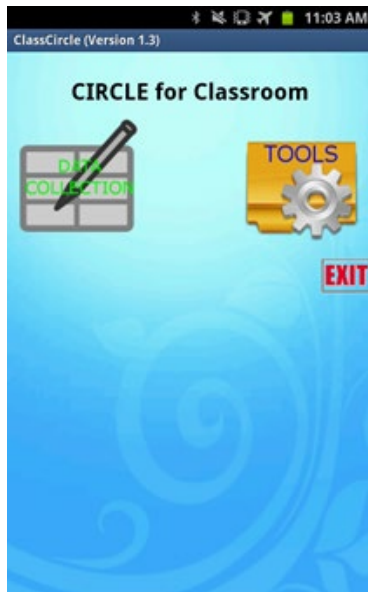


Data Collection Using the CIRCLE Application and Data Management

The CIRCLE Application Version: 1.3 (ClassCircle1pt3.apk)

Overview

The CIRCLE application is an Android-based application - it can be installed on any Android-based smartphone or tablet. It is basically an application for collecting interval time-sampling data on up to 3 subjects of observation (mainly children). The data collected using this application will be uploaded to a Windows-based PC for data analysis (discussed under **CIRCLE Transfers** on Page 125).



The main screen of the CIRCLE application contains 2 icons- a **DATA COLLECTION** icon for collecting data, and a **TOOLS** icon for data management (discussed under **Tools** on Page 95).

Click the **DATA COLLECTION** icon from the main screen to begin a new session of observation.

DATA COLLECTION - Observation Session Information

1. Enter the information for the observation session:
 - a. Select **Primary** (the default selection) or **Reliability** (if the observer is the "reliability" observer during an inter-observer reliability check session)
 - b. Check the **Practice** box if it is a practice session
 - c. Change the **Date**, if necessary
 - d. Enter the **Observer** initials
 - e. Enter the **Classroom Code**
 - f. Change the **Interval Length**, if necessary- it is set to **15 second** as a default
2. Click the **NEXT** button.

DATA COLLECTION - Focus Child Information

ClassCircle (Version 1.3) 10:51 AM

Focus Child #1 Information

Child ID: Wave:

Description:

1st Language: English

2nd Language: None

☒ Get Focus Child #2 Information

BACK NEXT

1. Enter the information for the first target of observation - Focus Child #1:
 - a. Enter the Child ID
 - b. Enter the Wave number
 - c. Enter child initials for Description for the target of observation
 - d. Change the 1st Language, if necessary
 - e. Change the 2nd Language, if necessary
2. Check the box for Get Focus Child #2 Information, if there is another target of observation in the current observation session
3. Click the NEXT button

NOTE: If there is more than one target of observation within the same observation session, i.e. the box is checked in Step 2, the same screen will be presented for Focus Child #2, and for Focus Child #3 if there is a 3rd target of observation.

DATA COLLECTION - Prepare to Observe

ClassCircle (Version 1.3) 11:04 AM

Prepare to Observe

Current FOCUS CHILD: Child #1

Make sure the current FOCUS CHILD is correct, otherwise select a different one.

Press the START TIMER button to begin this 15-minute observation of the FOCUS CHILD.

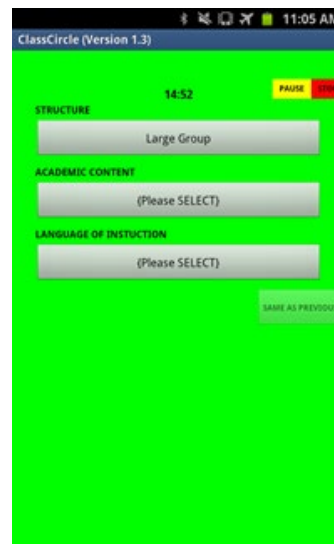
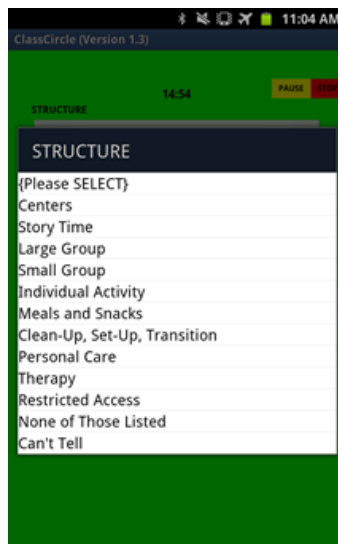
MAIN MENU START TIMER

1. Change the Current FOCUS CHILD, if necessary
2. Click the START TIMER button to start the timer for observation

DATA COLLECTION - Classroom CONTEXT



Observe and click the buttons for **STRUCTURE**, **ACADEMIC CONTENT**, and **LANGUAGE OF INSTRUCTION**, in turn, to code each of the categories, as shown below for STRUCTURE:

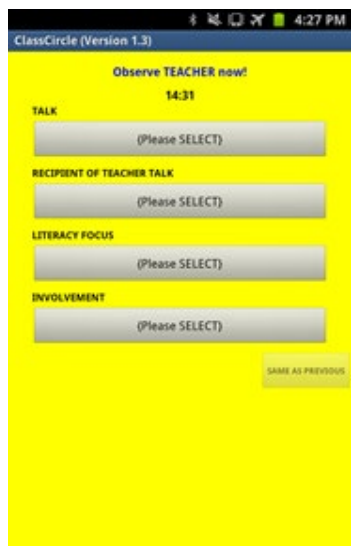


The **SAME AS PREVIOUS** button is disabled during the first cycle, but will be enabled in subsequent cycles, so that it can be used to code all the **Classroom CONTEXT** categories at once, if they were the same as the previous cycle.

Within the 15-seconds interval (*if the Interval Length was set at 15 seconds in the Observation Session Information screen*), any of the categories may be re-coded, if necessary.

At the end of the interval, the screen will change to that for coding the **TEACHER** categories.

DATA COLLECTION -TEACHER

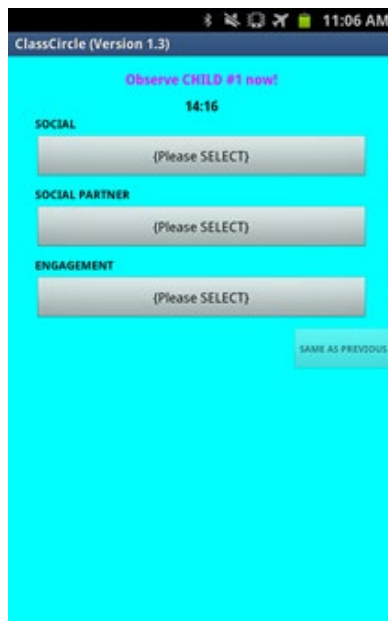


Observe and click the buttons for **TALK**, **RECIPIENT OF TEACHER TALK**, **LITERACY FOCUS**, and **INVOLVEMENT**, in turn, to code each of the categories.

The **SAME AS PREVIOUS** button is disabled during the first cycle, but will be enabled in subsequent cycles, so that it can be used to code all the **TEACHER** categories at once. Within the 15-seconds interval (*if the Interval Length was set at 15 seconds in the Observation Session Information screen*), any of the categories may be recoded, if necessary.

At the end of the interval, the screen will change to coding the **CHILD** categories.

DATA COLLECTION - CHILD



Observe and click the buttons for **SOCIAL**, **SOCIAL PARTNER**, and **ENGAGEMENT**, in turn, to code each of the categories.

The **SAME AS PREVIOUS** button is disabled during the first cycle, but will be enabled in subsequent cycles, so that it can be used to code all the **CHILD** categories at once, if they were the same as the previous cycle.

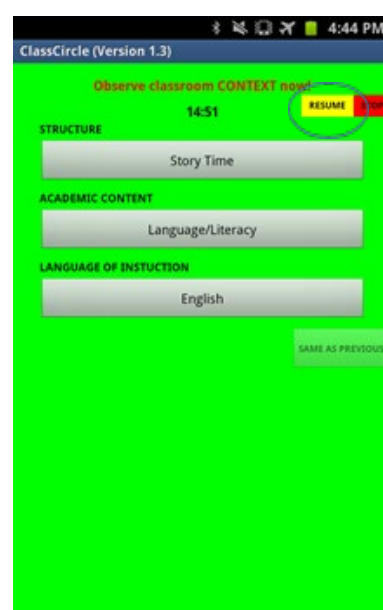
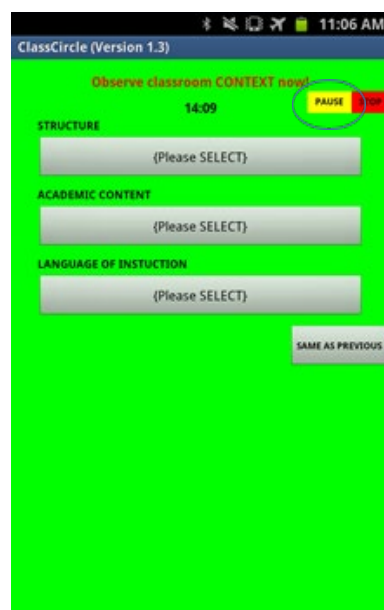
Within the 15-seconds interval (*if the Interval Length was set at 15 seconds in the Observation Session Information screen*), any of the categories may be re coded, if necessary.

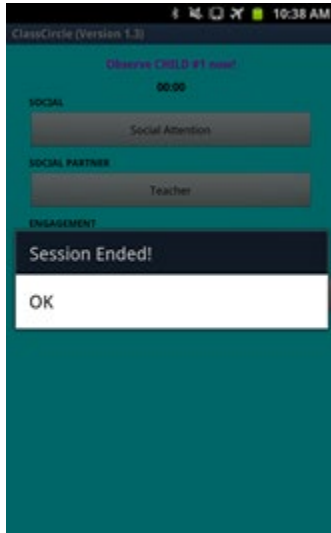
At the end of the interval, the current cycle will be complete and the screen will change to that for coding the **Class CONTEXT** categories, to begin the next cycle.

Note that there is a **PAUSE** button and a **STOP** button on the **Classroom CONTEXT** screen - this allows an observation to be interrupted. By default, an observation on a target of observation is 15 minutes long, i.e. 60 cycles if the Interval Length is 15 seconds. (During training, the Interval Length can be set to a longer interval, e.g. 20 seconds to get 45 cycles of observation; 30 seconds to get 30 cycles of observation; or 60 seconds to get 15 cycles of observation).

Click the **PAUSE** button to pause the observation -the text on the button will change to **RESUME** and the screen is in "freeze" mode. Click the **RESUME** button to continue the observation.

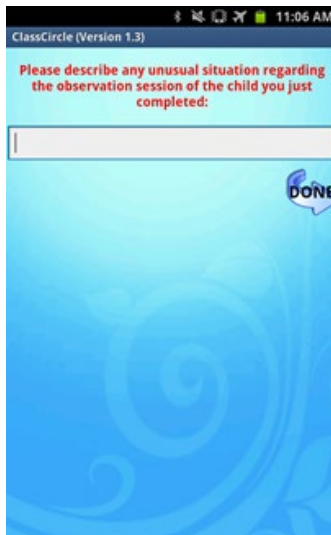
Click the **STOP** button to stop the observation for the current target of observation.





If the observation continues for the entire 15 minutes, at the end of the session, a message will pop up to announce the end of the session.

Click **OK**, the screen for entering notes will be presented.



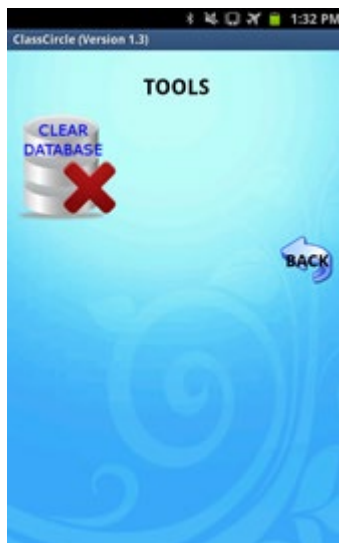
Notes may be entered to describe any unusual situation regarding the observation session of the current target.

Click the **DONE** button to complete entering notes.

The application then returns to the Prepare to Observe screen, where you can prepare to observe another target, or go back to the main menu to exit the application.

TOOLS

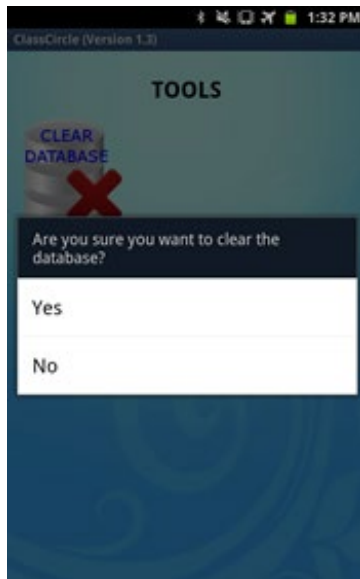
Click the TOOLS icon from the main screen to access the TOOLS feature.



In the current version (Version 1.3), only one feature is available, i.e. the tool to clear the database from the device. Use this tool to reset the database to store fresh data after:

1. Data have been uploaded to a master database on a Windows-based PC (discussed under **CIRCLE Transfers** on Page 125).
2. Practice session(s) and the data is to be discarded.

To clear the **CLEAR DATABASE**, a confirmation prompt will pop up:



Select **YES** to clear the database, or select **NO** to keep the database .

Click the BACK button to return to the main menu, to begin **DATA COLLECTION**, or to **EXIT** the application.

Data Management using MS Access

The CIRCLE application stores the data collected in a SQLite database on the device. The name of the SQLite database is **CIRCLEDB** - it is located in the application's data folder, and a copy is made in the device's external storage, in a folder called **CIRCLE_LOGS**, so that it can be accessible for upload even if the device is not rooted.

The CIRCLE application does not have a Data Analysis component. In its place, an MS Access database (**CIRCLE.ACCDB**) is provided, with all the tools (tables, imports, queries, etc.) necessary to transfer the SQLite database from the device, to the MS Access database on a Windows-based PC.

*If your PC has NOT been configured for transferring data using SQLite ODBC Connection, follow the steps in **APPENDIX H - Setting up SQLite QDBC Connection on Windows-based PC**. to prepare the PC to recognize the SQLite database on the device.*

Get started on the data transfer by following the steps for: **Using a SAVED IMPORT to Import SQLite Database From a Device into MS Access**

Connecting the device (Samsung Galaxy or Samsung Note) to Windows-based PC

In order for the Windows-based PC and the Android device to communicate with each other, a USB cable should be provided with your device. For the purpose of transferring the SQLite database from the device to the ACCESS database on a Windows-based PC, the Android device has to be connected as a USB Mass Storage. In this mode, when connected via the USB cable, it will show up on the PC as Removable Disk (E:) or any other letter designated by your PC, e.g. Removable Disk (F:)

You will need to change the settings on the Android device, IF it is not already in the USB Mass Storage mode.

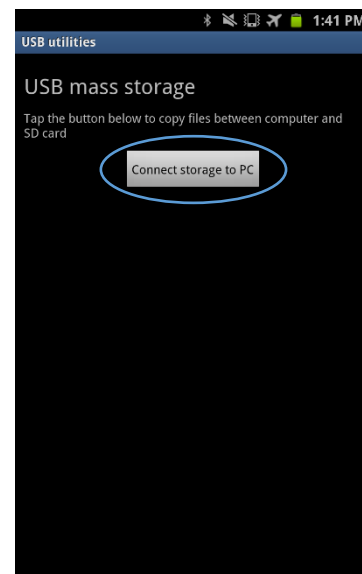
For devices such as the Samsung Galaxy Note, do the following:

1. Make sure the USB cable is **disconnected**
2. Click on APPLICATIONS
3. Click on SETTINGS
4. Click on WIRELESS AND NETWORK
5. Click on USB UTILITIES

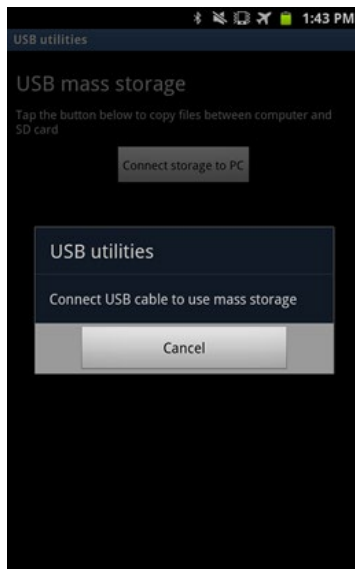


NOTE: You can skip Steps 1 through 4 if you can create a shortcut of USB UTILITIES on your HOME screen - an application called AnyCut is able to do that, so you can just click on USB UTILITIES from the HOME screen, as shown.

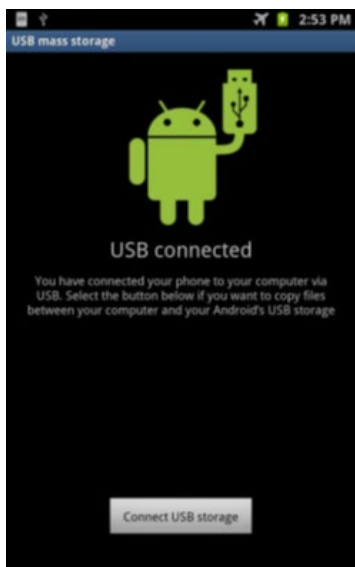
6. On the **USB mass storage** screen, click on the **CONNECT STORAGE TO PC** button



7. Connect the USB cable at the prompt to connect the USB cable to the mass storage



8. When the cable is connected, the USB CONNECTED screen (with the GREEN Android robot) pops up - click on the CONNECT USB STORAGE button



9. The screen should change to USB STORAGE IN USE - similar to the above screen, except that the robot's color is ORANGE, and the button is DISCONNECT STORAGE FROM PC
10. Your device should now be ready for data transfer.

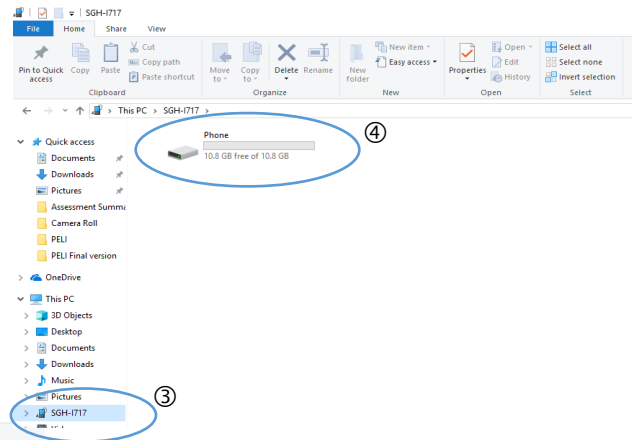
Using a SAVED IMPORT to Import SQLite Database from a Device into MS ACCESS

Note: There are two different devices, the Samsung Galaxy J7 and Samsung Galaxy player 5.0. For Galaxy player 5.0 instructions (see Appendix D).

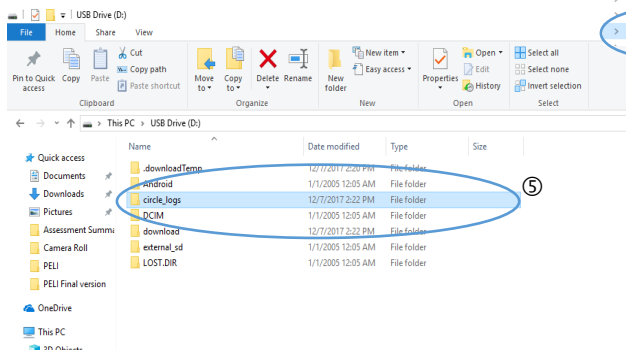
CIRCLE Transfers

Transferring CIRCLE Data from device to PC:

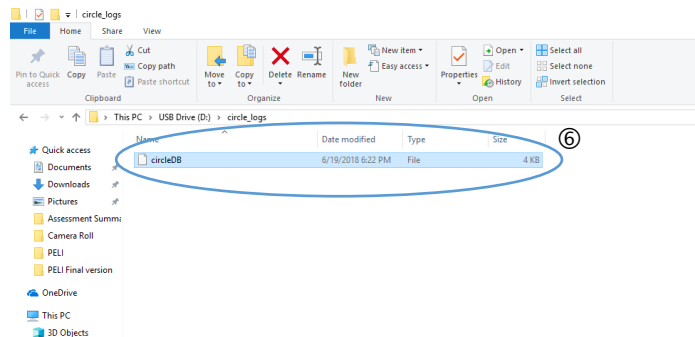
1. **Turn on** the device and connect the Samsung Note to the PC via USB cable
2. Click on the **Connect storage to PC** button on the USB MASS STORAGE screen (see APPENDIX D: Connecting the Device Samsung Galaxy Note to Windows-based PC).
3. Wait for Window Explore to load and click on **USB Drive (D:) or SGH-1717**
4. Click on **Phone** or **USB Drive**



5. Click on **circle_logs**

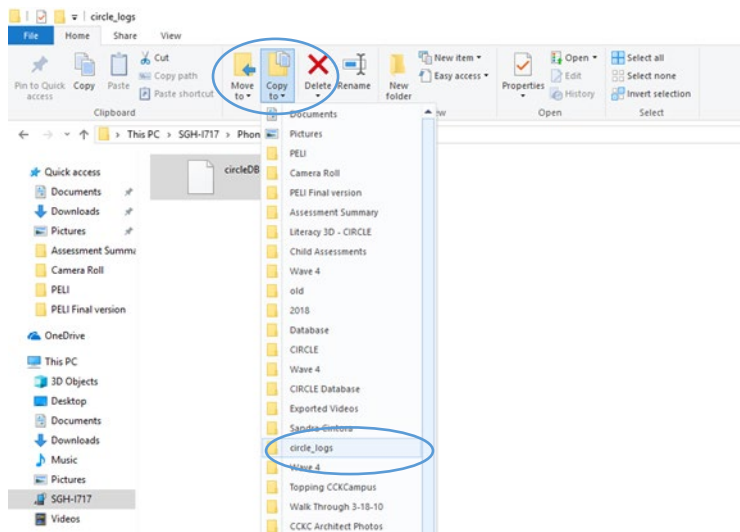


6. Highlight **circleDB**



7. Click on the **Copy To** icon to pull down its menu

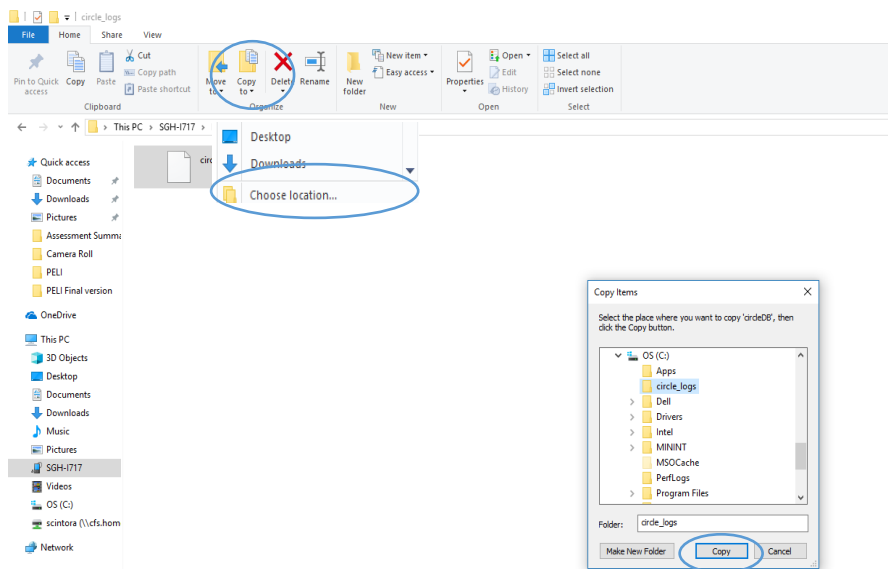
a. If **circle_logs** is listed, click on **circle_logs** (and skip step 7b to continue to step 8)



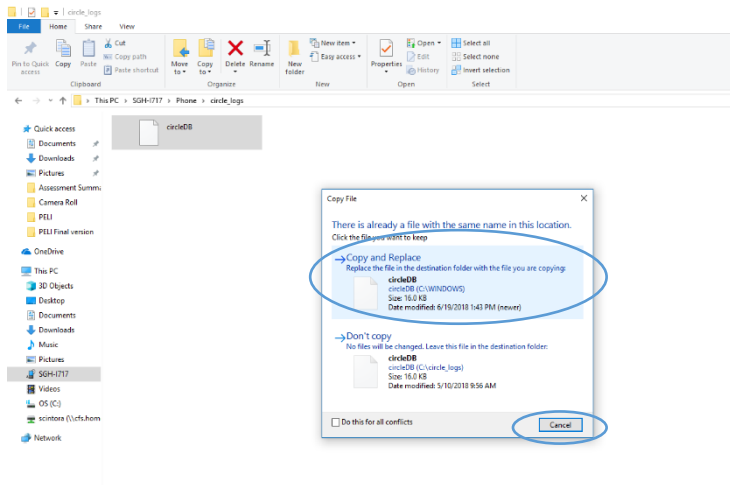
b. If **circle_logs** is NOT listed,

1. Click on **Choose Location**

2. When the **Copy Items** window pops up, navigate to: **OS (C:) -> circle_logs** and click **Copy**



8. If a previous upload of circleDB already exists in the destination folder, a **Copy File** window will pop up: Select **Copy and Replace**

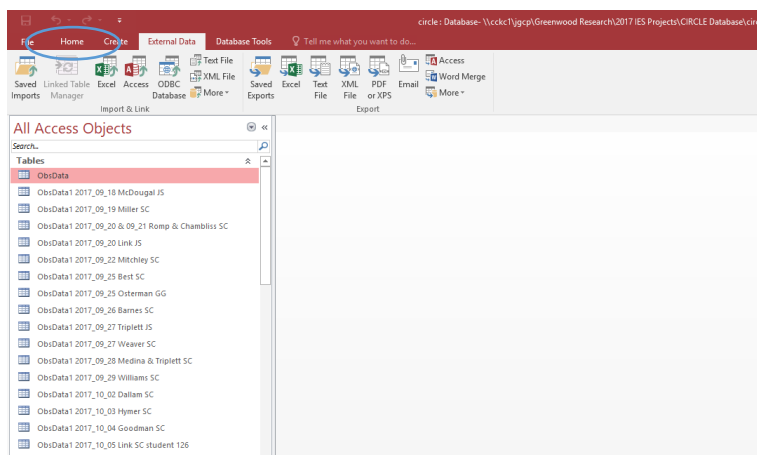


9. Close Windows Explorer and disconnect the Samsung Note by clicking on the Disconnect storage from PC button on the USB mass storage screen

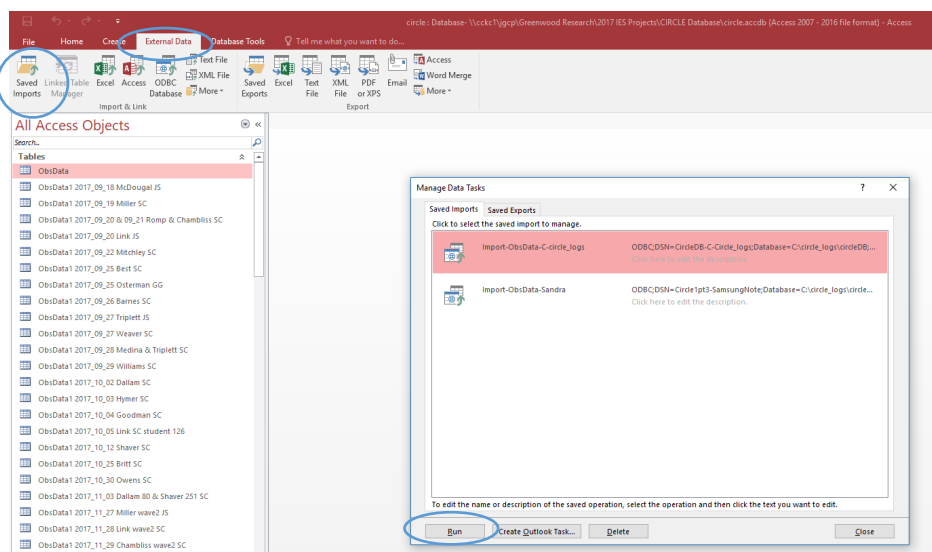
Uploading CIRCLE Data to Microsoft ACCESS

How to Transfer Data

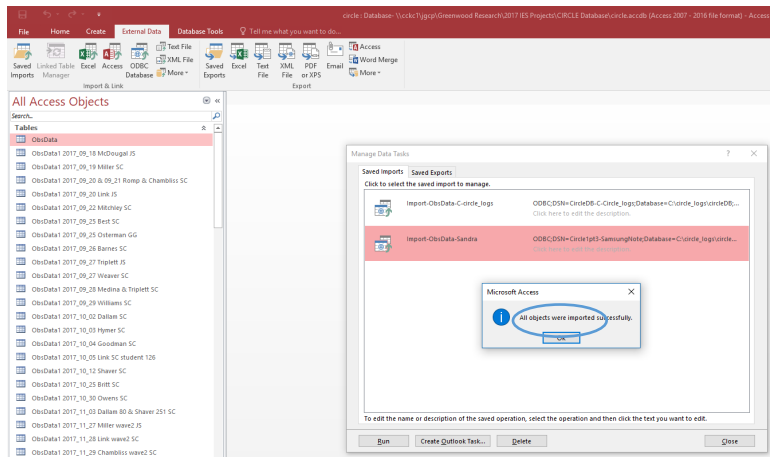
1. Open the CIRCLE database (**circle.accdb**) in Microsoft ACCESS. If it is already open from a previous transfer, you will need to click on the **HOME** tab in the CIRCLE database first before moving onto Step 2 below.



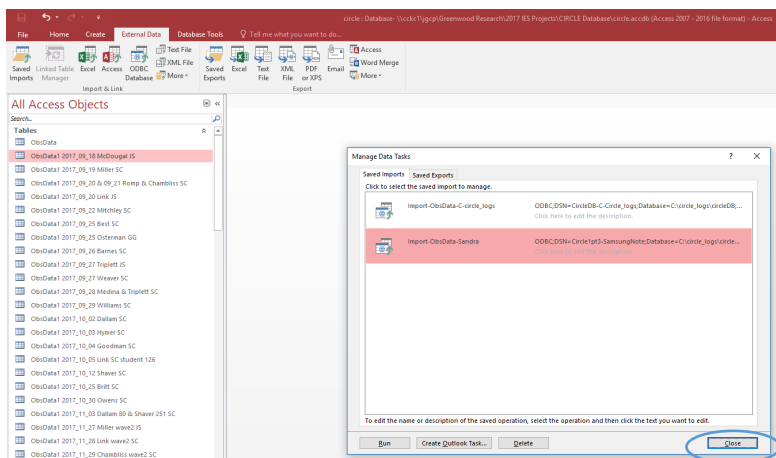
2. Click on the **External Data** tab
 - a. Click on the **Saved Imports** icon
 - b. When the **Manage Data Tasks** window pops up, highlight **Import-ObsData-C circle_logs** and click **Run** (select the designated lettered drive for your device one that is configured for your PC)



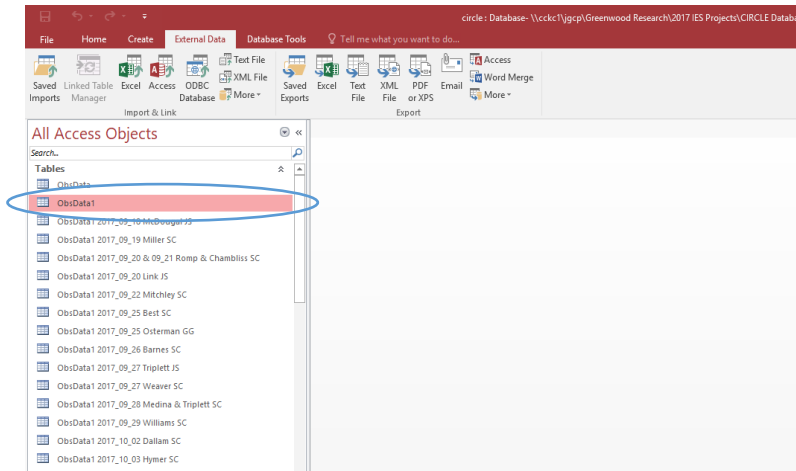
3. When the notification “All objects were imported successfully” pops up, click **OK**



4. Click **Close** to close the **Manage Data Tasks** window



5. You will notice that a new table, **ObsData1**, is now created



Appending CIRCLE Data to the master tables – ObsData or RelData – in Microsoft ACCESS:

1. Open the **ObsData1** table to make sure the data is correct (make any **edits** needed BEFORE you append the data).
2. When the observation is from:
 - The **PRIMARY** observer, run the **AppendToObsData** query
 - The Primary observer, check the **ObsData** table to make sure the data is appended at the end of the table.
 - The **RELIABILITY** observer, run the **AppendToRelData** query
 - The Reliability observer, check the **RelData** table to make sure the data is appended at the end of the table.
3. When appending the data to either the primary table or reliability table, rename ObsData1 and use the following file names:

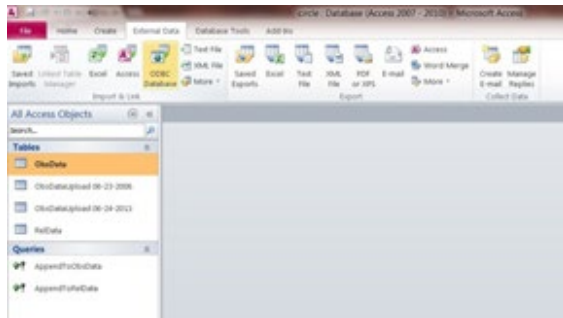
File Names

- The basic format when uploading data and naming files on the computer is as follows: year_month_day, teacher last name, wave number, and observer initials (for example: 2018_06_19 Smith wave1 TJ).
- When conducting reliability, the primary observer will use the above format with the addition of their partner's initials (e.g., TJ/MR)
- When conducting reliability, the secondary observer will use the above format with the addition of their partner's initials and include REL before the date to signify reliability (e.g., REL 2018_06_19 Smith wave1 TJ/MR).
- When taking practice data, for reliability purposes, that will not be used as project data, PRAC should be included before the date (e.g., PRAC 2018_06_19
- Both observers **must** use the same file name in order to be able to run reliability.

Creating a SAVED IMPORT for Importing SQLite Database into MS Access

This is a **ONE-TIME** instruction to follow in MS Access, **only if** the SAVED IMPORT already provided with the MS Access database does not work on your Windows-based PC.

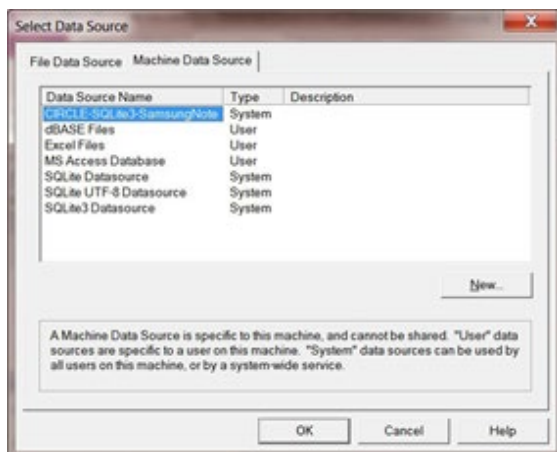
1. Open the MS Access database, **CIRCLE.ACCDB**
2. Under the **EXTERNAL DATA** tab, click on **ODBC Database**



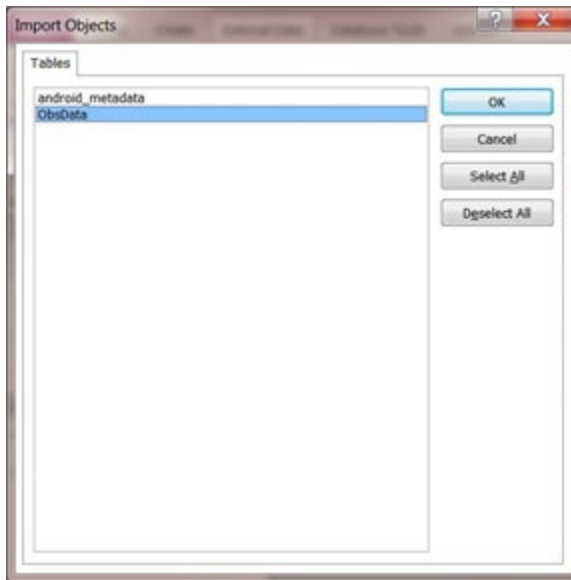
3. In the **GET EXTERNAL DATA** window, select **Import the source data into a new table in the current database**, as shown, then click the **OK** button



4. When the **SELECT DATA SOURCE** window opens, on the **MACHINE DATA SOURCE** tab, select the **Data Source Name** from the list (it should be the one named to reflect the CSFC SQLite database, AND the location of the SQLite database, i.e. on the device), as shown, then click on the **OK** button



5. When the **IMPORT OBJECTS** window opens, select the **ObsData** table from the list, as shown, then click on the **OK** button



If you do not see the list of tables as shown, see **APPENDIX H – Setting up SQLite ODBC Connection on Windows** on Page 135, to re-create the Data Source that will work on your PC.

6. When the **GET EXTERNAL DATA – ODBC DATABASE** window opens, check **SAVE IMPORT STEPS**, and type in a name, as shown, then click on the **SAVE IMPORT** button



7. These steps should now be saved for future use on your PC. You can then follow the steps under **Using a SAVED IMPORT to Import SQLite Database from a device into MS Access** (see page 125).