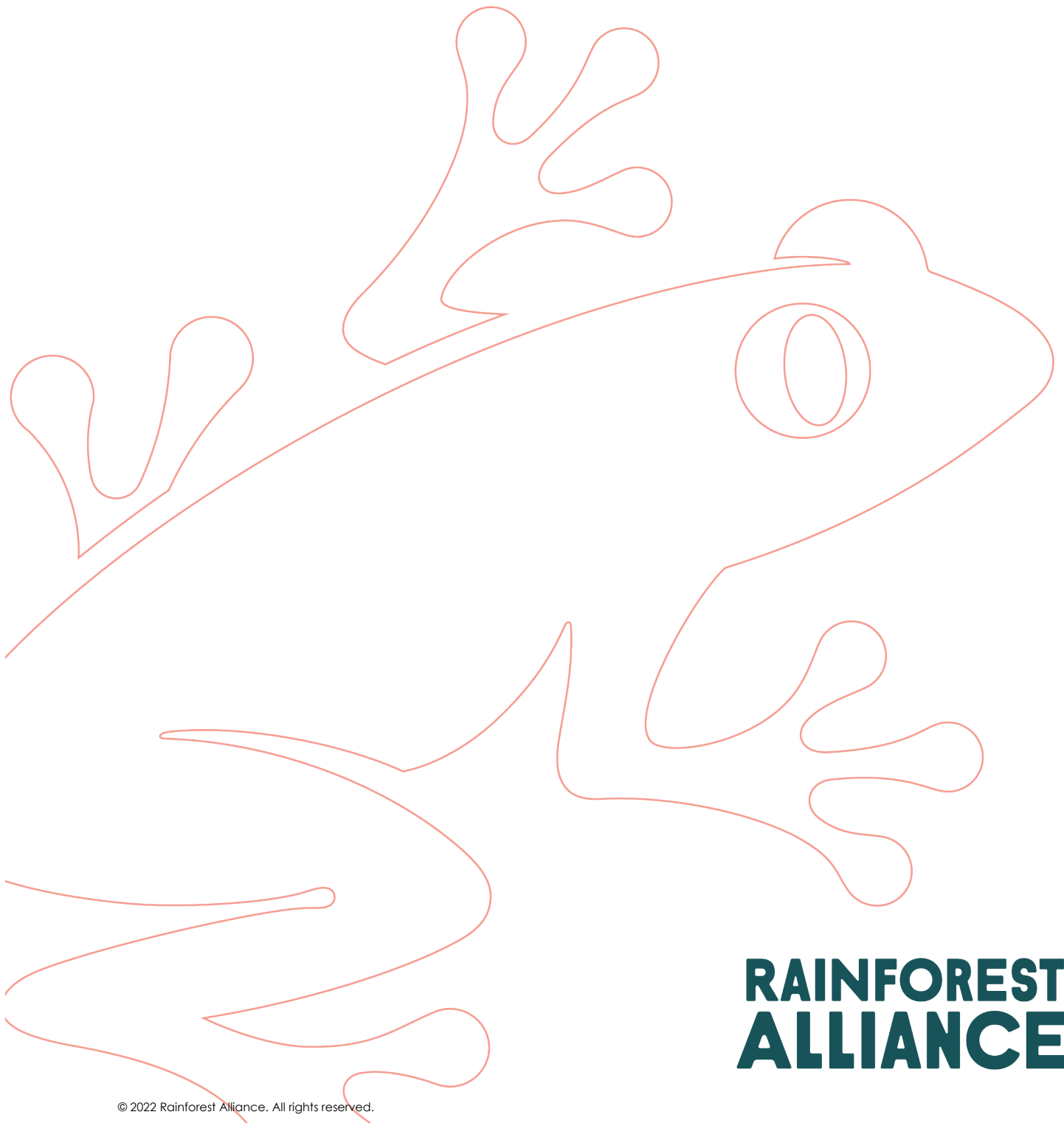


# RAINFOREST ALLIANCE

## GUIDANCE

For Geodata Collection Tool in China

Version 1.0



**RAINFOREST  
ALLIANCE**



The Rainforest Alliance is creating a more sustainable world by using social and market forces to protect nature and improve the lives of farmers and forest communities.

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<b>Document Name:</b>		<b>Document Code:</b>	<b>Version:</b>	<b>Language:</b>
Guidance for Geodata Collection Tool in China		SA-G-AS-31-V1	V1.0	EN
<b>Date of first publication:</b>	<b>Date of revision:</b>	<b>Valid From:</b>	<b>Expires by:</b>	
August 1 <sup>st</sup> , 2023	N/A	August 1 <sup>st</sup> , 2023	Until further notice	
<b>Developed by:</b>		<b>Approved by:</b>		
Standards & Assurance Department		Director of Standards & Assurance		
<b>Linked to:</b>				
SA-S-SD-1 Rainforest Alliance 2020 Sustainable Agriculture Standard, Farm requirements (1.2.12. 1.2.13. 1.2.14. 1.2.15. and 6.1.1. 6.1.2) SA-S-SD-19 Annex Chapter 1: Management (Previous Annex S17) SA-S-SD-24 Annex Chapter 6: Environment (Previous Annexes S12 and S15) SA-G-SD-5 Guidance D: Geolocation Data Requirements and Risk maps SA-R-GA-1 2020 Certification and Auditing Rules SA-P-AS-1-V1 Policy for Geodata Collection and Analysis in China				
<b>Replaces:</b>				
N/A				
<b>Applicable to:</b>				
Farm Certificate Holders Certification Bodies				
<b>Country/Region:</b>				
China				
<b>Crop:</b>		<b>Type of Certification:</b>		
All		Farm Certification		

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## 1. INTRODUCTION

This guidance document supports farm certificate holders (CHs) to collect and analyze geolocation data as per requirement 1.2.12 and 1.2.13 of the Rainforest Alliance 2020 Sustainable Agriculture Standard, using the “Field Working Wizard” on a smart phone device and the “LocaSpace Viewer” on a desktop computer. Certification Bodies (CBs) can use the same tools to check the accuracy of the information collected and verify associated risks during the audit as per the Certification and Auditing Rules AR5 and AR6.

- i. Install and use the mobile application on a smart phone, “Field Working Wizard” to:
  - Determine the location of a farm;
  - Collect and draw the location points and polygon information of the farm in the field; and
  - Export the information into a KML/KMZ file or other supported formats.
- ii. Install and use the “LocaSpace Viewer” software on a computer to:
  - Modify the geolocation data collected in field via the Field Working Wizard app; and
  - Finalize the collection of geolocation data for certification, exporting to a KML/KMZ file or other supported formats.

## 2. INSTALLATION AND REGISTRATION

### 2.1 INSTALLATION AND LOGIN WITH SMART PHONE

Using your smart phone, search for “Field Work Wizard” in any of the main mobile application stores. Click to install the app. See Figure 1.



Figure 1. 'Field Work Wizard' at App stores

Open the 'Field Work Wizard' app, click on 'fast registration', and then enter your 'mobile phone number', see Figure 2.



Figure 2. Login page



Set and remember your unique password and enter your 'company/organization name'. click 'send authentication number', and the mobile number that you provided will receive a message through SMS with a 6-digit number. Enter this number when requested, see Figure 3.

The screenshot shows a registration form titled '注册新用户' (Register New User). It includes fields for '手机号' (Mobile Number) with a '+86' prefix, '密码' (Password) with a note '请输入6-30位数字、字母、不能为纯数字' (Please enter 6-30 digits, letters, cannot be pure numbers), and '单位名称' (Unit Name) with a note '请输入单位名称, 不可为空' (Please enter unit name, cannot be empty). There is a '验证码' (Verification Code) field and a '发送验证码' (Send Verification Code) button. At the bottom, there is a checkbox for '我已阅读并同意用户协议和隐私协议' (I have read and agree to the user agreement and privacy policy) and a '注册' (Register) button.

Figure 3. Registration page

Select the box if you have read and agree with the 'user and privacy agreements',

Click on 'registration' to complete the online registration.

Please note there is no charge to use the basic functions of the app with your primary account

## 2.2 INSTALLATION AND LOGIN WITH COMPUTER

Enter this URL in your browser: <http://www.locaspace.cn/LSV.jsp>. Please note this application is only available for 64-bit Windows operating systems;

Click download, then double-click on the installation package to complete the installation. See Figure 4.



Figure 4. LocaSpace Viewer download page

 the same username and password to log in as what you set up in the "Field Work Wizard" app. There is no need to register again.



### 3. COLLECTING GEOLOCATION INFORMATION IN THE FIELD

Certificate Holders (CHs) can use the “Field Work Wizard” application to collect accurate geolocation data information in the field, including location points and polygons.

#### 3.1 CREATING A NEW ‘COLLECTING TASK’

Collecting tasks help you with collecting geodata in the field. Before collecting the geodata, CHs can start a new ‘Collecting task’ following the instructions below.

- Open the ‘Field Working Wizard’ app and click on the ‘menu’ button in the upper left corner,
- select ‘new collection task’ and enter the ‘task name’ manually according to the selection.
- You can choose to fill in the ‘description’ or leave it blank.
- Click on the ‘determine’ button. Here ‘RA farm’ is entered as task name, so the folder for ‘RA Farm’ is created in this app.
- The new ‘RA Farm’ task is now shown in ‘My Task’ under the ‘Menu’. See Figure 5 and Figure 6.



Figure 5. Create a new ‘collecting task’



Figure 6. Check collecting task saved

Please be aware that using this software requires the use of 5G/4G/3G data. To minimize additional data costs in the field, it is possible to use the app over a Wi-Fi connection and browse the area planned to collect geographic data information in advance. The software will automatically download the detailed satellite image data of the relevant area to the mobile phone cache.

#### 3.2 COLLECTING NEW LOCATION POINTS

To start collecting location points, you must first physically go to the point that you want to collect in the field, [Guidance D: Geolocation Data Requirements and Risk maps](#) provides more information on how to collect the point data according to the Rainforest Alliance Certification and Auditing Rules.



Open the 'location information' function of the smartphone in advance, click on the compass location icon in the lower left corner to establish the location of the device. Because of the accuracy of the relevant positioning components, the actual position may deviate from the position in the software. The data collector can manually drag and drop the screen for adjustment to ensure that the cross mark in the center of the screen is accurately positioned to complete the positioning.

Click on the red button 'click' in bottom-center of the phone screen to enter the location point save interface. In 'name and icon', the file 'year-month-day-hour-minute-second' is named by default, and the collector can also enter other names for the location point, such as 'farm unit 001'. After entering the relevant information, click the 'counter sign' in the upper right corner to complete the preservation of the location point. See Figure 7 and Figure 8.

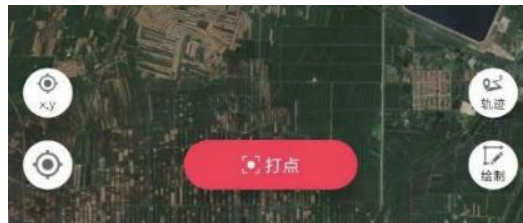


Figure 7. Pinning location points



Figure 8. Saving location points

Now, you can view the data of the location point. Return to the basic interface, click select the upper right corner of the 'data', then click 'point', and then click the 'default point folder', you can see the saved location points. Click 'Farm Unit 001' to view the location point on the map. After using two fingers to zoom in on the map, you can see whether it is accurate. Locate and save other location points, as needed. See Figure 9.



Figure 9. Check location points saved





### 3.3 MODIFY LOCATION POINTS AND ADD AND EDIT NEW ATTRIBUTES

If you need to adjust location points, you can click on the three dots on the right side of 'farm unit 001', then select 'Properties' and click 'Modify' below the sign in the upper right corner to enable edit mode. You can move the cross sign in the center of the screen to the exact location, click 'OK', and then click the 'true' sign in the upper right corner to complete the modification. See Figure 10 and Figure 11.



Figure 10. Location points modification interface

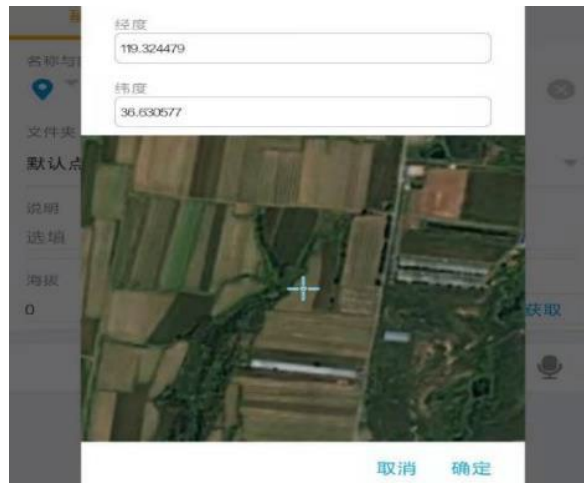


Figure 11. Adjusting location points

You can also add new attributes defined by yourself to location points, which could help to put more detailed information in the geolocation data.

On the basic interface page, click to select the upper right corner of the 'data', the default shows 'point'. Click on the right icon with three dots at the end of the 'default point folder', choose "set syllable/pattern", see Figure 12.



Figure 12. Add new attributes



Then click on the red cross at the bottom to add the first new attribute. This must have a maximum of 10 letters, without special marks or spaces. There are two supporting types for the syllables here, text and number. For example, the new attribute is set as “FarmID” with “text”, and the other new attribute is set as “Area” with “number”. See Figure 13 and Figure 14.

Figure 13. Add new attribute - Text

Figure 14. Add new attribute - number

Adding the attributes to the folders, then you will be able to edit and modify the attributes for each point. Go to the “point folder”, click on the “three dots” icon of the location point, choose “attribute”, then choose “attribute” again to enter the specific information to the attributes defined above. See Figure 15 and Figure 16.



Figure 15. Editing new attributes of points



Figure 16. Editing new attributes defined of location point

### 3.4 DRAW NEW POLYGONS

Click on 'draw' in the lower right corner of the screen. Two options will appear on the upper left corner. Select the second square flag and display it as the 'draw surface'. See Figure 17.

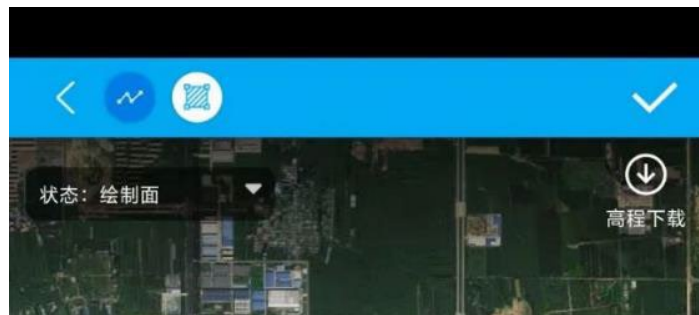


Figure 17. Select 'draw polygon'

You can add the first location node of this polygon by zooming in and moving the cross mark in the center of the screen, then selecting the exact location point of the farm unit and clicking on the red circle 'Add' in the lower part of the screen. To add the following location nodes, move counterclockwise or clockwise. Please note that you can only choose one direction in a polygon drawing process. Once you have found the following location node, click on 'add'. If you are not satisfied with the point, you need to adjust, click the 'revocation' point position. If you are not satisfied with the entire polygon, you can choose Redraw. See Figure 18.

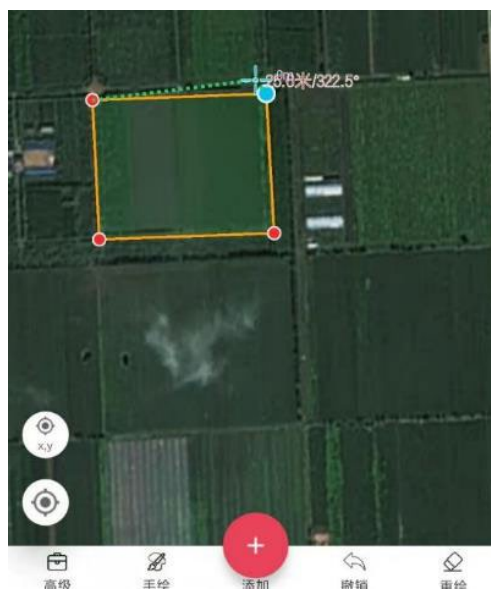


Figure 18. Add position points by order to draw polygon



Once all the position points of the polygon are selected, click the sign in the upper right corner to enter the information saving interface. Under 'name', a number with the name 'year-month-day-hour-minute-second' is saved by default. The operator can also enter the specific name of the polygon here, such as 'farm unit 001'. After entering the relevant information, click on the 'true' mark in the upper right corner to complete the procedure to save a polygon. See Figure 19.



Figure 19. Polygon saving options

You can view the polygon data now. Return to the basic interface, click 'Data' in the upper right corner, then click 'Face', and then click 'Default Face Folder'. You can now see all the polygons saved under the folder. Click 'farm unit 001' to view the polygon on the map. Use two fingers to zoom in on the map to see if it is accurate. See Figure 20.



Figure 20. Check polygon information saved

### 3.5 MODIFY POLYGON INFORMATION AND ADD OR EDIT NEW ATTRIBUTES

If you need to adjust a polygon, you can click on three dots on the right side of the polygon related files, such as 'Farm Unit 001'. Then, select 'Properties', and then click 'Continue Drawing' to modify according to the actual situation. After the adjustment is completed, click on the 'True' mark on the upper right corner to complete the modification.

The operation to add and edit attributes to polygons the same as described in section 3.3 of this document.

### 3.6 EXPORT AND SAVE FARM MAP FILES

To export a map file, return to the main interface of the application software, click on 'menu', select 'my task', click on the circular 'i' sign on the right side of the task to be exported. This will show the 'task details' interface. Then click the 'three dots' sign in the upper right corner (note: please do not click on the delete sign on the left side). Select 'Export Task', default as KML / KMZ file. See Figure 21.



Figure 21. 'Export task' menu

The third option 'export and share' here is set to unselected by default.

There are two options:

1) Select this option, click 'export immediately', you can choose to send the exported kml file through other applications, such as WeChat, QQ, or other mails.

2) Do not select this option, click 'export immediately', the relevant files are directly stored in the data card of smart phone. You can find the data file under 'My Mobile / Professional Smart / Export Directory' through the file manager for your smart phone.

After returning to an area with a desktop computer, you can copy or send the file to the computer with a data line or Bluetooth function and import the file with the 'LocaSpace Viewer' computer side software for subsequent data processing. See Figure 22.

### 导出

导出后的数据将存放在“外业精灵的-导出目录”下，手机端导出shp字段名不能超出5个汉字或10个字母（ArcGIS标准），推荐导出后的压缩包，使用WinRAR解压！

导出格式	KML/KMZ	▼
导出属性信息	<input checked="" type="checkbox"/>	
导出关联附件	<input checked="" type="checkbox"/>	
导出并分享	<input type="checkbox"/>	

取消   立即导出

Figure 22. File exported

## 4. OPERATION AT COMPUTER

### 4.1 CREATE NEW FARM MAP FOLDER

Farm certificate holders can use this software to create a new farm map.

Open the LocaSpace Viewer software. Find and right-click on 'my landmark' in the left sidebar. Select 'add', and then select 'folder'. The folder name defaults to 'unnamed folder'. If you want to modify the folder name, right-click on the folder, select 'rename', and modify the name to something such as 'RA Certified Farm Map'. See Figure 23.

Another option is to use the 'create layer' function to create a new layer file. Go to the toolbar and click on 'Create Layer' to enter the file name. The new map file will appear in the list below the 'layer' directory. See Figure 24.

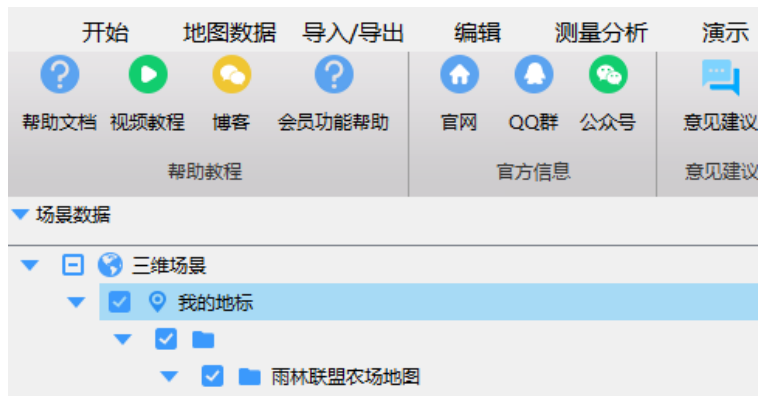


Figure 23. Create new farm map folder in 'my landmarks' index

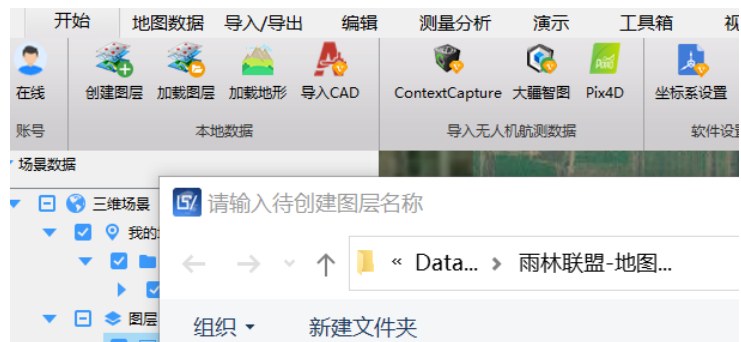


Figure 24. Create new farm map folder in layer index

## 4.2 IMPORT FARM MAP FILES

The software can use the existing farm map data file as the basis, modify the existing information, or add new location points, polygons, and other elements. Click on 'Start' toolbar and 'Load Layer', select the appropriate file and open it. File types supported here include kml, kmz, shp, dxf, dwg, lcad, gpx, tif, lrc, etc. See Figure 25, Figure 26.



Figure 25. Find the 'Loading layer' at toolbar

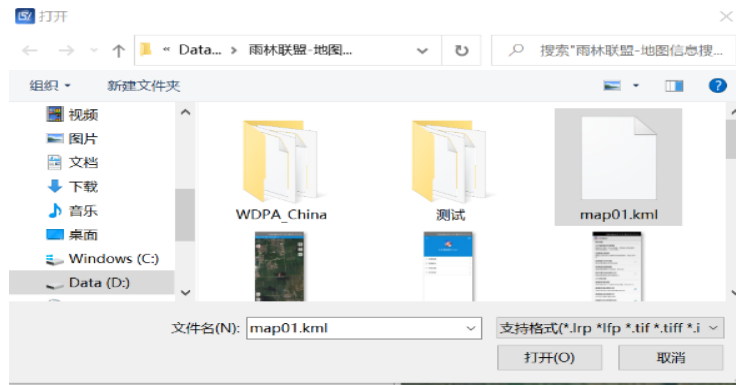


Figure 26. Choose the layer file

The farm map will appear after loading. see Figure 27.

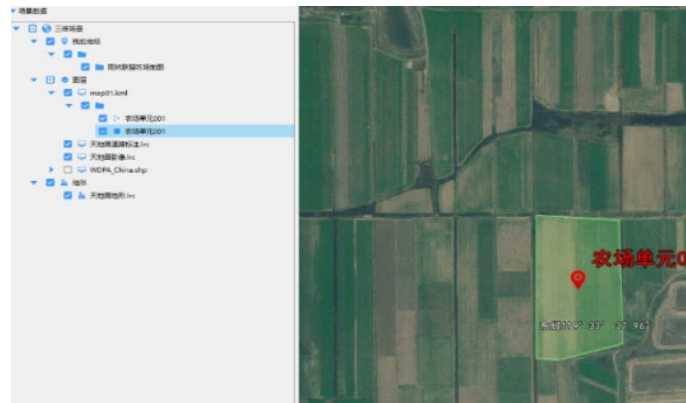


Figure 27. Imported farm maps shown in screen

### 4.3 MODIFY LOCATION POINTS

Select the file name of the specific location point in the left sidebar, click the right key, and then select the 'attribute / edit', showed with the 'attribute style ( point )' dialog box, operator can modify the name; the description can be added under the 'description' list; in the spatial information sheet, the longitude and latitude numbers can be manually modified ; in the 'style' sheet, attributes such as icon style can be modified. If you want to adjust the location point, you can select the location point on the map by the left mouse button and drag it to the relevant new location when displayed as a bright blue box. After that, the modification can be completed by clicking on the 'sure' of the dialog box 'attribute style (point)'. See Figure 28.



Figure 28. Modify location points





## 4.4 MODIFY POLYGON

Select the file name of the specific polygon in the left sidebar, click the right key then select the 'attribute / edit', jump out of the 'attribute style ( face )' dialog box, can modify the name ; the description can be added under the ' description ' list ; under the spatial information sheet, the longitude and latitude numbers of each positioning point can be manually modified ; under the " style " menu, the " custom style " can be selected to modify the filling color, opacity and other properties. After modification, click OK.

If you want to add new position nodes on one side of the polygon, you can use the ' Advanced Editing ' function. First in the left sidebar, select the polygon file to modify, and then click on the ' Edit ' menu of this software, select the ' Advanced Edit ', where the ' Edit ' tool box appears, select the ' Insert Node Tool ', according to the prompt, click on the edge of the polygon, you can add a new location, and you can drag and drop freely to adjust any node of the polygon. After editing, turn off the Edit toolbox. Using this tool, you can also implement ' delete nodes ', ' continue rendering ' and other functions. See Figure 29 and Figure 30.



Figure 29. 'High-level edit' at 'edit' toolbar



Figure 30. Modify polygon with 'high-level edit'

## 4.5 EXPORT AND SAVE FARM MAP FILES

Select the relevant files or folders listed in the left side bar (which can be any level of files or folders under 'My landmark' and 'Layer'), click on the right key, select 'save as'. A dialog box will open. Note that the default file format is set to KML file (other supported file formats include: shp, lgd, dxf, tab, dgn and gml). Enter the file name, select the appropriate storage location, and save. See Figure 31.



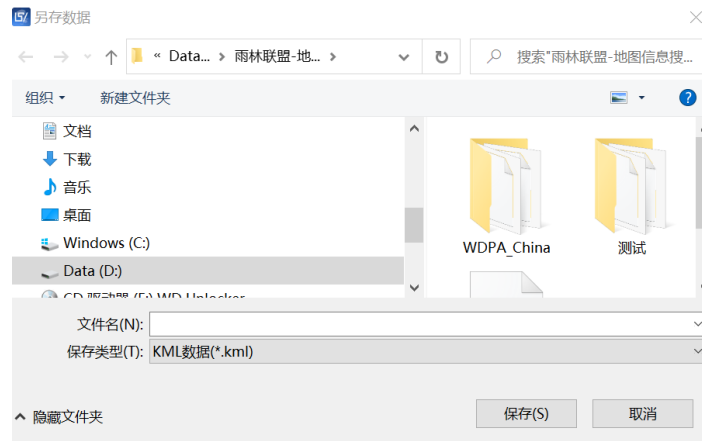


Figure 31. Exported and saved farm map files