Helpful links:

Troubleshooting: <http://www.sustainablenetworks.org/CIS623/?page_id=142>

GPS Shield Kit: <https://learn.sparkfun.com/tutorials/gps-shield-hookup-guide>

Library for GPS: <http://arduiniana.org/libraries/tinygpsplus/>

Msg type: <http://docs.ros.org/api/sensor_msgs/html/msg/NavSatFix.html>

Arduino Raw Data: http://tronixstuff.com/2010/09/17/moving-forward-with-arduino-chapter-17-gps/

When following this page (<http://wiki.ros.org/nmea_navsat_driver>):

\*\* MAKE SURE YOU RUN “roscore” on a separate terminal window BEFORE YOU TRY TO RUN the cmd “rosrun nmea\_navsat\_driver nmea\_serial\_driver \_port:=/dev/ttyUSB0 \_baud:=38400”

\*\* ALSO NOTE that your port may change i.e. /dev/ttyACM0 or /dev/ttyACM1

Arduino Upload:

* Put into dline while uploading onto Arduino
  + Won’t work otherwise
* Put on uart and change baud rate( preferably 4800)

Publishing to ROS:

* Open 3 terminals
* 1st Terminal:
  + roscd
  + roscore
* 2nd Terminal:
  + rosrun nmea\_navsat\_driver nmea\_serial\_driver \_port:=/dev/ttyUSB0 \_baud:=38400 (NOTE: PORT MAY BE /dev/ttyACM0)
* 3rd Terminal:
  + rostopic echo /fix