

# RTKCONV



Convert receiver raw data to RINEX format.

Ex. ublox receiver > .ubxファイル } .obs (observation)  
javad receiver > .javファイル } .nav (ephemeris)

RINEX (The Receiver Independent Exchange Format )

<ftp://igs.org/pub/data/format/rinex302.pdf>

# Convert Receiver Raw Data to RINEX Format-1 (Open the Converter)

The screenshot shows a Windows File Explorer window titled "The data from receiver" with the address bar set to "パンガンhow to GNSS". The file list contains two files:

名前	更新日時	種類	サイズ
Base160628_005736.ubx	2016/06/28 21:17	u-blox Log File	307,731 KB
GCP0628F1_3.ubx	2016/06/28 3:28	u-blox Log File	197 KB

**.ubx is ublox original raw data**

An orange arrow points from the text to the RTKLIB v.2.4.3 b9 application icon in the taskbar. A red arrow points from the text "Click RTKCONV" to the same icon.

**Click RTKCONV**

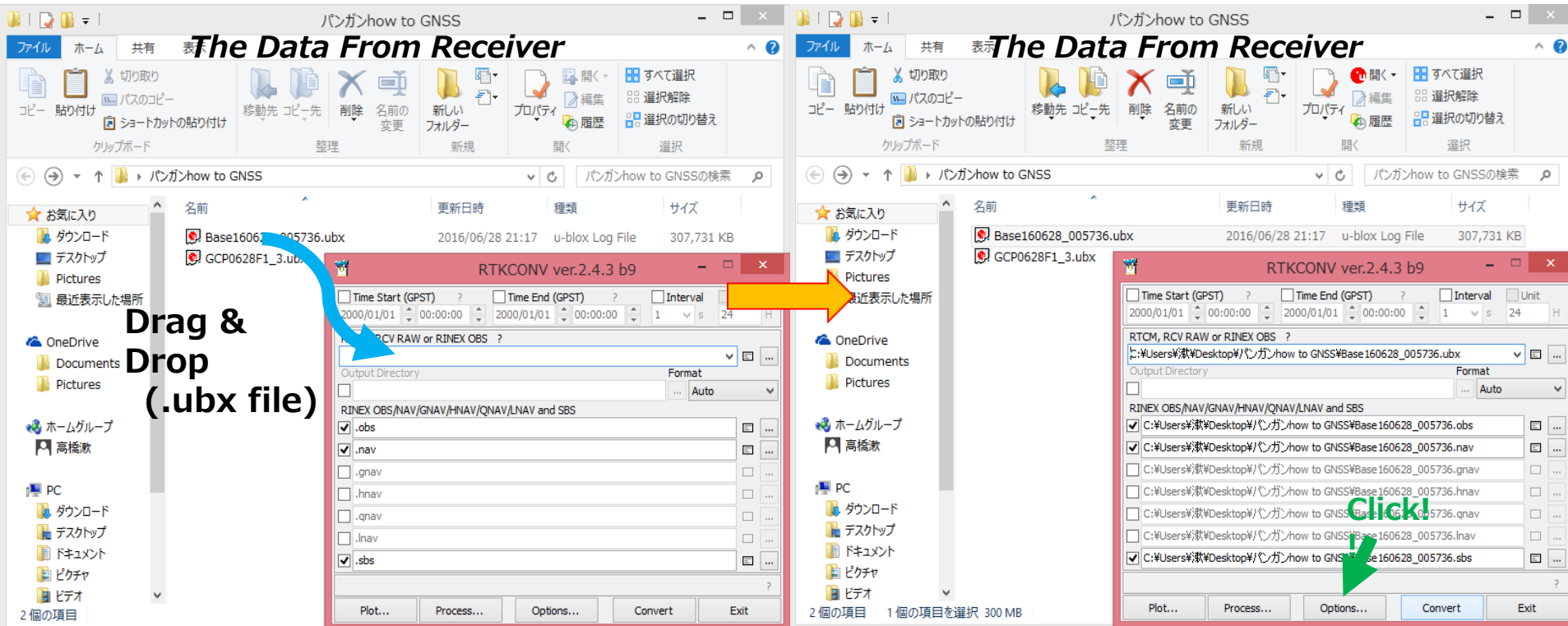
The screenshot shows the RTKCONV v.2.4.3 b9 application window. The "RTCM, RCV RAW or RINEX OBS" dropdown is set to "RINEX OBS/NAV/GNAV/HNAV/QNAV/LNAV and SBS". The "Output Directory" is empty, and the "Format" is set to "Auto". The "RINEX OBS/NAV/GNAV/HNAV/QNAV/LNAV and SBS" section has the following options checked:

- .obs
- .nav
- .gnav
- .hnav
- .qnav
- .lnav
- .sbs

The "Time Start (GPST)" is set to 2000/01/01 00:00:00, and the "Time End (GPST)" is set to 2000/01/01 00:00:00. The "Interval" is set to 1 s and the "Unit" is set to 24 H.

**Open the window**

# Convert Receiver Raw Data to RINEX Format-2 (Input the data)



Input the raw data

- Confirm the check box .obs and .nav are vailed
- Then, click the options

# Convert Receiver Raw Data to RINEX Format-3 (Setting the options)

## Setting the options

Options

RINEX Version: 3.02 Station ID: 0000 RINEX Name:

RunBy/Obsv/Agency:

Comment:

Maker Name/#/Type:

Rec #/Type/Vers:

Ant #/Type:

Approx Pos XYZ:  0.0000 0.0000 0.0000

Ant Delta H/E/N: 0.0000 0.0000 0.0000

Scan Obs Types  Iono Corr  Time Corr  Leap Sec

Satellite Systems:  GPS  GLO  Galileo  QZSS  SBAS  BeiDou  Excluded Satellites

Observation Types:  C  L  D  S

Frequencies:  L1  L2  L5/L3  L6  L8 Mask...

Option:  Debug: OFF OK Cancel

RTKCONV ver.2.4.3 b9

Time Start (GPST): 2000/01/01 00:00:00 Time End (GPST): 2000/01/01 00:00:00 Interval: 1 s Unit: 24 H

RTCM, RCV RAW or RINEX OBS ?  
C:\Users\...\Desktop\...\how to GNSS\Base160628\_005736.ubx

Output Directory:  Format: Auto

RINEX OBS/NAV/GNAV/HNAV/QNAV/LNAV and SBS

- C:\Users\...\Desktop\...\how to GNSS\Base160628\_005736.obs
- C:\Users\...\Desktop\...\how to GNSS\Base160628\_005736.nav
- C:\Users\...\Desktop\...\how to GNSS\Base160628\_005736.gnav
- C:\Users\...\Desktop\...\how to GNSS\Base160628\_005736.hnav
- C:\Users\...\Desktop\...\how to GNSS\Base160628\_005736.lnav
- C:\Users\...\Desktop\...\how to GNSS\Base160628\_005736.sbs

Plot... Process... Options... Convert Exit

- Ver. **3.02**
- Satellite systems
- Frequencies

Execute convert

In this case, ublox receivers data obtained the single – frequencies with GPS, QZSS, and BeiDou