Version 1.0

Function Description.

■ Below are links to Youtube.

<u>Playlist</u>

[Second Life] Camera view manager Location scouter Introduction

[Second Life] Camera view manager Location scouter Tutorial

[Second Life] Camera view manager Location scouter Version 1.06 update information

[Second Life] Camera view manager Location Scouter v1.7~1.8 Tutorial

Below are links to the contents of the v1.7~1.8 Tutorial

How to disable camera constraints on viewers.

Example of HUD management; HUD is copied and used.

Quick Pinning.

Explanation of landscape camera.

Explanation of avatar tracking camera.

How to search by avatar name.

Explanation of relative camera positions for avatar tracking camera.

Export and Import of camera data.

Editing functions for registration buttons: Delete / Insert / Compaction / ClearAllButtons.

How to convert camera data created in buildings such as Skybox and Photography studio when moving out of those buildings.

Promotion for making slideshows.

Slideshow with camera positions (Tour with camera positions). Part 1.

HUD warning when there are 60 avatars in a Sim. How to prevent script crashes.

How to search for avatars Part 1. Search by altitude.

Various ways to register avatars.

How to search for an avatar by some strings used in the avatar.

How to register the results.

How to register additional results.

How to add one of the results.

Example of registering a landscape camera with an avatar tracking camera.

How to search for avatars and register them one by one.

Slideshow with camera position (Tour with camera positions) Part 2: How to set parameters for the fade effect in a slideshow.

How to set the background texture for the fade effect.

How to check the location of registered avatars on a map.

Changing the name of a registered avatar. By changing the name, you can replace the avatar to which the relative camera position is applied.

How to search for avatars Part 2. Search by radius of horizontal circle.

Function to rotate around the avatar avoiding objects blocking the camera.

Mouselook and Rear view perspective with avatar tracking camera.

Added key operation for relative camera position adjustment of avatars. Continuous change of camera position by pressing the related key and PageUp key simultaneously.

Function description.

There are two types of cameras: one for landscape and one for avatar.

They can be mixed and registered.

About the landscape camera.

The camera angle does not change no matter where in the Sim the camera position is registered.

Use this camera when you want to change avatars or objects based on the scenery or background.

Registration of camera position.

Registration menu.

Restoration of camera position.

Restoration menu.

About the avatar camera.

The camera moves with the avatar, so the background changes when the avatar moves/rotates. It is useful to associate a pose name with a camera number when posing an avatar for a photo shoot to maintain the camera angle for the avatar.

Opening the Hellow Avatars menu searches for avatars and displays the searched avatar name on a button.

The QuickSlideShow button in the menu allows you to execute a Slidedshow using the avatar searched for.

When the QuickSlideShow button is pressed, a confirmation dialog box opens, and when the Do Quickslideshow button is pressed, all existing registrations are deleted and the avatar from the search is registered and the slideshow is executed.

The search in the Hellow Avatars menu requires some conditions to be met.

This is done in the Setup menu.

Types of conditions.

Required.

Altitude range. (Two numbers separated by commas.)

0 to 4000 is the default value.

Options.

Avatar Name.(A comma-separated string of characters after the altitude range.)

String at the start of the name.

String in the middle of the name with wildcards.

Horizontal range.(Described in the second line.)

Radius of the horizontal circle.

Selecting the avatar name button in the Hellow Avatars menu will point the camera at that avatar.

Registration of camera position.

Select the avatar name button in the Hellow Avatars menu or the Restoration menu, open the Registration menu, adjust the camera position with the keyboard, and press the number button to register the camera position.

Open the Hellow Avatars menu to search for avatars, and then register all search results by clicking the Register button in the Setup menu.

Open the Hellow Avatars menu to search, then press the +Register button in the Setup menu to add all the search results.

Restoration of camera position.

Select the avatar name button in the Restoration menu.

When Slideshow is enabled (■), refer to the Slideshow section.

If Map is enabled (■), the camera position is restored and the viewer's Map menu opens, showing the avatar's position.

When FwdFacing is enabled (■), the camera moves to the Mouselook or Rear view position from the target avatar's perspective according to the settings in the Setup menu. However, if the avatar owner moves the camera with the mouse along with the Alt key, Ctrl key, Shift key, etc., it will not be reflected.

Adjusting the camera position.

Open the Registration menu and adjust the camera position with the keyboard while the camera position is restored by selecting the button in the Restoration menu or the Hellow Avatars menu. List of keyboard operations.

When the key is pressed.

Arc: It rotates the camera around the avatar. Camera target is fixed.

$$\leftarrow$$
, \rightarrow , \uparrow , \downarrow

Boom: It raises/lowers the camera around the avatar. The camera target is fixed.

Shift +
$$\leftarrow$$
, Shift + \rightarrow

Pedestal: It moves the camera and camera target up/down.

Changes the amount of movement, from Step 1 to Step 4. When pressed, the Step status is displayed above the HUD.

While pressing the key.

Arc: It rotates the camera around the avatar. The camera target is fixed.

Boom: It raises/drops the camera around the avatar. The camera target is fixed.

Camera data.

Export/Import.

It is done with the Export/Import button in the Setup menu.

Conversion of camera data when relocating Skybox or Photography studio.

Procedure.

It is done in the Setup menu.

step1 Register the coordinates of the two Anchor points of the Skybox before relocation using the SetAnchors button.

step2 Export the camera data by clicking the Export button.

step3 Copy the exported text data to the note card DATA in the HUD inventory.

step4 Click on the ImpWithAnchors button to import the camera data by entering the coordinates of the two anchor points of the relocated Skybox.

You can also use the included script to obtain the coordinates of the Anchor points.

Slideshow.

In the Restoration menu, activate the Slideshow button (■), then select the start avatar and end avatar buttons to cycle through the camera positions between them in a slideshow-like fashion. Setup.

It is done in the Setup menu.

Camera iris open time.

It is set with the Open Time button.

Camera iris closed time.

It is set with the Closed Time button.

The fade effect can be used between the opening and closing of the camera iris.

To use this effect, the FaderEnabled button must be enabled (■).

Fade effect application time.

It is set with the Fade Time button.

Fade effect settings.

Specify the color.

The FadeTexture button covers the screen with an object, so use the viewer's edit function to change the color of the object's texture.

After changing the color, close the viewer's edit menu and touch the screen.

Specifying the texture.

The FadeTexture button will cover the screen with an object, so use the viewer's edit function to change the texture of the object. The texture used for the change must be placed in the HUD.

After changing the texture, close the viewer's edit menu and touch the screen.

For the avatar camera.

You can select the type of viewpoint for the camera.

It is done in the Setup menu.

When the FwdFacing button is disabled (□), it is the viewpoint when the camera is registered.

When it is enabled (■), use the following buttons to specify the viewpoint.

Mouselook.

Rear View.

In this mode, the camera position can be adjusted with the keyboard while Slideshow is running. Adjustments made here do not affect the registered camera position.

List of keyboard operations.

When the key is pressed.

Arc: It rotates the camera around the avatar. Camera target is fixed.

$$\leftarrow$$
, \rightarrow , \uparrow , \downarrow

Boom: It raises/lowers the camera around the avatar. The camera target is fixed.

Shift +
$$\leftarrow$$
, Shift + \rightarrow

Pedestal: It moves the camera and camera target up/down.

Changes the amount of movement, from Step 1 to Step 4. When pressed, the Step status is displayed above the HUD.

While pressing the key.

Arc: It rotates the camera around the avatar. The camera target is fixed.

Boom: It raises/drops the camera around the avatar. The camera target is fixed.

If there is an obstacle in front of the camera that blocks the avatar, the camera can be made to go around the obstacle to avoid it.

Enable RotAround (■) in the Setup menu.

It works for avatars at altitudes below 4096.

It does not always avoid obstacles.





The HUD size can be changed using the viewer's edit function.

The changed size will be returned to the default by clicking ResetScript button in the setup menu.



When there are more than 60 avatars in the Sim, the HUD turns red like this.

If you do a slideshow with avatars in this state, the HUD may become unusable due to a memory error.

To prepare for this, once the HUD turns red, remove and copy the HUD, save the original, and add the copy as a HUD.

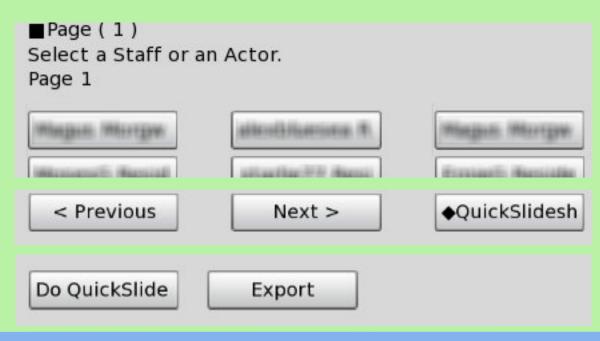


Quick pinning

Touching this area pins the current camera position. It is also used to release it.

This is also used to release a camera position that has been restored by another function.

Hello Avatars



Touching this area searches for avatars in the Sim according to the conditions set in the Setup menu, and the corresponding avatar name is used as the button label.

The button moves the camera to the position where the avatar is shown.

After the **QuickSlideshow** button displays the confirmation dialog shown below on the left, you can perform a photo slideshow with the camera reflecting the avatar of your search results.

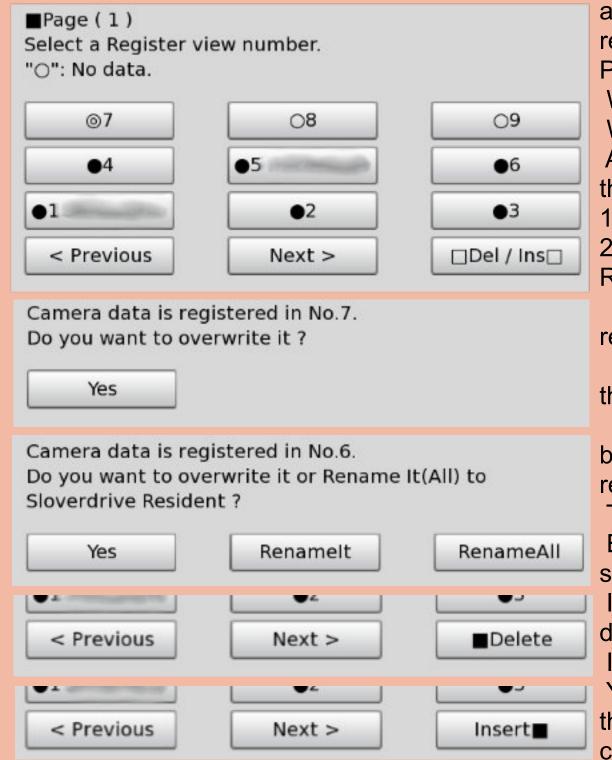
The fade effect of the slideshow can be set in the Setup menu.

The slideshow will re-search the avatars in the sim every other round and refresh the list of avatars. In other words, avatars that have left the Sim are excluded, and avatars that are currently in the Sim are always included.

The maximum number of avatars that can be handled in one round is 40.

All previously registered camera data will be lost when the **Do QuickSlideshow** button is pressed. If necessary, before doing so, use the Export button to output the camera data to the console and save it. If the camera data is copied to a note card in the HUD, it can be restored with the Import button in the Setup menu.

Registration



Selecting the number button registers the current camera position. This will register the camera position relative to the Sim, such as the landscape.

If an avatar is selected in the HelloAvatars menu or Restoration menu before pressing the number buttons, the avatar will be tracked and the relative camera position will be registered with respect to that avatar. Before pressing the registration number button, the relative camera position can be fine-tuned by the following keyboard operations. \leftarrow , \rightarrow , \uparrow , \downarrow , Shift + \leftarrow , Shift + \rightarrow , PageUp, PageDown, PageDown, PageDown + \uparrow , PageDown + \downarrow , PageUp + PageDown, PageUp + (\leftarrow , \rightarrow , \uparrow , \downarrow , Shift + \leftarrow , Shift + \rightarrow).

When a camera that tracks an avatar is registered, a portion of the avatar's name appears on the button label.

When a button that is already registered is selected, a confirmation menu appears to overwrite it.

At this time, if an avatar is selected in the HelloAvatars menu or the Restoration menu, the behavior will be as follows, depending on the state of the avatar.

1 If the avatar name of the button to register and the current avatar name are the same, only the Yes button will be displayed.

2 If the avatar name of the button to register and the current avatar name are different, the Yes button, Rename button, and RenameAll button will be displayed.

If you select the Yes button, a portion of the current avatar is displayed on the button label and the relative camera position is registered to that button.

Selecting the Rename button renames the button label to the name of the current avatar. The relative camera position registered to the button will then be applied to the current avatar.

Selecting the RenameAll button will rename the button label to the current avatar's name. In addition, the button labels of all other buttons registered by the avatar of that button will also be renamed to the current avatar's name. The relative camera positions registered for those buttons will then be applied to the current avatar.

The Del / Ins button allows you to delete buttons and insert empty buttons.

Each time this button is pressed, it cycles through three states: ■Delete, Insert■, and □Del / Ins□. You can switch between these states when you want to delete, insert, or register a button.

If you select a numbered button when it is in the **Delete** state, you can delete the button. If a camera position is registered there, a dialog box will appear confirming the deletion.

If the button is deleted, it will be packed and a new empty button will be added at the end.

You can insert a button by selecting a numbered button when it is in the **Insert** state. The empty button will then be inserted and the last button will be pushed out and discarded. At this time, if a camera position is registered at the end, a dialog box will appear to confirm the insertion.



Restoration

▲Page (1) Select a Restoration view number. "∆": No data. Λ8 Λ9 ∧7 $\nabla \mathbf{T}$ 1 ∇ 2 < Previous Next > □Slideshow ▲Page (1) Select a Starting view number. "A": No data. Previous Start and End numbers are 1 and 1. Touch the screen to stop the slideshow. Cameras where the subject avatar is not in Sim will be skipped. $\nabla \mathbf{I}$ \triangle 3 77 ■ Slideshow < Previous Next > $\nabla \mathbf{I}$ \triangle ∆3 ■FwdFacing < Previous Next > $\nabla \mathbf{I}$ △2 ∆3 Next > < Previous Мар

Fig.1

Slide show in the previous range.

↓

∕ 🌣 🖯

Selecting the number button restores the camera position. If the registered camera is an avatar tracking camera, part of the avatar name will be used along with the number as the button label.

Press the **Slideshow** button to **Slideshow** and specify the start and end number buttons to start the slideshow.

To end the slideshow, touch the screen. (Slideshow settings are made in the Setup menu.)

The avatar tracking camera will skip through the slideshow if the target avatar is not in the Sim. Incidentally, if you press and hold the Restoration section of the pictogram with the mouse for more

than 1 second, "Slide show in the previous range" will be displayed above the HUD, and you can restart the slide show by releasing the mouse. Fig.1

Fading out of the slideshow does not make the floating text on the other HUDs invisible.

Therefore, it is recommended that you detach the other HUDs, hide their floating text, or move them off the screen if you want to videocapture the slideshow.

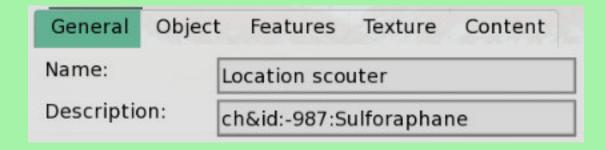
If you have a script error or move to a location where the script cannot be executed during a slideshow with a fade effect, detach the HUD. Otherwise, the HUD will cover the entire screen during the fade effect and you will not be able to touch objects in the Sim or other HUDs with the mouse.

If you press the **SlideShow** button to set **FwdFacing**, the camera will be facing forward of the avatar when using the avatar tracking camera. At this time, Mouselook and Rear view are applied as relative camera positions according to the settings in the Setup menu.

Press the □**SlideShow** button to ■**Map** and specify the number button to open the viewer's map menu.

However, if you are using Firestorm as a viewer, check the Allow scripts to show map UI checkbox in Firestorm/Protection in Preferences.

Appendix



```
integer CH = -987;
default
{
    state_entry()
    {
        llListen(CH,"",NULL_KEY,"");
    }
    listen(integer _ch, string _name, key _id, string _msg)
    {
        if(_ch == CH) llOwnerSay(_msg);
    }
}
```

Example of receiving test script.

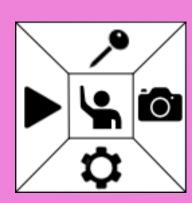
If you enter "ch&id" followed by a value in the description field of the HUD, you can send a message to all areas of the Sim by clicking on the **Restoration** button. That can be useful for creating a posed stand, etc. linked to a number.

The "ch&id" is followed by the negative number of the channel to be used for the transmission, followed by ":", and finally an optional string as an identifier.

e.g. ch&id:-987:Sulforaphane

This will send a message to channel -987 according to the following conditions. The separator for each value is "\n".

For landscape cameras:	For avatar tracking cameras:	For avatar tracking cameras:
Id	If the avatar is in the Sim:	If the avatar is not in the sim:
Button number	Id	Id
	Button number	Button number
Camera position	Avatar name	Avatar name
	Avatar position	
Sulforaphane	Sulforaphane	Sulforaphane
3	2	1
<238.651400, 185.248900, 25.196960>	Sloverdrive Resident <240.076100, 195.367000, 24.653330>	Kyuzo Hax



Texture



Setup

■FaderEnable ■HideInforma Next > Open Time Closed Time Fade Time Conditions FadeTexture Compaction +RegistActors RegistActors ◆ResetScript Press the **FaderEnabled** button to set **FaderEnabled** to enable the fade effect.

Press the

HideInformation button to set

HideInformation to hide the information while using the fade effect. The **Next** > button opens the next menu. The details are described below.

Tip. You can also enter the open time, closed time fade time together on three lines. 2

The Open Time, Closed Time, and Fade Time buttons are used to set the respective times. See the figure below for the meaning of each. Fig.1

The Open Time, Closed Time, and Fade Time fields can also be set as a batch with three rows of them. Input the range of the altitude where the

Refer to the left figure.

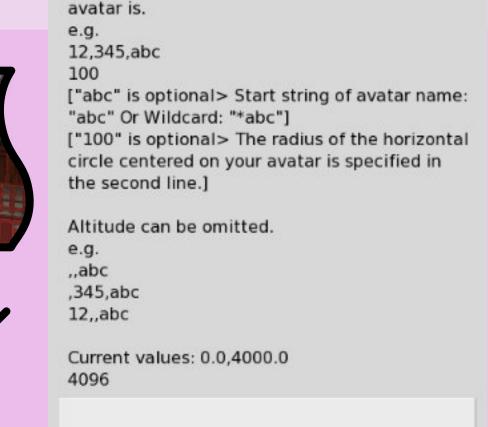


Fig.2



Pick: Texture Filter Textures Drag to move, shift-drag to copy Stretch Both Sides Move Dirt, Sand, Ground X Stretch Textures Rotate (Ctrl) Fabric Stretch (Ctrl+Shift) Snap Floor Tile Select Face K Edit axis at root Hair Textures Align Show Highlight Edit linked Misc Textures Steel Plate Screen Plastic Small Bumps **X** Plastic Big Bumps 1 objects selected, land impact 0 ■ Inventory Local Bake Gray Metal Scratched Object Features Texture Content General Size: **Blue Plasma** Default 256 x 256 Glow Transparency % Color **X** American Flag Blank -0.60 Color Picker K Full Bright Texture (diffuse) RGB LSL Hex Bumpiness (normal) Materials Shininess (specular) Red: For textures with transparent areas, we recommend scaling up until the transparent areas are outside of the screen. Otherwise, the moment the camera switches during fade-out will be visible. Textures should always be copied to the HUD inventory.

Set the conditions under which avatars will be searched for using the Conditions button.

The basic conditions must be the lower and upper altitude limits

of the avatar's location, separated by commas. Fig.2

In addition, the avatar's name may be added to the search conditions, if desired. In this case, you can either specify the first few characters of the avatar's name or the middle of the name. In the former case, the letter or string of letters is specified with a comma after the altitude. The latter is the same format, but the character or string must be preceded by a "*".

If necessary, you can also add a horizontal circle area centered on the coordinates of your avatar's current location to the limit. This is done by specifying the radius of the circle in the second line.

When the script is reset, the lower and upper limits of the altitude are initially set to 0 and 4000, respectively.

The Compaction button allows you to delete empty buttons between registered buttons.

The FadeTexture button allows you to change the texture used during the fade of the slideshow. Use the viewer's edit function as shown on the left.

After selecting a texture in the inventory and making settings, the texture must be copied to the HUD inventory.

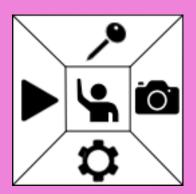
If you are using a texture from the library, copy it to the viewer's inventory and then edit it.

It is not possible to copy directly from the library to the HUD inventory.

When you open the Hellow Avatars menu, the names of the avatars in the search results are displayed as button labels.

The **RegistActors** button registers the avatars to an empty button. All already registered avatar tracking camera buttons will be cleared before the button is executed.

The +RegistActors button registers additional unregistered avatars among the avatars searched for. The registered button on the avatar tracking camera will never be cleared, even if the avatar is no longer in Sim.



types.

1 "SetAnchors"

3 Move the building.

4 "ImpWithAnchors".

the building.

2 "Export".

the HUD.



"
FwdFacing": Turn the camera forward during the

"●Mouselook" and "●RearView" are the forward-facing

Camera data created by Skybox or other buildings can

Records the coordinates of any two objects linked to

Export the camera data and copy it to the "DATA" in

be converted when moving them.

Setup / Next Fig.1

- **■FwdFacing** button: Use Mouselook or Rear view for the avatar tracking camera during slideshows.
- •Mouselook button: When using the avatar tracking camera, the camera is oriented in forward direction of the avatar to simulate a mouselook.
- •Rear view button: Simulates Rear view by setting the camera to face forward of the avatar when using the avatar tracking camera.

During the execution of Slideshow (when ■FwdFacing), the relative camera position can be fine-tuned by the following keyboard operations.

 \leftarrow , \rightarrow , \uparrow , \downarrow , Shift + \leftarrow , Shift + \rightarrow , PageUp, PageDown, PageDown+ \uparrow , PageDown + \downarrow , PageUp + PageDown, PageUp + (\leftarrow , \rightarrow , \uparrow , \downarrow , Shift+ \leftarrow , Shift+ \rightarrow).

RotAround button: If a slideshow is running without FwdFacing, if there is anything blocking the avatar in front of the camera, the camera will be rotated around to show the avatar. This does not always work well. In some cases, the avatar may not be shown. It is for avatars up to altitude 4096.

Camera positions created by buildings such as skyboxes and photography studios become meaningless when those buildings are moved.

This situation can be handled.

Buildings can be moved up, down, left, right, back, and forward, but their rotation is limited to the vertical axis.

The procedure is as follows

- 1 Before moving the building, record two reference points that are that far from each other that do not change their relative positions to the building. These two points can be at different heights.
 - 2 Register the camera positions in the HUD for photographic work, etc.

The order of 1 and 2 can be reversed.

- 3 Move/rotate the building.
- 4 Export the camera data.
- 5 Import the data while absorbing the difference from the reference points after the move. After importing, the reference points entered here are automatically recorded as new reference points.

The object coordinates are used as the reference points. An object whose coordinates can be checked is an editable object.

To check it, for example, in the Firestorm viewer, you can check the coordinates of the selected object in the Object tab of the Edit menu. If you are using another viewer, put the included script Anchor position checker into the target object's inventory to check its coordinates.

If the object you want to use as a reference point is not editable, rez a tiny object and place it exactly at the feature point of the building and use its coordinates. If it is an object you have rezzed, it is editable and you can put the Anchor position checker in its inventory.

Note that the camera positions that can be moved in this way are limited to those for scenery. This is because in the case of an avatar tracking camera, its position is updated with the most recent avatar position, independent of the building.

SetAnchors button: Enter the reference point for the building before moving. Fig.2

Enter two reference points here.

ImpWithAnchors button: Enter the reference points for the building after the move. Fig.3

After entering the two reference points here, the camera data will be imported.

CheckAnchors button: Outputs the current reference points to the console.

ClearAllButton button: Clears the camera data from all buttons.

Import button: Imports the camera data, which must be entered on the "DATA" note card in the HUD.

Export button: Export camera data to the console.

Tip.

Camera data can be shared with other users' Location scouter via "DATA" on the note card.

Fig.3

After moving the skybox, enter the current

the skybox that you previously obtained the

coordinates of on two lines.

<10.0,10.0,20.0>

<20.0,20.0,50.0>

e.g.

coordinates of the two objects associated with

You can specify the camera orientation by entering "Camera:<***,***,***>; Target:<***,***,***>" in the Open/Closed/Fade Time setting field. This is the format of the camera position of another video camera product, KERBEROS, and is used when you want to save it in Location Scouter.



Fig.1

Enter on two lines the coordinates of two objects that, in relation to the skybox, will not change their relative positions after they are moved.

Ideally, the coordinates of the child prims linked to that skybox.

e.g.

<10.0,10.0,20.0>

<20.0,20.0,50.0>