**GPS**

Stuk akkerland:

[http://www.gpscoordinaten.nl/bepaal-gps-coordinaten.php#](http://www.gpscoordinaten.nl/bepaal-gps-coordinaten.php)



|  |  |
| --- | --- |
| 1) 50.92148, 3.74583  2) N 50 55.289, E 3 44.75  3) N 50 55 17.3, E 3 44 45  4) 39589, 327042 | 1) 50.92319, 3.74388  2) N 50 55.391, E 3 44.633  3) N 50 55 23.5, E 3 44 38  4) 39456, 327236 |
| 1) 50.92301, 3.74340  2) N 50 55.381, E 3 44.604  3) N 50 55 22.8, E 3 44 36.2  4) 39422, 327216 | 1) 50.92136, 3.74522  2) N 50 55.282, E 3 44.713  3) N 50 55 16.9, E 3 44 42.8  4) 39546, 327030 |

N = Nord

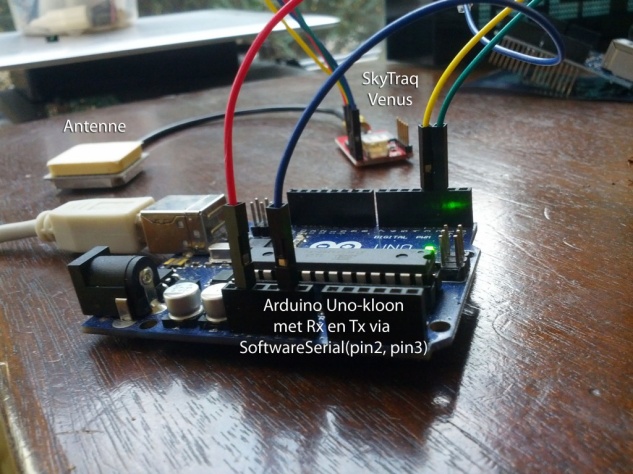
O = East

Z = South

W = West

? = distance to know = length of the area

##### PS software

[](http://raspberry-pi.be/wp-content/uploads/2013/01/gps-setup.jpg)

**The first step: writing a program that gives an output**

#include <SoftwareSerial.h>

SoftwareSerial mySerial(2, 3); // RX, TX

void setup() {  
Serial.begin(57600);  
mySerial.begin(9600);  
}

void loop() {  
if (mySerial.available()){  
Serial.write(mySerial.read());  
}  
}

De output gives (o.a.) :

*$GPGGA,145648.324,5319.4508,N,00651.6376,E,1,07,1.1,19.3,M,43.1,M,,0000\*68*

This means:

*$GPGGA,hhmmss.sss,ddmm.mmmm,a,dddmm.mmmm,a,x,xx,x.x,x.x,M,,,,xxxx\*hh<CR><LF>*

hhmmss.sss = 145648.324 = time

* + 14 hour
  + 56 minutes
  + 48,324 seconds

ddmm.mmmm,a,dddmm.mmmm,a = 5319.4508,N,00651.6376,E

* + 53 degrees, 19,4508 minutes Nord
  + 6 degrees, 51,6376 minutes East
    - This means:
  + 53 + 19,4508/60 = 53,32418 degrees “Norder-with”
  + 6 + 51,6376/60 = 6,86062 gaden “Easter-length”

**The second step: writing the program to do something with the output**

I don’t know how to start with this.

The goal of my project is to assure that the vehicle stays in the area, see figure above.

Can someone help me with that?