JWorks(v0.510) and KWorks for FTDNA Data:
Automated Chromosome Browser Tools

(July 2014; updated January 2015)
By [Mesa Foard](#)

DNAGEDCOM wishes to offer special thanks to the volunteer programmers of these two valuable tools, Jay Pizarro (JWorks) and Kitty Munson Cooper (KWorks). Their hard work will save you hours of data analysis! If you find them valuable in your research, please consider making a donation. All donations are used to support the development and hosting of new tools.

Note: These utilities work with your Family Tree DNA (FTDNA) results and you can add you Ancestry and 23andme results manually.
_____

JWorks and KWorks are two automated tools that do the same thing. They organize your FTDNA match data so that you can quickly discover shared common ancestors ("[The Methodology](#)"). Both tools do the sorting, grouping and matrix-building necessary for you to work with your most promising matches.

Either tool automatically completes the first two items below – the criteria for identifying the common ancestor of your matches. You'll be ready to work with GEDCOMs in a matter of minutes.

1. They have to share overlapping DNA segments.
2. At least two members in a set have to have ICW status.
3. Those ICW members have to have a family tree or GEDCOM available.

The difference between the two tools is that JWorks is for users of Microsoft Excel, and KWorks is for those using other spreadsheet software:

JWorks v0510: JWorks is a macro-enabled Excel spreadsheet. If you have Microsoft Excel, JWorks will automatically run and generate a new spreadsheet that groups overlapping segment matches into sets and creates an ICW ("in common with") matrix for each set.

KWorks: If you don't have Excel on your PC, KWorks will generate the data on a server and create a *.csv file for you to download. This type of file is in a text-based format that can be opened by many free apps such as Google Spreadsheets, Open Office or a CSV reader so that you can easily view the data.

To use either tool, you first have to generate the FTDNA data files each tool will use to sort your matches (Step A). Once you have completed Step A, determine which tool you will use.

- If you have Excel, go to the instructions for JWorks in Step B.

- If you have other spreadsheet software, skip down to Step C for instructions for using KWorks.

- Step D contains troubleshooting tips.

A. Download your FTDNA Data Files from DNAGEDCOM.com

1. Go to http://dnagedcom.com and log into your DNAGedcom.com account (if you don't yet have an account at DNAGedcom, click **Register** and follow the instructions).

2. Click **Family Tree DNA** on the main menu.

3. Enter the kit number and password **for the FTDNA** account for the data you want to download.

WELCOME TO THE TOOLS SECTION FOR FAMILY TREE DNA.

This is a NEWLY created version of the FTDNA downloader. The file will not automatica
You should click the Download link in the section below for the kit you are interested in. Plea
This program ONLY works with Family Finder. This will not download YDNA or mtDNA data.
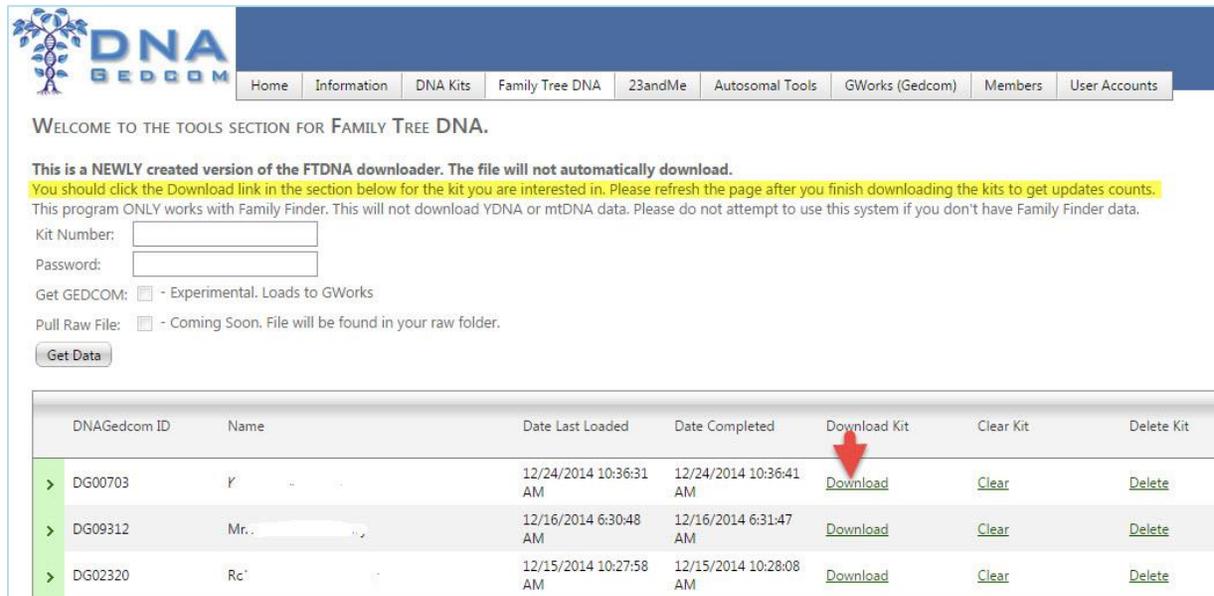
Kit Number: 123456

Password: ••••••

Get GEDCOM: ☐ - Experimental. Loads to GWorks

Pull Raw File: ☐ - Coming Soon. File will be found in your raw folder.

Get Data

Note: **Get GEDCOM** and **Pull Raw File** are enhancements which are in the works, so they are not yet functional. We do not support raw data files so **please do not upload raw data files to DNAGedcom**. They are of no use to the data provided and just take up a large amount of server space.

4. Click **Get Data**. You can work on other things on your computer while the files are being generated, but please be patient. Depending on how many matches you have, the download could take a few minutes to generate. Do not attempt to run more than one download at a time.

5. When processing completes, refresh your web browser to see the output file.

6. Click the appropriate download link at the bottom of the screen to download a ZIP file to your PC's Download folder.

7. A copy of these files will also be stored in your Member folder. To review or download these files:
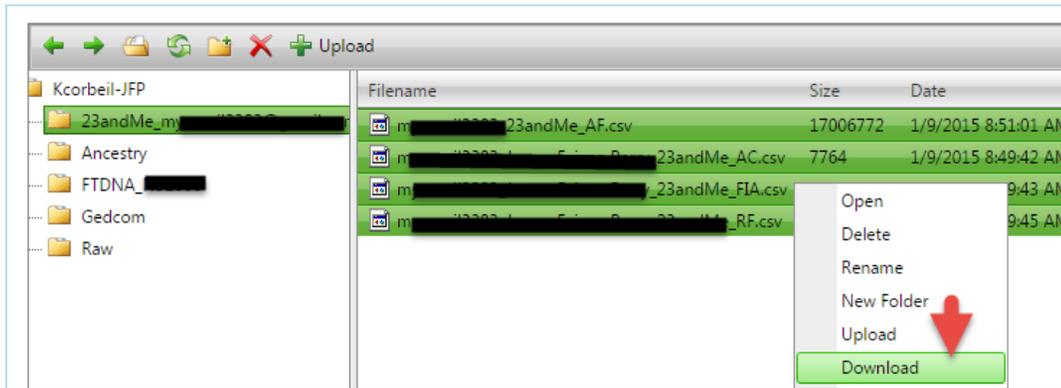
   a. Click **Members** and then **View Files**.

   b. Click on the appropriate FTDNA folder on the left of the file viewer. The folder's files will then display on the right.

4

c. Download files by highlighting the ones you want (you can select more than one file with CTRL+Click). Then right-click and select **Download**.

Tip: A *.zip file temporarily shrinks large files so that they can be transmitted faster. These compressed files have to be "unzipped" to use them.

1. Unzip this file to the directory of your choice (right-click on the file and select "Extract All"). All three files will have the *.csv extension and begin with your FTDNA kit number (Figure 2). Do not change the file names.
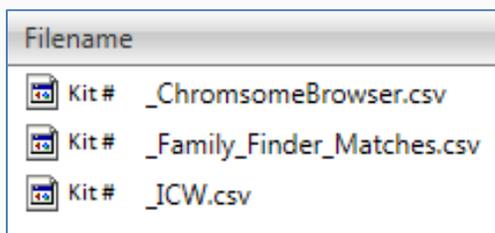

Figure 2 DNAGedcom Files of FTDNA Data

8. Backups

   Your FTDNA data files are automatically stored on DNAGEDCOM.com for you. Just log in, place your cursor over the "Members" tab and click "View Files" from the drop-down menu.

   A file browser (much like the one on your PC) contains copies of the FTDNA files generated by DNAGEDCOM.com. Right-click on any folder on the left or any file on the right to download, delete, open, etc.

   Tip: It is recommended that you regularly run the FTDNA tools to include new matches.

B. Instructions for Using JWorks

1. Download JWorks from DNAGEDCOM.com. The link to JWorks is also located under the Tools menu on DNAAdoption.com.
2. Save JWorks to the same directory as the three files you downloaded and expanded in Step A.
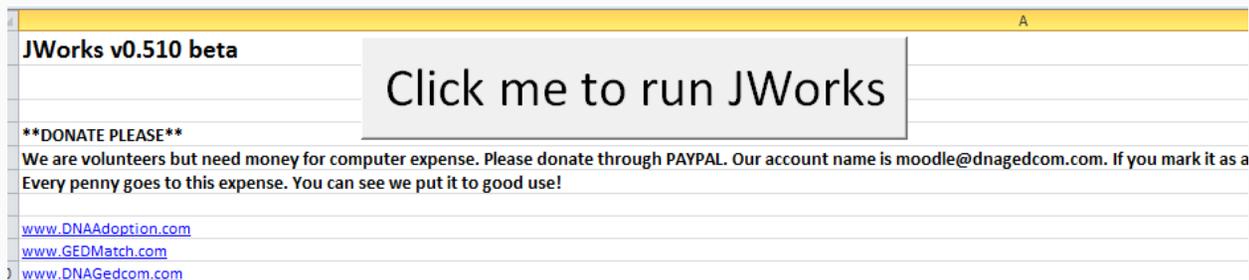3. Open the file JWorks_v0510.xls.

Figure 6 JWorks

4. Click the gray button to run JWorks. (Figure 6).

   a. The file may open in Protected View. Be sure to click "Enable Editing" at the top of the screen.

b. If you get a Security Warning, be sure to click "Enable Content" at the top of the screen.

5. Enter your FTDNA kit number in the pop-up window and click "OK."

6. Enter the minimum amount of cMs to include. The default is 6.

   Note: It is generally not recommended to go below 5 cM .

7. This process may take a few minutes to run and generates data in several phases. You can see the progress indicator on the bottom left-hand corner of the Excel window. Once completed, a window pops up with the message "Process complete. Have fun!"

8. A prompt will ask you if you want to run another kit. Enter the kit number of the next kit or click "Cancel."

9. The organized chromosome browser opens in a new spreadsheet window and is automatically saved in the same directory as JWorks and the FTDNA Matches, Chromosome Browser and ICW files.

10. Your ICW matches will appear in a matrix for each group of overlapping segments.

11. The file name is *yourkitnumber*_results.xls.

C. Instructions for Using KWorks

1. Open your internet browser and go to http://kittymunson.com/dna/MakeSegmentGroups.php.
2. Locate the directory on your PC where you downloaded and unzipped the three FTDNA files from DNAGEDCOM.com (Figure 2).
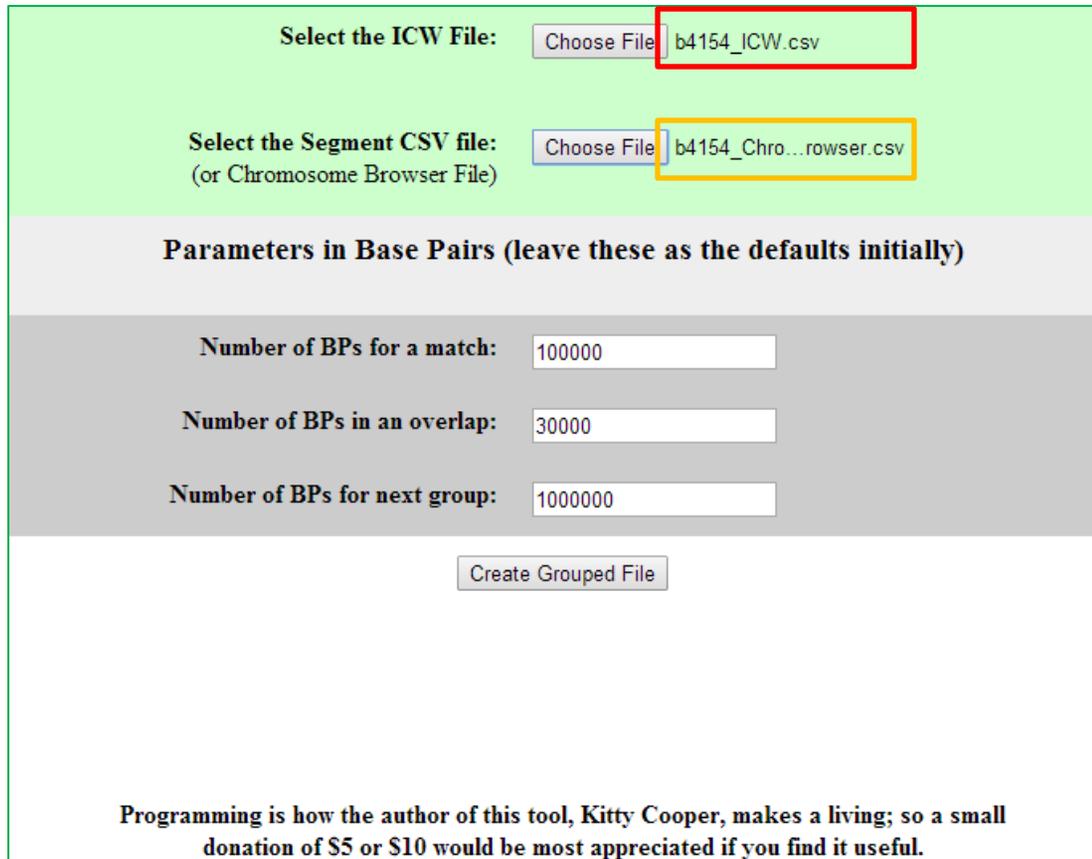
Figure 3 KWorks

3. Click "Choose File" and browse to FTDNA ICW file in the appropriate directory on your PC and double-click (Figure 3, outlined in red).

4. Click "Choose File" and browse to the FTDNA Chromosome Browser file and double-click.

Note: Both files must be entered to generate the data (Figure 3, outlined in orange).

5. Click "Create Grouped File."

6. Once the server has generated the file, a link will appear at the bottom of the screen. (Figure 4).

>>> There are 44 names for chr 1 ... Chromosome 1 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 24 names for chr 2 ... Chromosome 2 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 14 names for chr 3 ... Chromosome 3 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 27 names for chr 4 ... Chromosome 4 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 39 names for chr 5 ... Chromosome 5 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 27 names for chr 6 ... Chromosome 6 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 22 names for chr 7 ... Chromosome 7 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 29 names for chr 8 ... Chromosome 8 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 24 names for chr 9 ... Chromosome 9 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 31 names for chr 10 ... Chromosome 10 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 8 names for chr 11 ... Chromosome 11 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 28 names for chr 12 ... Chromosome 12 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 11 names for chr 13 ... Chromosome 13 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 7 names for chr 14 ... Chromosome 14 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 18 names for chr 15 ... Chromosome 15 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 7 names for chr 16 ... Chromosome 16 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 10 names for chr 17 ... Chromosome 17 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 30 names for chr 18 ... Chromosome 18 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 13 names for chr 19 ... Chromosome 19 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 21 names for chr 20 ... Chromosome 20 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 11 names for chr 21 ... Chromosome 21 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 22 names for chr 22 ... Chromosome 22 is completed ... at May 4, 2014 - 12:11 PM CDT
>>> There are 8 names for chr X ... Chromosome X is completed ... at May 4, 2014 - 12:11 PM CDT
Click here to download the CSV file

Figure 4 KWorks Download Link

7. Click the link. The file will automatically download to your internet browser's default download directory and will be named *yourkitname* _ChromsomeBrowser_GRP.csv.
8. Open the file in a spreadsheet application or CSV reader to see your ICW matches in a matrix for each group of overlapping segments. The "F" indicates that the match is from Family Tree DNA.
9. If you have created a combined chromosome browser file to replace the file downloaded from then you must be sure that the column headings for the file are as follows: THEY ARE CASE SENSITIVE!
    i. Column 1 Source
    ii. Column 2 Profile Name
    iii. Column 3 Match Name
    iv. Column 4 Chr
    v. Column 5 Start
    vi. Column 6 End
    vii. Column 1 cMs

D. Troubleshooting

1. Family Tree File Downloads from DNAGEDCOM.com

    If your FTDNA doesn't show in the download list or the number counts show any zeros, the files were not completely uploaded to the database. Try again.

    If you are still having trouble after trying the above remedies, email DNAGEDCOM.com for [support](). Please note that support is provided by volunteers using their own time and resources which may cause a delay in response.

2. JWorks

    If you have problems running the JWorks app, please check the following:

    A. Be sure you saved the JWorks spreadsheet file to the same directory as the FTDNA Chromosome Browser, ICW and Matches files ending in *.csv. These files download to the default directory of your internet browser.

B. Check to see if you unzipped (extracted) the FTDNA *.zip file from DNAGEDCOM.com.
C. Make sure all of the files have the names as shown in Figure 2 (beginning with your FTDNA kit number) and haven't been changed.
D. The file may open in Protected View. Click "Enable Editing" at the top of the screen.
E. If you get a Security Warning, click "Enable Content" at the top of the screen.
F. If you get an error message on the first try, try to enter the kit number a second time. Sometimes this will solve the error issue.
G. If you are still having trouble after trying the above remedies, email DNAGEDCOM.com for [support](). Please note that support is provided by volunteers using their own time and resources which may cause a delay in response.

3. KWorks

A. Be sure you uploaded the correct FTDNA files to the server. These files download to the default directory of your internet browser. The first file is the ICW file, and the second is the Chromosome Browser.
B. Check to see if you unzipped (extracted) the FTDNA *.zip file from DNAGEDCOM.com.
C. Make sure the files have the names as shown in Figure 2 (beginning with your FTDNA kit number and ending in *.csv) haven't changed.
D. Check that the column names are correct as listed above using the correct case
E. The name in the ICW field (both Column 1 and Column 2) must exactly match the name in the chromosome file for it to match in the ICW matrix. Margo Louise Wells does not match Margo Wells or Margo L Wells, it only matches Margo Louise Wells.
F. If you still have difficulty, please contact the developer at http://kittymunson.com/index.php?page=contact-us. Please note that support is provided by volunteers using their own time and resources which may cause a delay in response.