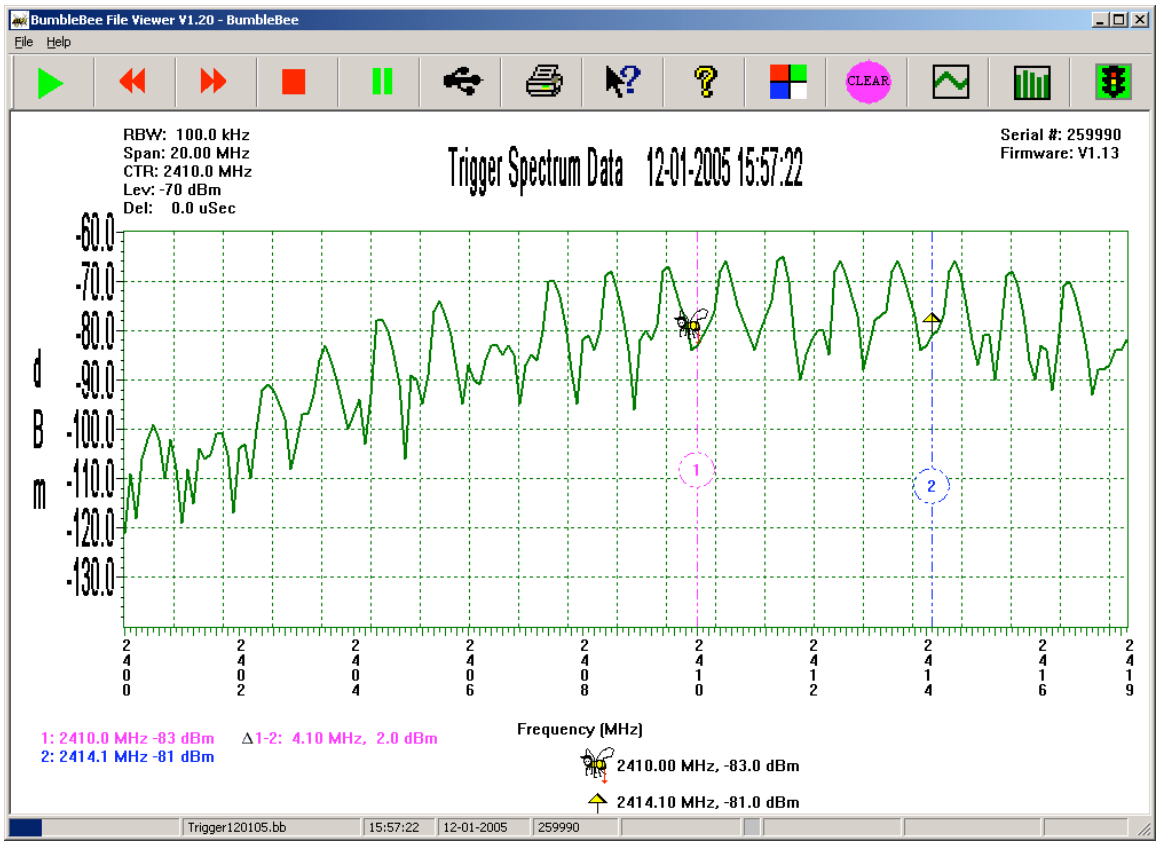
# BumbleBee/Yellowjacket-BAG
# PC Viewer Software
**Manual Version 1.2**



Contents

**BumbleBee PC Data File Viewer Manual V1.20**

**This version of the PC viewer plays files captured with the BVS BumbleBee or the BVS YellowJacket BAG product.**

**Requirements:**

**PC running Windows XP or Vista, 1.6 GHz Pentium CPU and at least 512 Mbyte of ram.**
**NOTE: To print using Microsoft VISTA, make sure the computer display is set to 16 bit color.**

**Note: To print using Microsoft VISTA, make sure the PC display is set to 16-bit color.**

**Installation:**

**Run the program "Setup.exe" on the supplied CD by double clicking the icon in Figure 1.**


**Figure 1**

**To run the application, double click its icon**  **and the following screen in Figure 2 will appear:**

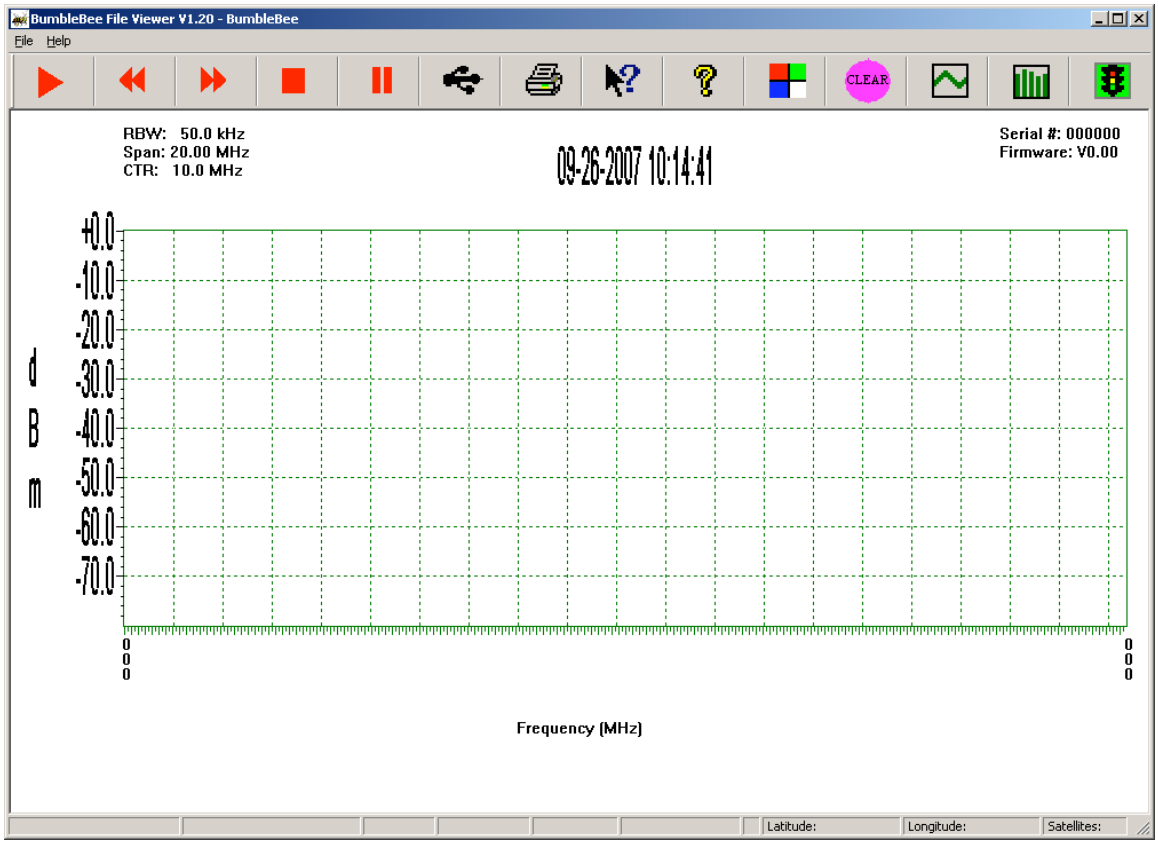
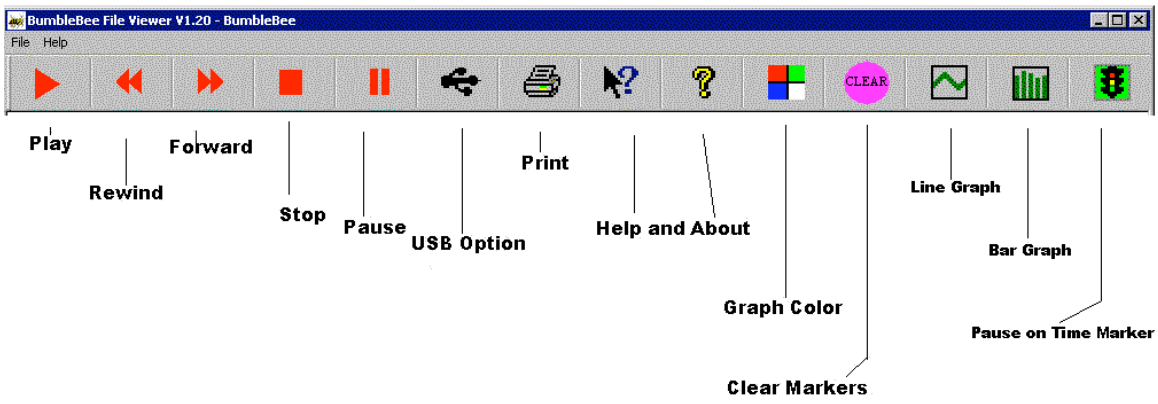



**Figure 2**

**It is assumed at this point that data files have been loaded onto the PC hard drive using Microsoft "ActiveSync" and are in a folder with an appropriate name that is easy to find.**

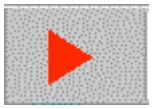

**Figure 3**

**The "Tool Bar" portion is used to control the application. To exit, use the File Menu option "Exit" or Click the X button in the far right corner of the Menu as shown in Figure 3.**




**BumbleBee PC Tool Bar**

**Figure 4**



**Play button, click to play a BumbleBee data file. Use the "Look in:" selector to choose the folder that contains the data files. Choose the file type "BumbleBee Data File (*.bb) with the file type selector. Right click the file to play (it will be highlighted), then click the "Open" button. The file will begin to play.**

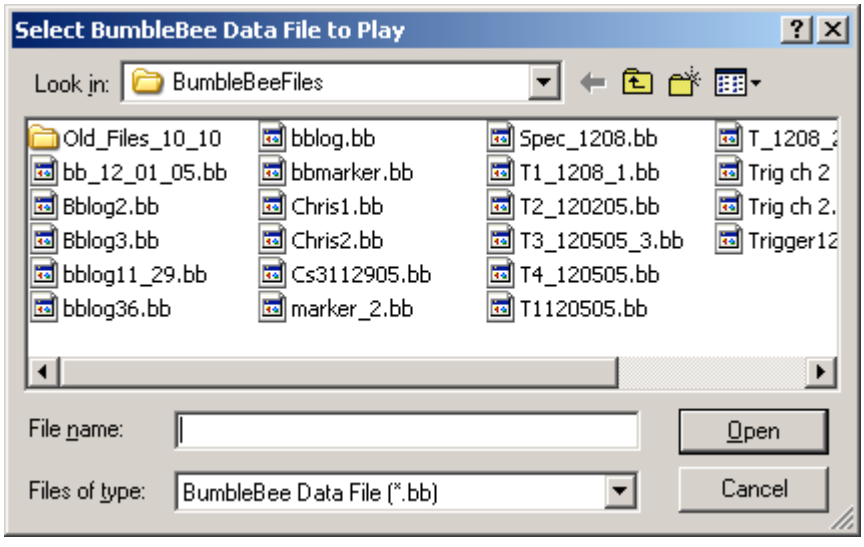



**Figure 5**

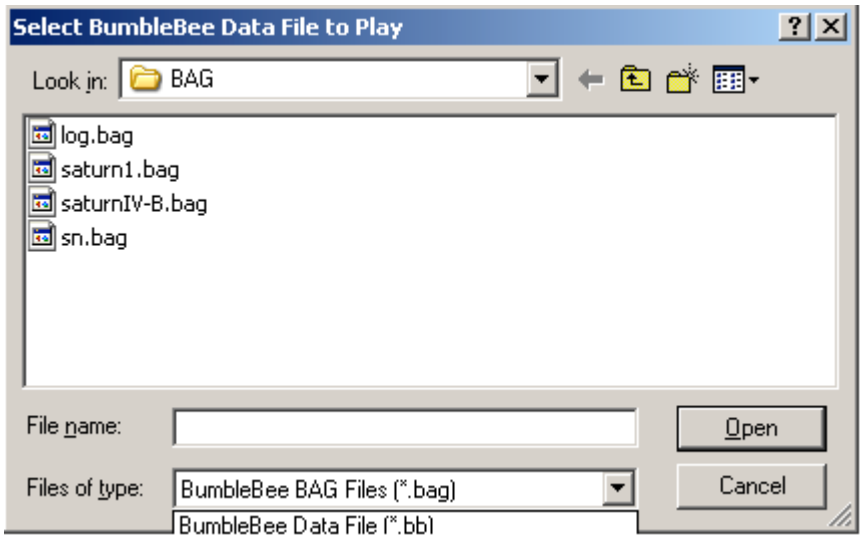
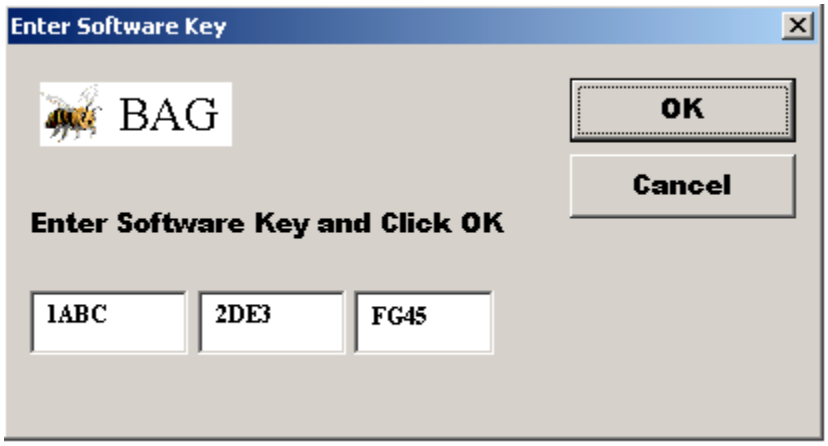



**Figure 6**

**To select a file captured using the BVS YellowJacket BAG product, use the file selector to choose "BumbleBee BAG Files (*.bb) as shown in figure 6.**

**First Time Use:**

**The first time a BumbleBee file is played with this application, the following dialog is displayed:**

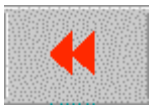



**Enter the 12 character software key supplied with the software (in this example the supplied key is 1ABC-2DE3-FG45).**

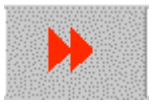
**For each of the 3 edit boxes, enter 4 characters of the supplied key, then hit the space bar. The dialog will move to the next exit box. Once the 12 characters have been entered, click the OK button.**

**Up to 8 BumbleBee's can be used with the application. If the application is installed on a different computer, the key's will have to be re-entered.**

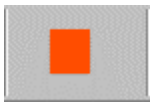
**Note: Entry of the key is case insensitive.**



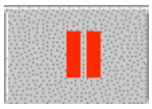
**Click the REWIND button to reverse the direction of the file playback.**



**Click the FASTFORWARD button to move forward through the file faster than play.**



**Click STOP to stop the current playback.**



**Click PAUSE to pause the current playback.**

**USB – (FUTURE OPTION)**

**Click to Print (in 8.5x11 BW) the current screen.**

**Click to get the application information as in Figure 7.**

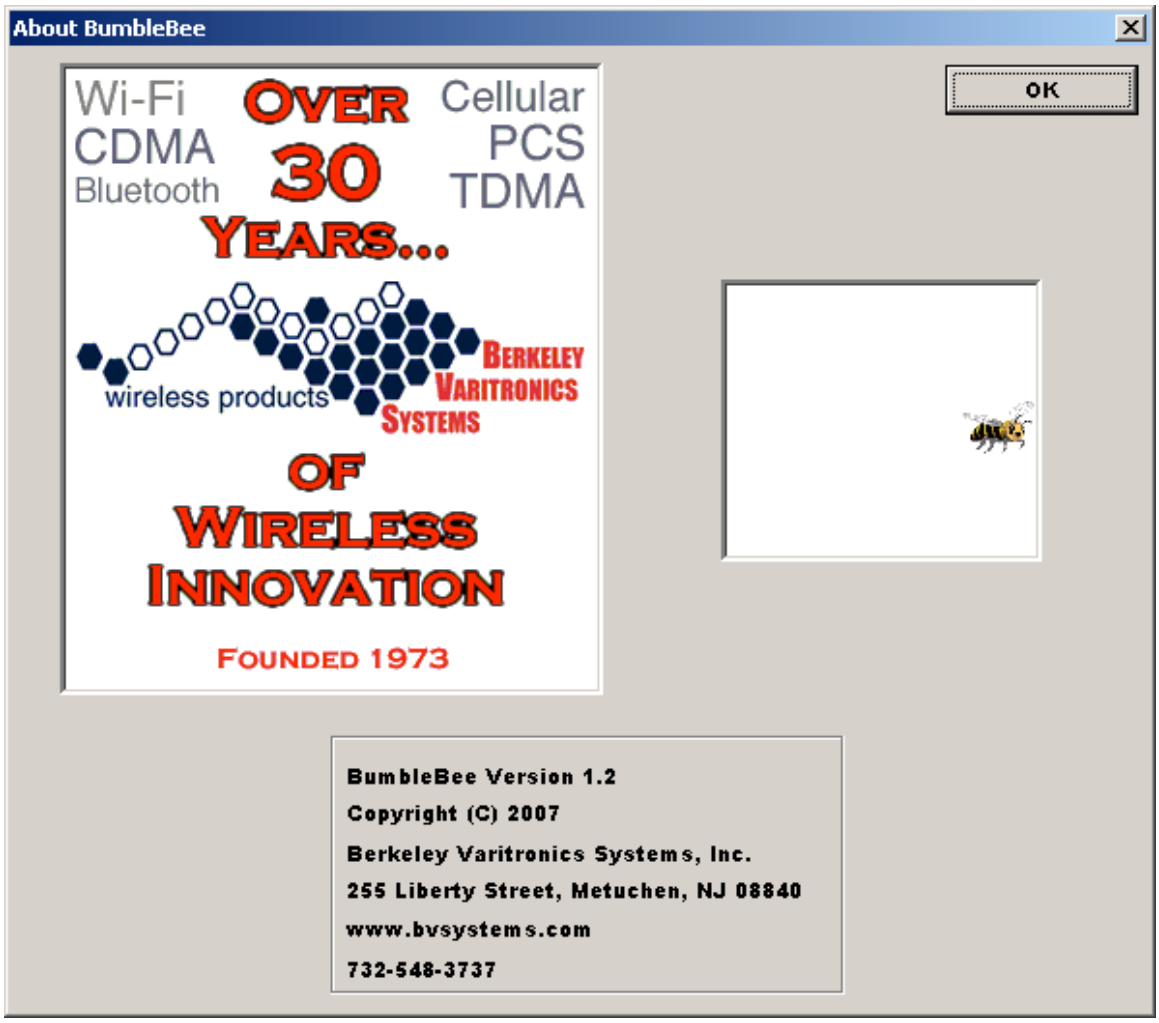
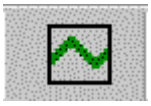



**Figure 7**

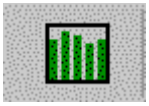
**Click the color button to change the graph color. The dialog in Figure is displayed. Select the desired color then click OK.**


**Figure 8**


**Click the Clear marker button to remove Viewer markers. Up to four markers can be placed on the graph.**



**Click to display a line graph (the default).**



**Click to display a bar graph.**

**When green as shown, the replay stops whenever a time marker was pressed on the BumbleBee during the measurement. The marker number is displayed in the status bar below the graph.**

**When red, the replay does not stop when the BumbleBee time marker changes. To change from red to green, click the button.**

**The Menu bar above the toolbar has 2 entried, "File" and "Help". Selecting "File" displays the menu in Figure 9. Print will print out the current screen (same as print toolbar button. Preview option shows a view of what the printout will look like. Use Exit to cloase the application.**


**Figure 9**

**Selecting the Help menu option displays the menu in Figure 10.**

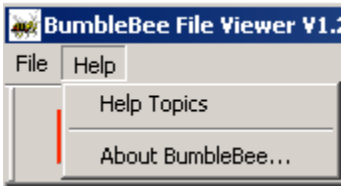



**Figure 10**

**Choosing "Help Topics" opens the application Help – the same as this manual. "About" displays the dialog shown in figure 7.**

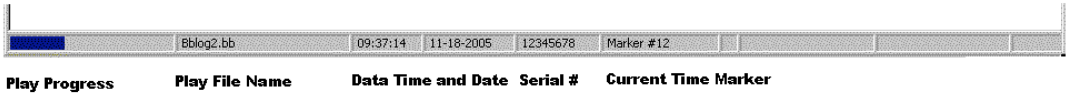



**Figure 11**

**The status bar below BumbleBee replay screens (Figure 9) displays:**

**Progress of the play back.**
**File name of data file being played.**
**Measurement time**
**Measurement date**
**Product serial number**
**BumbleBee marker value**

**Note GPS fields are grayed out (no GPS in BumbleBee).**

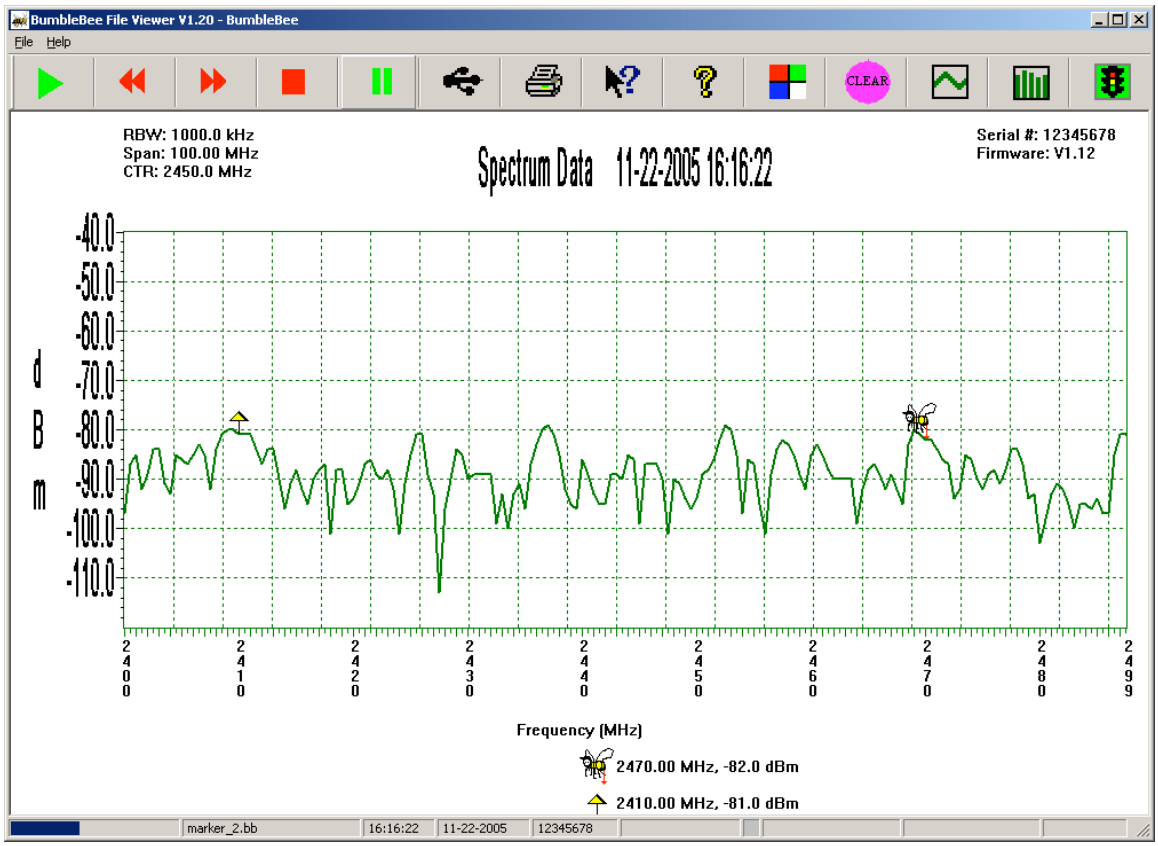



**Figure 12**

**Figure 8 is an example of a Spectrum measurement playback. Note that the Play and Pause buttons are highlighted in green. This indicates the current status of these buttons (ON is green). The status bar is below the graph and contains (from left to right) a playback progress bar, the name of the file**

**being played, the date and time contained in the data, the BumbleBee Serial # and the Time Marker value.**

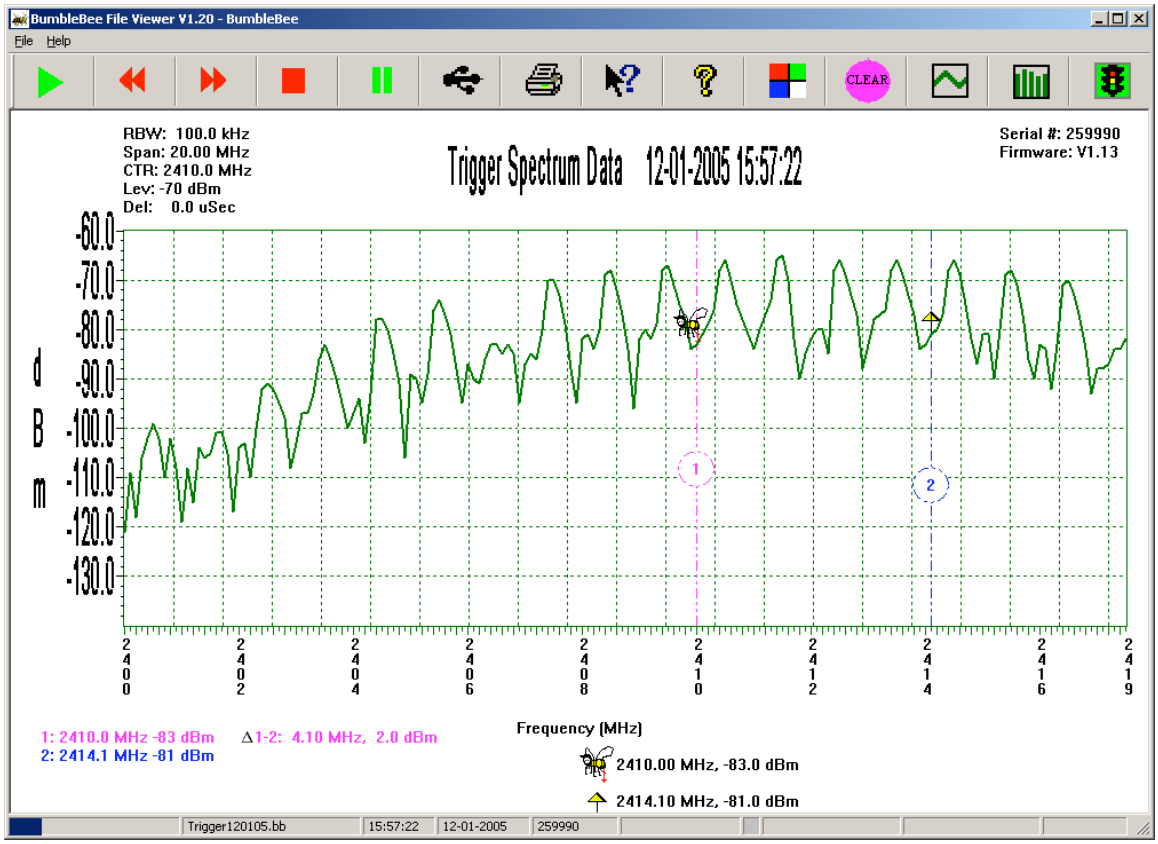



**Figure 13**

**The screen in Figure 9 is s trigger spectrum measurement playback.**

## Graph Items

**Above the graph on either side of the title is the information from the BumbleBee about the measurement such as Resolution Band Width (RBW).**

**This icon is displayed on and below the graph. It is the position of the BumbleBee marker if it was on during the measurement.**

**This icon is also displayed on and below the graph. It is the position of the BumbleBee delta markrer if it had been on during the measurement.**


**This icon is a PC marker and is set by the user during replay. To set a marker, move the mouse pointer to the desired position of the graph and left click. Once a marker is visible, it can be moved by positioning the mouse pointer in the circle around the marker number and dragging it by holding the right mouse button down while moving the mouse.**

**Up to four such marker can be set, and the delta dBm and frequency between marker 1-2, 3-4 is displayed below the graph.**

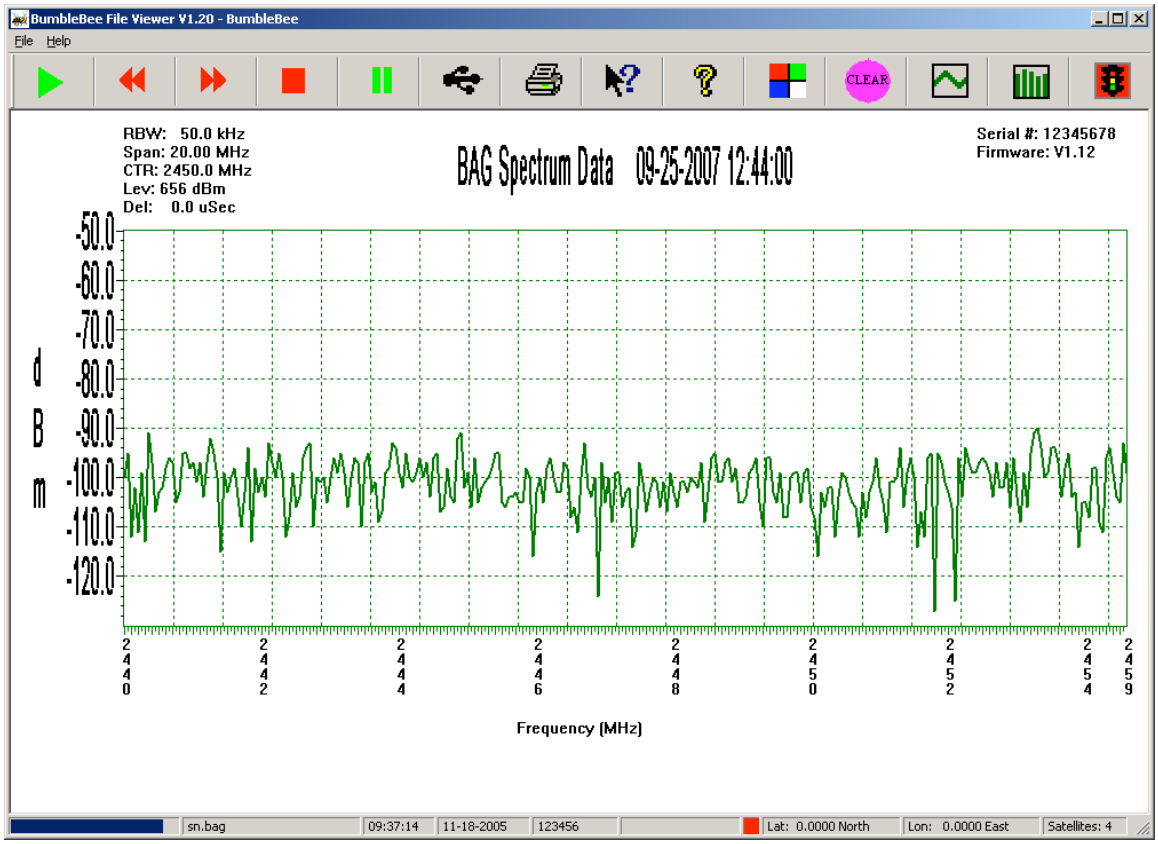



**Figure 14**

**Figure 11 above shows the pc screen view of a captured Spectrum measurement using the YellowJacket BAG product. Up to 4 markers can be added to this screen using the mouse as with Bumble Bee files.**

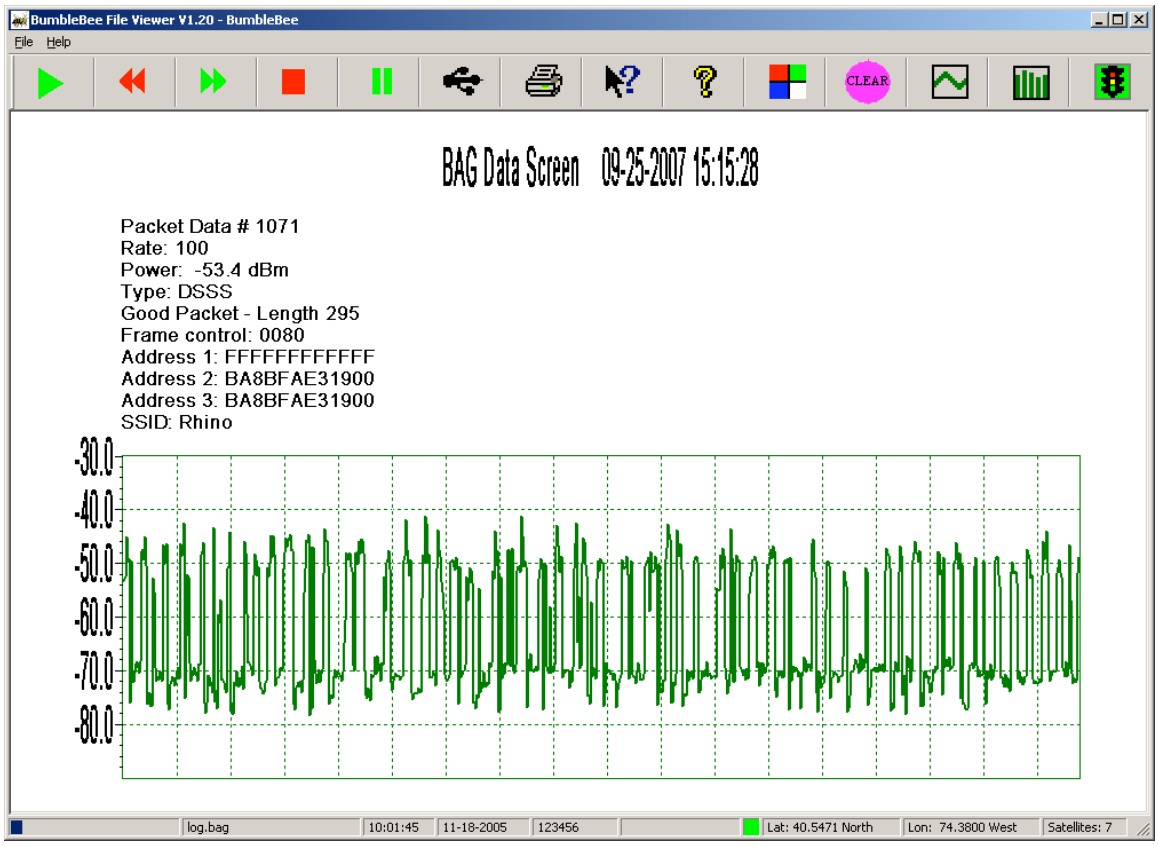



**Figure 15**

**Figure 12 shows a BAG packet data measurement.**

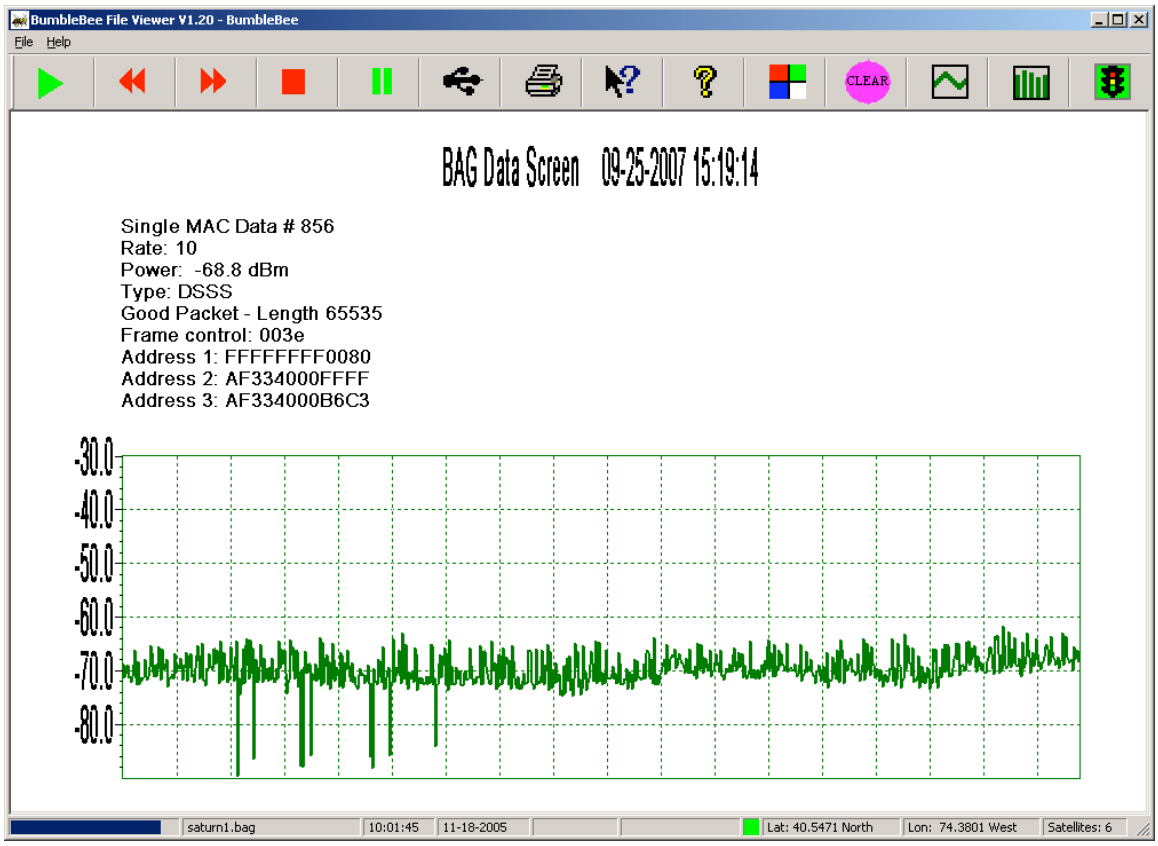



**Figure 16**

**Figure 13 is a snapshot of the pc screen during the replay of a BAG single MAC measurenent.**


**Figure 17**


**Figure 18**


**Figure 19**

**The status bar below BAG replay screens (Figure17 -19) displays:**

**Progress of the play back.**
**File name of data file being played.**
**Measurement time**
**Measurement date**
**Product serial number**

**BAG marker value**

**GPS Status "Led"**

- **Green means 3D lock.**
- **Yellow means 2D lock.**
- **Red means not locked.**
- **Black means GPS is off.**

**Latitude,Longittude at the time of the measurement.**

**Number of Satellites being tracked.**