spidertracks

The world's **favourite** portable satellite tracking solution

spidertracks – instruction manual

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October 2009. This manual was correct at time of printing. Please contact support@spidertracks.com if you have any issues with these instructions.

Contents

1. welcome to spidertracks!

Thank you for purchasing the spidertracks tracking solution - the world's favorite satellite tracking solution.

Spidertracks is an innovative satellite-based tracking system, combining satellite communication and GPS technology into one simple, cost effective and portable solution.

Spidertracks offers you increased productivity and cost savings and enhances the safety of your crew and clients.

Real-time tracking means you know exactly where your aircraft or vehicles are, wherever they are across the globe, whenever you want.

We recommend following the guidelines in this instruction manual before using your spider.

2. the website

2.1 signup

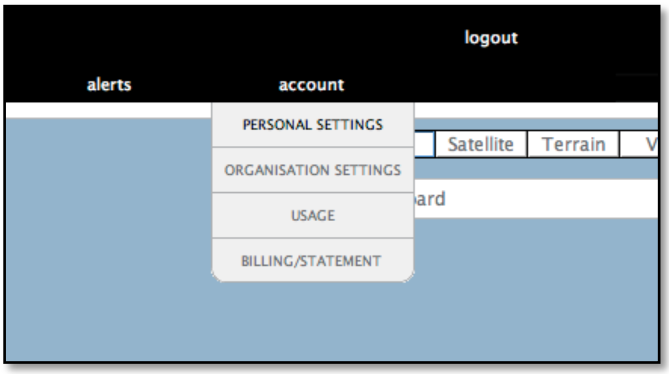
Go to www.spidertracks.com

Click on the green ***login*** tab and click ***signup***. Enter all your details including your credit card and billing details. (If you do not have a credit card or wish to pay by other means please contact accounts@spidertracks.com). You have now signed up to spidertracks!

You can go to https://app.spidertracks.com from now on to login. We recommend saving this as a favorite in your web browser.

2.2 account settings

Hover over ***account***, and go to ***personal settings*** in the drop down menu.



2.2.1 changing your personal details

Click on *edit* to change your *personal details*. Please make sure that you enter your mobile phone number in **international format** if you intend to use spidertxt.

2.2.2 custom units

Check *use custom display settings* and select the units for distance, speed, altitude, and direction. Also set time zone and date. Discarding tracks with low point counts will hide tracks with less than two points.

2.2.3 change your password

Click the *change password* button. An email will be sent to your email (shown in the personal details box) with a link to change your password.

Hover over ***account***, and go to ***organisation settings*** in the drop down menu.

2.2.4 adding vehicles

Click on *register new vehicle*. Add the vehicle name, registration and vehicle type. Please note the vehicle name will be shown throughout the website.

2.2.5 inviting users

Click on *invite new user*. You can add users (people who may be using the spider in their vehicle or people who may be watching over the tracks the spider makes) with an email address. These people will be able to log in with their own email and password. Inviting users without email address will just show their name in the list of users. This allows you to assign the spider to them, but they will not be able to login with their own account. If you assign the spider to them their name will show beside the tracks they make.

2.3 spider settings

Hover over ***spiders***, and go to ***register*** in the drop down menu.

2.3.1 register your spider

Enter the registration code (unique to each spider and found under the mounting bracket as a serial number). Please note that there are no zeros or ones. You will be taken through the setup wizard to add a name, vehicle and user.

Hover over ***spiders***, and go to ***spiders*** in the drop down menu.

2.3.2 spider setup

Click the *setup* tab at the right of the list of spiders.

Your Spiders

Name	Allocated to user	Allocated to vehicle	Publicity	
2CQK9S9BXF	Test Account		Private	setup latest track
37C24L5MVZ	Test Account		Private	setup latest track

On the s*pider settings* page you can assign spiders to users and vehicles. You can change the publicity of the spider – *private* will mean only you as the organisation administrator will be able to view the tracks, *organisation* allows any invited users to see the tracks, and *public* allows you to show your tracks on a publicly viewable web page as well as through your account.

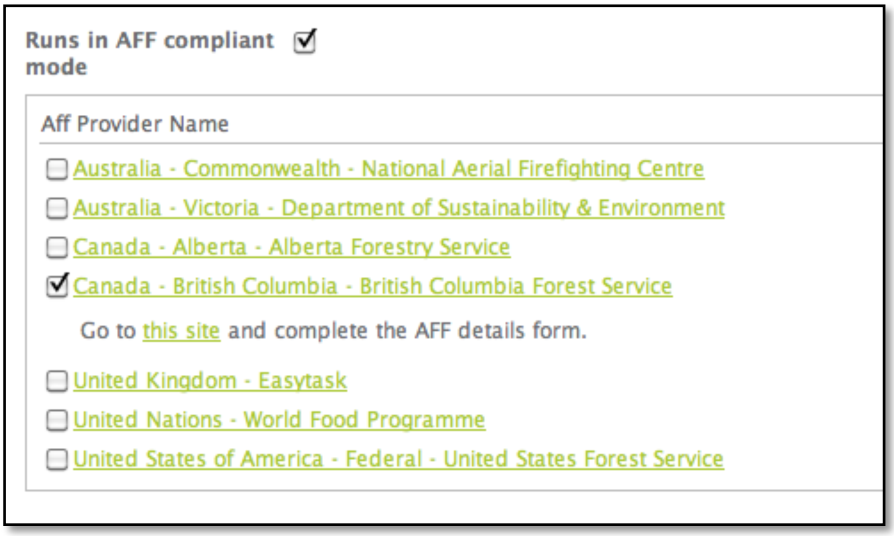
To set or change the spider reporting time (the time or distance when you want your spider to report its GPS position) check time, distance, or both and type in the distance or time in the space provided. Once complete, click on the ***update*** button to save the changes. The spider has to be turned on and sending messages within 24 hours for the updates to take effect.

2.3.3 spiderwatch

Enabling spiderwatch changes the settings on your spider. The spider will send one location point on start up, but will not send any more points until it travels through 40 knots or monitor is pressed, activating spiderwatch. The unit will then send position points at 2-minute intervals until spiderwatch is turned off. If the website does not receive points for a 15 minute period while spiderwatch is on, an alert will be sent to tier one contacts. If these contacts do not react within a further 15 minutes, a second tier alert will be sent, with the recipient intended to be rescue services. Please see the *spiderwatch instruction manual* under *downloads* or contact getspiderwatch@spidertracks.com for more information.

2.3.4 AFF

If you are required to provide your tracking data to an AFF monitoring agency (for example, the BC Forest Services) you must set your spider to AFF compliance mode. Check *runs in AFF compliant mode* and the provider/s you need. Follow the instructions under each provider.



2.4 keypad settings

Hover over ***spiders***, and go to ***keypads*** in the drop down menu.

Please note that the keypad settings are user defined. Therefore if the spider is assigned to a user the keypad settings of the user will be used. If no user is assigned to the spider the settings of the organisation administrator will become the default settings.

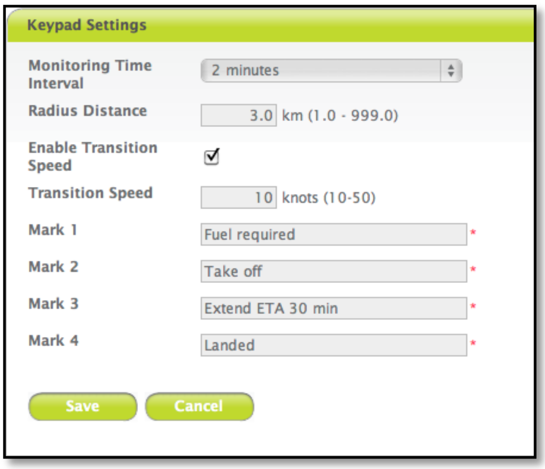
2.4.1 monitoring time interval

Set the time interval to either one or two minutes. An *alert* will be sent if the power to the spider is turned off while in monitoring mode. Please note that you can track at a different update rate, and turn monitoring on and off during the flight. Monitoring is intended for users flying through dangerous conditions who would like to be tracked with the website watching over them.

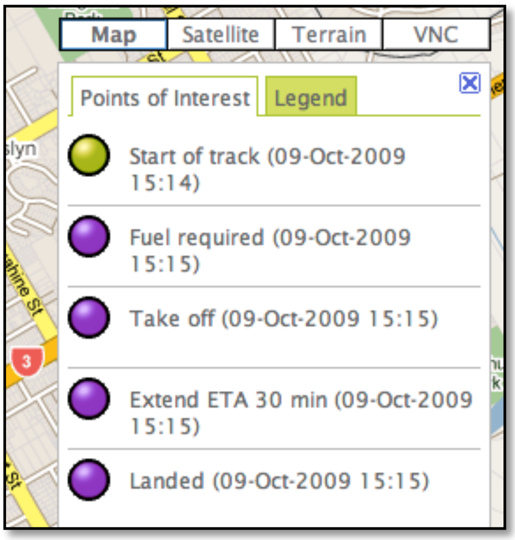
2.4.2 radius distance

Set the radius to any distance you choose. No position points will be sent while in the circle defined by the radius. On leaving the circle tracking will continue as normal.

2.4.3 mark button



Enter text into the boxes beside the four button presses. These descriptions will show up on the map, both in the details pane and in the description of each point. Click when viewing the map to show the points descriptions.

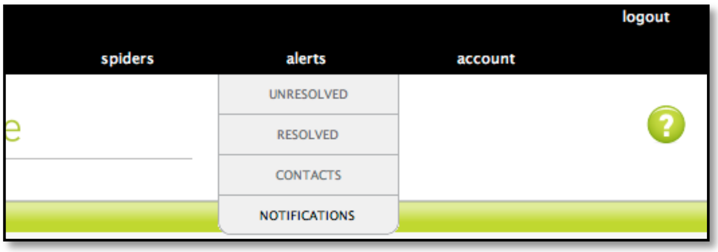


Hover over ***alerts***, and go to ***contacts*** in the drop down menu.

2.4.4 contacts

Contacts are alerted via text and email, both when a monitoring alert is sent and when a manual alert is sent. Please note organisation contacts will receive all alerts sent by any spider in the account. Personal contacts of a user will only be alerted when a spider assigned to the user sends an alert. Please check the email and make sure the **mobile phone** number is in **international format**.

2.5 notifications



Hover over ***alerts***, and go to ***notifications*** in the drop down menu.

Notifications allow you to send messages to any number of recipients via email or text to a mobile phone when a specific event occurs. **Please note that notifications to mobile phones will incur an extra cost of USD 0.20 on top of normal position point charges.** Email notifications only incur normal position point charges.

2.5.1 contacts and users

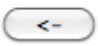
Contacts and users in notifications are made up from any 'invited user' (who will have an email, but may not have a mobile phone set up), personal contacts, and organisation contacts (who can have either a mobile phone, email, or both).

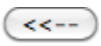
You can select any of these people to receive messages. Organisation contacts have (Organisation) beside them, (Personal) beside personal contacts, and nothing beside users.

To make sure an invited user has a mobile phone set up they will have to login to their account, hover over *account* and click *personal settings*. The details can be edited here. Contacts can be edited under *alerts* and *contacts*. Please make sure the mobile number is in international format.

2.5.2 speed up and slow down

Enter a message of up to 150 characters into the message box when 'Speed Up Notification' is selected. You can have any message you choose, for example, 'Take off'.

Select the recipients for the message. Highlight one or more 'Unselected contacts and users' and click the 

button, or click 

to select all. Double clicking on the names will also shift them between boxes.

Next you will want to set the notification speed trigger. Hover over *spiders* and click on *keypads*. There you can enter a transition speed between 10 and 50 knots. Make sure you check 'Enable Transition Speed'. The position point and notification is sent when the spider travels through this speed trigger.

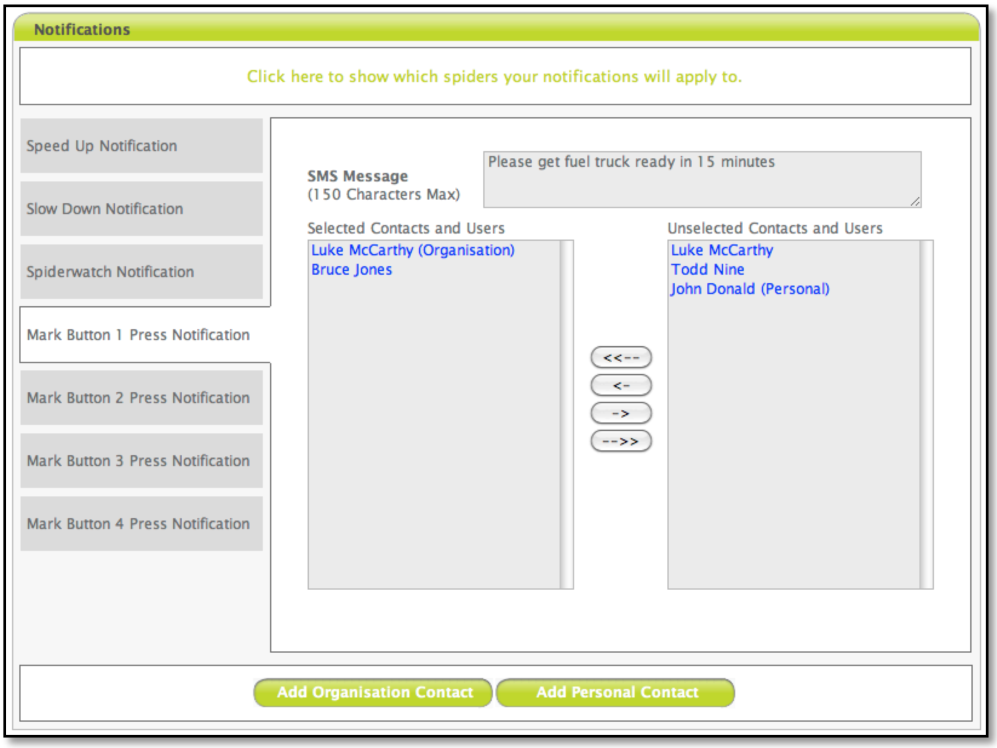
2.5.3 spiderwatch

If your account is spiderwatch enabled you will be able to send notifications when spiderwatch is activated (through the speed trigger) and when spiderwatch is turned off at the end of the flight. Fill in the message box and select the users and contacts as above. Please note this will only be applied when a spider is set to spiderwatch. No speed up or slow down notifications can be sent when on spiderwatch.

2.5.4 mark button presses

A mark button notification message is different from the *mark point description* in 2.4.3 above. The *mark point descriptions* will only show on the track map. The notification message will be sent to email and the mobile phones when the button is pressed once. You can make these the same message if you choose.

For example, my mark button 1 description (2.4.3) may read 'Fuel required' but my mark button 1 notification may read 'Please get fuel truck ready in 15 minutes'. 'Fuel required' will show on the map next to the point in the map, whereas 'Please get fuel truck ready in 15 minutes' will be sent as a notification message.

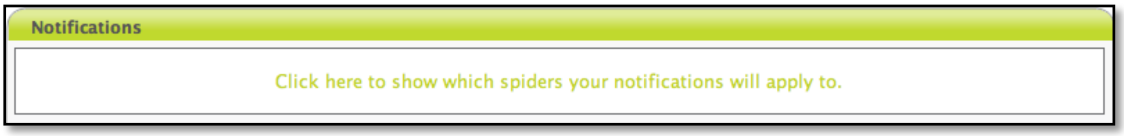


Luke and Bruce will receive a notification when mark button one is pressed.

2.5.5 message recipients

Notifications are defined per user. This means if a spider is assigned to an *invited user* (2.2.5) it will send the notifications message that the invited user has set up. If the spider is assigned to no one it will take the notification settings that the *organisation administration* has set up.

To see what spiders your notifications will apply to click on the green link at the top of the box.



2.6 more settings

Hover over ***account***, and go to ***billing settings*** in the drop down menu.

2.6.1 billing settings

Here you can change your credit card details as well as your billing address and accounts email.

Hover over ***account***, and go to ***organisation settings*** in the drop down menu.

2.6.2 global viewer

Click on spider permissions. Here you can add both people in your organisation and other spidertracks account holders.

If your spider is set to private, and you have *invited users*, you can allow specific *invited users* to view the tracks of the spiders, while keeping the spider private to everyone else.

If you know someone that has their own spidertracks account, you can add the email address they use to login to the website into the global viewer box. They will then be able to view the tracks that your spider creates.

3. installing your spider and keypad

3.1 installing your spider

To work best the spiders need a good view of the sky.

We recommend placing the spider on top of the instrument panel in the vehicle, preferably not directly under any window frames. If you cannot physically see the sky from where the spider is placed the spider will not be able to either.

Secure the spider to the dashboard with the bracket supplied. The spider unit can be quickly removed from the mount when required. The top of the spider should point upward.

The spider can be powered using the supplied power lead - just plug into your vehicle's 10-32 volt DC (cigar lighter) power supply. Alternatively the spider can be hard-wired to the power supply in your vehicle if you prefer. It is a simple process for a Licensed Aircraft Maintenance Engineer or technician to wire in the supplied power lead to the battery. The spider draws up to 1A on transmission, a 3A fuse is recommended and if required 18 – 22 AWG wire can be used depending on length.

The power lead supplied has three wires. Brown is positive, black is earth, and blue is not required.

When the power supply is connected and turned on the spider will automatically connect to a satellite. The LED on the abdomen of the spider will glow red until the spider has a GPS fix. When a fix is acquired the LED will turn amber. The first time you power up, it may take the spider a few minutes to secure a GPS fix. After that it should take less than a minute if you use your spider often.

3.2 installing your keypad

If you have a keypad you can connect it to the spider unit via the USB connection under the blue cap. Attach the keypad with the adhesive bracket supplied to a place you can easily reach while flying or driving. Be careful not to put it in a place where you may accidently knock the buttons.

4. using spidertracks

4.1 using the spider

Once your website account is set up and you have installed your spider you are ready to go flying. As soon as you have power to the spider it will begin acquiring a GPS fix. Once it has a fix it will send your location in real time to the website. Further points will be sent corresponding to the time and/or distance that you set on the website.

4.2 using the keypad

4.2.1 mark

Press the mark button to force a position point to be sent right now. A description will be added to the point when viewed on the website. You can add up to four descriptions. Pressing the mark button twice within one second will cause mark button description two to be displayed, and so on. The mark button can be used at any time and a point will be sent, as long as the unit has a fix. Please see 2.4.3 for details.

4.2.2 radius

Press the radius button when working in a defined area for an extended period of time if you do not wish points to be sent while in this area. This may be while flying close to your home airport, or doing agricultural work. Once you leave the area normal tracking will continue.

4.2.3 monitor

Press the monitor button for the website to monitor your flight. The website will monitor the points coming in and if none are received for a fifteen minute period while monitoring is turned on the website will send out an email and text alert to your *contacts*.

You can have monitoring on for part or all of the flight. The normal transmission rate will occur when monitoring is turned off. You must turn monitoring off at the end of your flight, and wait for the blue monitoring light to stop flashing.

Please note that if you are flying with monitoring on, you can use the radius. This will suspend monitoring until you leave the radius. Monitoring will turn back on when outside the radius area.

4.2.4 alert

Pressing the radius and mark button together will cause an alert to be sent to your contacts. The only way to stop the alert is to power down the spider and power up to start it tracking again.

Both monitoring and manual alerts are only sent to contacts that you set up in the website. They will not be sent to emergency services. If you require the alert to be sent to emergency services please contact your local authority and inform them that you intend to do this. They may require further information on how the alert service works. Please contact support@spidertracks.com if information on the alert service is required.

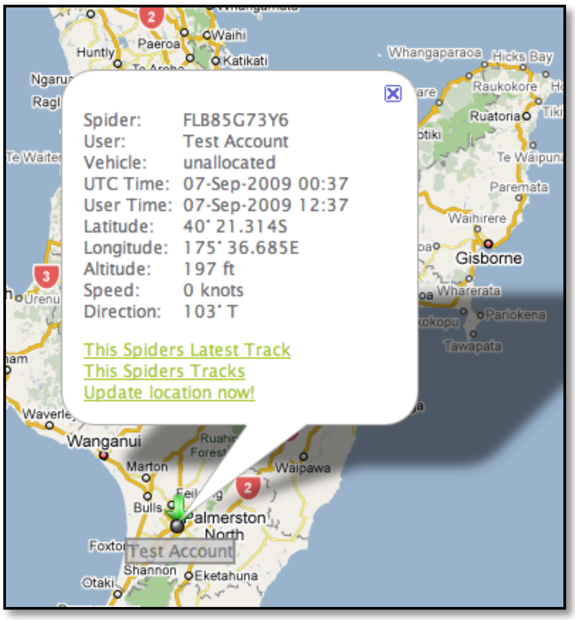
Please also note that the alert mobile number must be in international format and must be a valid mobile number. For example, a New Zealand mobile number 021 234 567 would be entered +6421234567.

The email address must be valid and entered correctly as well. You can test these work by clicking *test* from the *contacts* page. If the email doesn't come through please get the contact to check email filter settings.

5. using the website

5.1 viewing tracks

5.1.1 dashboard view



On login to the site you will see the last location of all your spiders on the dashboard map. Using the icons at the top left of the map you can specify different views.

Click on the bubble to see information about the last location. You can also force the spider to update its location if it is turned on.

5.1.2 track view

Hover over *tracks* and click *view*. Today's tracks are shown as default in the list of tracks. You can sort the tracks by various dates or by a custom search. Check boxes beside each track to view multiple tracks on one page. Click view beside the track you want to see or view down the bottom for multiple tracks.

While viewing the map you can click the bubbles to view more information about each point. You can change the background of the map between different displays from the buttons in the top right corner.

Zoom in and out using the zoom bar in the top left hand corner of the map or with your scroll wheel on your mouse. You can also zoom in by double clicking the mouse on the map. Move the map around using your mouse by clicking and holding the map and then dragging it around.

5.2 editing tracks

From the *tracks* page you can *edit* a track. Here you can change the name of the track, change the user of the track, change the vehicle, change the track publicity, download a spreadsheet of the track data, open a track in Google Earth, or add notes to a track.

From the *tracks* page you can select *show details*. Here you can quickly view the details of the track as well as do minor editing, or even delete the track.

6. other features

6.1 spidertxt

Please see the downloads section for instructions on setting up spidertxt. For more information on spidertxt please contact getspidertxt@spidertracks.com.

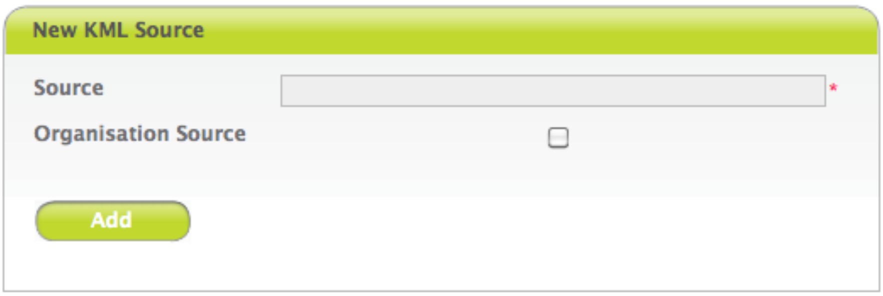
The message centre is where spidertxt is controlled.

6.2 updating spider firmware

The code on your spider can be updated from the spider updater. For instructions on how to download and use this please see the downloads section of the dashboard.

6.3 kml file upload

If you have a KML source that you know you can put the URL directly into the space provided on the website. If you make the file *organisation source* the KML will be visible to all invited users in your organisation.

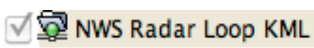


If you would like to see what a KML file overlay might look like please copy this URL into the box and view a map of Los Angeles, USA from the tracks page.

http://www.srh.noaa.gov/ridge/kml/animation/sectors/pacsouthwest_N0R_loop.kml

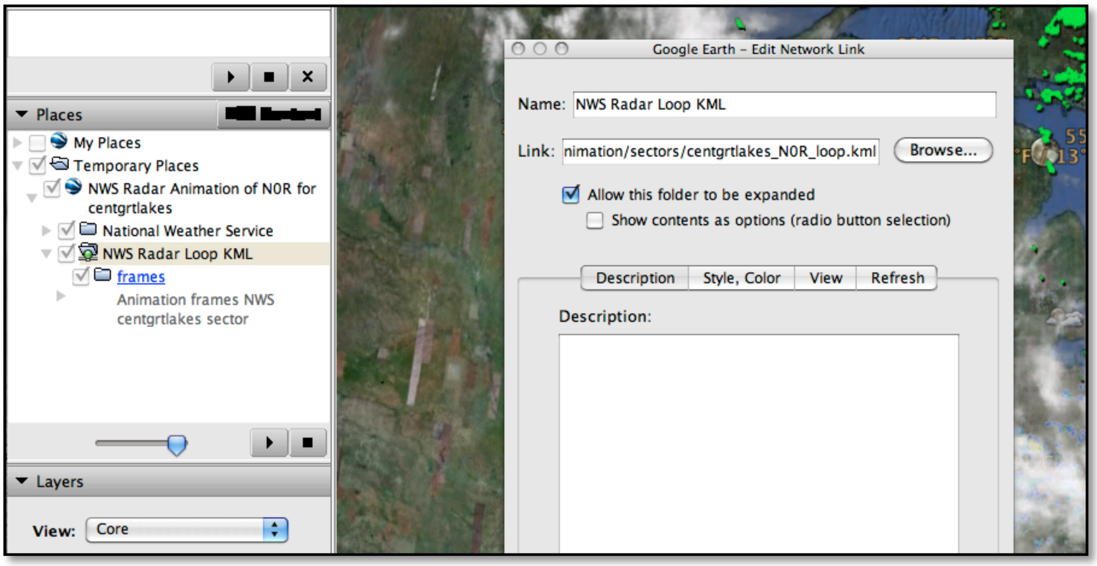
Please note that the KML can only be viewed from the tracks maps, and are not visible from the dashboard map or the public page maps.

If you have a kml source in Google earth you can right click on the icon that looks like this:



And click the option *get info.*

This will open a box to *Edit Network Link*.



From here you can copy the link and paste it into the appropriate box on our website above.

Please note that not all KML files will work with Google Maps and therefore with our website. If you have any questions please contact us!