lvl** Debug level

**NAME**

**gpx-photos** - Fetch hi-res PNG aerial photos from a GPX file

**SYNOPSIS**

**gpx-photos** [*options*] *gpx-file*

**DESCRIPTION**

Fetch hi-res PNG format aerial photos for every cache in a GPX file.

**OPTIONS**

- f** Force image download even if it already exists
- W width**  
Width of image in pixels [500]
- H height**  
Height of image in pixels [500]
- a mapsrc**  
Source for photos, ala geo-map [terra]
- s scale** Scale of photos, ala geo-map {0.5fpp}
- S time** Time to sleep between fetches [5]
- D lvl** Debug level

**NAME**

**gpx-stats** - Compute stats from a GPX file

**SYNOPSIS**

**gpx-stats** [*options*]

**DESCRIPTION**

**gpx-stats** [*options*]

Compute stats from a GPX file

Options:

|        |                       |
|--------|-----------------------|
| -l     | Sort by # of logs     |
| -a     | Sort by cache age     |
| -f     | Sort by log frequency |
| -D lvl | Debug level           |

**gpx-stats -H** [*options*]

Add headers to stdin

Options:

|        |                       |
|--------|-----------------------|
| -l     | Sort by # of logs     |
| -a     | Sort by cache age     |
| -f     | Sort by log frequency |
| -t     | Top caches only       |
| -D lvl | Debug level           |

**EXAMPLES**

Statistics:

```
gpx-stats all-mn.gpx
```

```
gpx-stats -l all-mn.gpx | gpx-stats -H
```

```
gpsbabel -igpx -fall-mn.gpx -x radius,lat=45,lon=-93.5,distance=20 -ogpx -Ftc.gpx
gpx-stats -l tc.gpx | gpx-stats -H -t
```

**NAME**

**lethist** - Letter histogram from <stdin>

**SYNOPSIS**

**lethist** [*options*]

**DESCRIPTION**

Letter histogram from <stdin>.

**EXAMPLE**

Letter histogram:

```
$ lethist | sort -k2 -n -r
1 5 - 8)) W 5 - (+)) ; 4 8 W 5 ; 8 (* + ; 8 ; W + 0 5 (3 8 9
? 0 ; 6 ; (? * K 8 ! ; (8 8) W 6 ; 4 5 1 5 0 0 8 * + * 8 6 * 2 8
; W 8 8 * ; 4 8 ! 8 5 ; 4) 4 8 5 ! 6) 6 * ; 4 8 9 6 ! ! 0 8 + 1 ;
4 8 ; + . 0 6 9 2 + 1 ; 4 8 1 5 0 0 8 * ; (8 8 3 + ; 4 8 (8 1 (+
9 ; 4 8 ! 8 5 ; 4) 4 8 5 !) 4 + + ; 5 2 8 8 0 6 * 8 ; 4 6 (; : 1
8 8 ; + ? ; ; + ; 4 8) + ? ; 4.
```

**OPTIONS**

**-D lvl** Set Debug level [0]

**NAME**

**ll2ggl** - Lat/lon to google maps

**SYNOPSIS**

**ll2ggl** [*options*] *lat lon*

**DESCRIPTION**

Lat/*lon* to google maps.

**OPTIONS**

**-z zoom**

Zoom factor from 0 (small) to 17 (large)[2]

**-D lvl** Debug level

**NAME**

**ll2osg** - Lat/long to British National Grid

**SYNOPSIS**

**ll2osg** [*options*]

**DESCRIPTION**

Lat/long to British National Grid.

**OPTIONS**

**-D lvl** Debug level

**NAME**

**mngca** - Fetch MnGCA cache counts and upload to website

**SYNOPSIS**

**mngca** [*options*]

**DESCRIPTION**

Fetch MnGCA cache counts and upload to website.

Run this on Mondays and Fridays in the wee hours

**OPTIONS**

- i** Just recreate the web pages from existing data
- m l,l** Override moving123 lat/lon
- D lvl** Debug level

**NAME**

**mngca-logs** - Create a webpage of recent logs

**SYNOPSIS**

**mngca-logs** [*options*] [*gpx-files*]

**DESCRIPTION**

Create a webpage of recent logs.

This is meant to be called from cron every 5 minutes.

**OPTIONS**

- f** Force regeneration of web page
- v** View-only, do not post the pages
- D lvl** Debug level

**NAME**

**mngca-newmap** - Create a map of newest caches

**SYNOPSIS**

**mngca-newmap** [*options*]

**DESCRIPTION**

Create a map of newest caches for the MnGCA.

**OPTIONS**

- a0** Use tiger for the maps and use tiger to place the markers on the map.
- a num** Use geo-map and map source "num" for the maps. [3]
- g** Do not include geocaching.com caches
- n** Do not include navicache.com caches
- v** View-only, do not post the maps
- T dir** Temp directory name for results [tmp/mngca]
- D lvl** Debug level

**NAME**

**nc-newest** - Fetch a list of newest geocaches

**SYNOPSIS**

**nc-newest** [*options*] [*state*]

**nc-newest** [*options*] [*state*] [*lat*] [*lon*]

**DESCRIPTION**

Fetch a list of newest geocaches.

Requires:

**curl** <http://curl.haxx.se/>

Options:

- f** Do not report any found or unavailable caches
- F** Report caches found by the login 'username' as unfound
- T datespec**  
Return caches placed or modified since 'datespec', which can be any date accepted by the **date(1)** command.
- n num** Return "num" caches [20]
- s** Output short names for the caches (gpsbabel option)
- I term** Include only caches with 'term' [\*]
- X term**  
Exclude caches with 'term' [**-unavail**]. Terms: unfound, ifound, unavail, regular, multi, virtual, webcam, event, hybrid, moving
- r radius**  
Display only caches with radius (e.g. **-r 25M**)
- u username**  
Username for <http://www.navicache.com>
- p password**  
Password for <http://www.navicache.com>
- o format**  
Output format, **-o?** for possibilities [gpsdrive]. Plus "gpsdrive.sql" for direct insertion into MySQL DB. Plus "map[,geo-map-opts]" to display a geo-map.
- O filename**  
Output file, if not stdout
- S** Alias for **-o gpsdrive.sql**
- d** For **-S**, just delete selected records
- P** For **-S**, purge all records of type **-t Geocache\***
- t type** For **-ogpsdrive.sql**, the waypoint type [Geocache]
- H htmldir**  
Also fetch the printable HTML pages (slowly)
- L logdir**  
Also fetch the plain text log entries (slowly)
- D lvl** Debug level [0]

**-U** Retrieve latest version of this script

Defaults can also be set with variables in file \$HOME/.georc:

```
PASSWORD=password; USERNAME=username;
LAT=latitude; LON=logitude;
NUM=num; OUTFMT=format; BABELFLAGS=-s;
SQLUSER=gast; SQLPASS=gast; SQLDB=geoinfo;
```

## EXAMPLES

Add newest 50 caches to a GpsDrive SQL database

```
nc-newest -n50 -f -s -S MN
```

Purge the existing SQL database of all geocaches, and fetch 200 fresh ones...

```
nc-newest -S -P -s -n200 MN
```

## SEE ALSO

geo-newest, geo-nearest, geo-found, geo-placed, geo-code, geo-map, geo-waypoint, <http://geo.rkkda.com/>

**NAME**

**pgpdb2txt** - Convert a Mapopolis Place Guide .pdb file to text

**SYNOPSIS**

```
pgpdb2txt [options] [file] ...
```

**DESCRIPTION**

Convert a Mapopolis Platinum Place Guide .pdb *file* to text. This is useful for creating a waypoint database for GpsDrive.

The **-F0** (default) output text format is:

```
Category | Name | StreetAddress | CityStateZip | Phone | Lat | Lon |
```

The **-F1** or **-F2** output format is:

```
Category | Name | StreetAddress | CityStateZip | Phone | Lat | Lon | Index |
```

The **-F3** (GpsDrive way.txt) output format is:

```
ShortName Lat Lon Category
```

The **-F4** (GpsDrive SQL) output format is:

```
ShortName Lat Lon Category Comment
```

**OPTIONS****-c category**

Select category [\*] category may be an RE, e.g. **-cRest.\***

**-n name**

Select name [\*] name may be an RE, e.g. **-n.\*McDonald.\***

**-l** Just list the categories in this *file*.

**-o dec** Output lat/lat in 'degdec' (44.456789) or 'mindec' (44.12.123) format.

**-r** Just print the lat/lon coverage rectangle of this *file*.

**-t type** The waypoint type to output [<category-in-pdb-file>]

**-u** Do not convert text to mixed case

**-F1** Append record number as Index

**-F2** Append filename and record number as Index

**-F3** Produce output compatible with GpsDrive v1.32 way.txt

**-F4** Produce output compatible with GpsDrive v1.32 SQL

**-d** For **-F4**, just delete selected records

**-D lvl** Set Debug level [0]

**NAME**

**rect2geomap** - Calculate the scale, image width/height and lat/lon

**SYNOPSIS**

```
rect2geomap [options] scale latUL lonUL lat LR lonLR
```

**DESCRIPTION**

Calculate the *scale*, image width/height and *lat/lon* center point command line arguments for geo-map that will enclose a *lat/lon* rectangle at the specified *scale* factor.

**OPTIONS****-P pixelfact**

Override the default pixel factor [2817.947378]

**-D lvl** Debug level**EXAMPLE**

Calculate the *scale*...

```
$ rect2geomap 50000 45.25 -93.375 44.75 -92.675
-s50000 -W3113 -H3131 45 -93.025
```

**NAME**

**update-caches** - Upload caches

**SYNOPSIS**

**update-caches** [*options*]

**DESCRIPTION**

Upload caches

**OPTIONS**

- o** Update, but no geo-nearest/geo-newest
- f** Find
- F** Force
- i** Incremental (200)
- I** Incremental (2000)
- n** Use geo-newest instead of geo-nearest
- q** Quick (60)
- D lvl** Debug level

