

# Campaign Data Collection Modes and Memory Requirements

73 Freddy Blume March 24, 2010 [GNSS Campaigns](#) 2548

## Campaign Data Collection Modes and Memory Requirements

GPS receivers can be operated in several modes such as logging data to a single file, logging data according to pre-programmed sessions, logging stop-and-go kinematic files, or streaming data to an external device. The mode selected depends on the particular data collection method used (Section 3). Typically data collection is started and a file name and antenna height information are entered in the receiver, field notes, or both. The user also selects the survey data collection sample rate and the elevation cutoff angle depending on field objectives. **There must be enough free memory in the receiver for the desired survey:**

For example, a Trimble 5700 or R7 receiver can log data for about 3 months at the default 15 second sample rate with a 5 degree elevation mask onto a 128 MB compact flash card.

A Trimble 4700 receiver can log data for about 4 days at the default 15 second sample rate with a 13 degree elevation mask.

A 5Mb memory Trimble 4000 SSi receiver at a 30-second sample rate, 15 degree elevation mask can log data for about 7 days before the internal memory fills up. Once a survey is started, the front panel status screen will display an estimate of the memory remaining. This number is optimistic, and should be multiplied by 0.75 for a realistic estimate.

Typical sample rates and elevation cutoff:

Survey Mode	Sample Rate	Elevation Cutoff Angle
Static Survey	30 seconds	5 degrees
Rapid Static	15 seconds	13 degrees
Kinematic	1-15 seconds	13 degrees

Online URL:

<https://kb.unavco.org/article/campaign-data-collection-modes-and-memory-requirements-73.html>