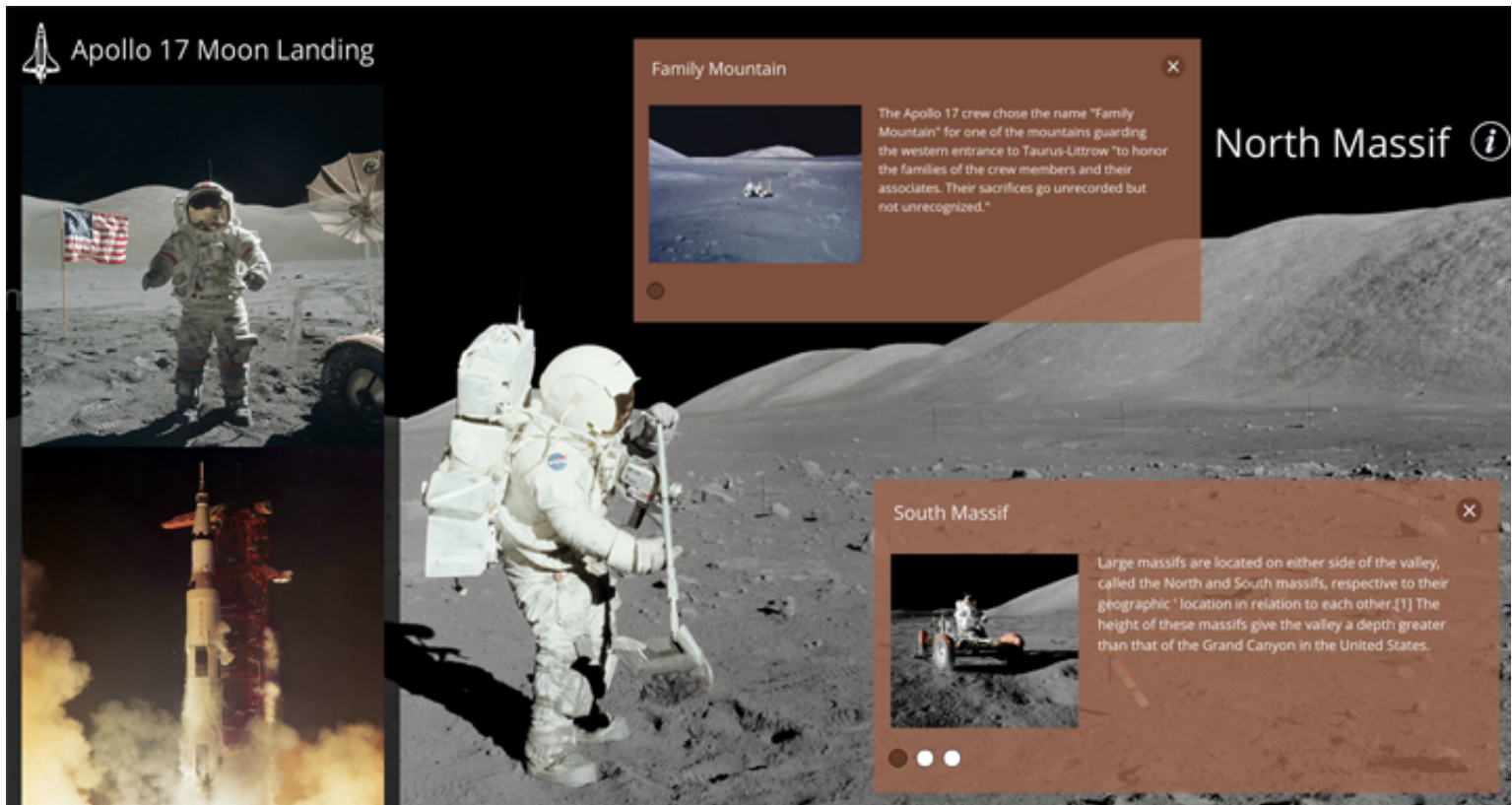


# Open Exhibits Moon Landing Manual



The gigapixel moon-landing exhibit is a multitouch interface that allows scrolling of a gigapixel moon-landing image. Hotspots on the gigapixel open information panels with slideshows of images and descriptive text. This exhibit also includes a vertical scrolling image gallery.

The exhibit is fully configured in CML to support easy customization of features. Each hotspot can have an associated title, slideshow of images, and text descriptions. Font sizes and colors, information overlay background color, and the media files are all customizable through CML.

## User Interface

### library/moon

This folder contains the gigapixel files for the moon landing image. A gigapixel image can be created using the following Photoshop plugin.

<http://research.microsoft.com/en-us/um/redmond/groups/ivm/HDView/HDPhotoshopPlugin.htm>

### library/cml/Base.cml

This file contains the Open Exhibits libraries, the include files for the gigapixel and hotspots, the include files for the hotspot content, and the CML for the vertical scrolling image gallery.

```
<!-- External Libraries -->
<LibraryKit>
  <Library type="swf" src="library/swfs/openexhibits_assets.swf" />
</LibraryKit>

<!-- Gigapixel and Hotspots -->
<Include src="library/cml/Gigapixel.cml" />

<!-- Albums -->
<RenderKit>
  <Renderer dataRootTag="album" dataPath="locations/index.cml">
    <Include src="library/cml/renderers/album.cml" />
  </Renderer>
</RenderKit>

<!--Vertical Gallery -->
<Container class="block">
  <Graphic x="0" y="0" shape="rectangle" width="400" height="1080" fill="color" color="0x000000"
  lineStroke="0" alpha="0.7" />
  <Image src="library/images/shuttle-icon.png" x="20" y="20" width="40"/>
  <Text text="Apollo 17 Moon Landing" color="0xfffff" x="70" y="30" fontSize="27" width="500"
  multiline="true" wordWrap="true" />
</Container>
<Album x="20" y="100" margin="0" horizontal="false" height="1080" backgroundAlpha="0">
  < Image src="library/images/1.jpg" width="360"/>
  <Image src="library/images/2.jpg" width="360" />
  <Image src="library/images/3.jpg" width="360" />
  <Image src="library/images/4.jpg" width="360"/>
  <Image src="library/images/5.jpg" width="360"/>
  <Image src="library/images/6.jpg" width="360"/>
  <Image src="library/images/7.jpg" width="360"/>
  <Image src="library/images/8.jpg" width="360"/>
  <Image src="library/images/9.jpg" width="360"/>
  <Image src="library/images/10.jpg" width="360"/>
  <Image src="library/images/11.jpg" width="360"/>
  <Image src="library/images/12.jpg" width="360"/>
  <Image src="library/images/13.jpg" width="360"/>
</Album>
```

## library/cml/Gigapixel.cml

This file contains the gigapixel and hotspots CML.

```
<Gigapixel id="gpv1" mouseChildren="true" src="library/moon/moon.xml" width="1920" height="1080"
visibilityRatio="0.99" minScaleConstraint="0.65">
```

### What is VisibilityRatio?

This sets how much of the gigapixel must be seen within the viewer. Setting it to 1 will ensure no border is ever seen within the viewer.

### What is minScaleConstraint?

This is the minimum scale the scene can reach (how far zoomed out).

```
<!-- Render Hotspots -->
  <RenderKit>
    <Renderer dataRootTag="hotspot" dataPath="locations/index.cml">
      <Include src="library/cml/renderers/hotspot.cml" />
    </Renderer>
  </RenderKit>
</Gigapixel>
```

## library/renderers/album.cml

This file contains CML for the panel images and descriptive text.

```
<OEAlbumViewer id="{id}" class="viewers" touchChildren="true" clusterBubbling="true"
gestureReleaseInertia="false" disableNativeTransform="true">
  <TouchContainer2 targetParent="false" disableNativeTransform="true">
    <Graphic class="title-graphic" />
    <Text class="title-text" text="{title-en}" />
    <Gesture ref="n-drag-viewer" />
  </TouchContainer2>

  <OEAlbum id="front" class="albums" dragGesture="n-drag-album" targetParent="false"
mouseChildren="true" clusterBubbling="true" backgroundAlpha="0">
    <RenderKit>
      <Renderer dataRootTag="panel" dataPath="{panel-path}">
        <Include src="library/cml/renderers/panel.cml" />
      </Renderer>
    </RenderKit>
  </OEAlbum>
  <RadioButtons id="rb1" class="page-buttons" labels="0,1,2" />
  <Container x="670" y="20">
    <Include src="library/cml/buttons/closeButton.cml" />
  </Container>
  <Gesture ref="n-scale-viewer" />
  <Gesture ref="n-rotate-viewer" />
</OEAlbumViewer>
```

## library/renderers/hotspot.cml

This file contains CML for hotspots.

```
<Hotspot id="{id}" sceneX="{scene-x}" sceneY="{scene-y}" component="{album-id}"
compCenterToStage="true" compResetOnOpen="true" tether="false">
  <Text class="location-title" text="{location-title}" color="0xffffffff" fontSize="50" width="500" />
  <Button x="{button-x}" y="{button-y}" class="hotspot" dispatch="down:hotspot" hit="hotspot-hit"
initial="hotspot-up" down="hotspot-down" up="hotspot-up" out="hotspot-up">
    <Container id="hotspot-up">
      <Image id="graphic" src="library/images/moon-info.png"/>
    </Container>
    <Container id="hotspot-down">
      <Image id="graphic" src="library/images/moon-info.png"/>
    </Container>
    <Container id="hotspot-hit">
      <Image id="graphic" src="library/images/moon-info.png"/>
    </Container>
  </Button>
</Hotspot>
```

## library/renderers/panel.cml

This file contains CML for the panel that contains the album.

```
<TouchContainer class="panel-container" mouseChildren="false" disableNativeTransform="true" >
  <Media class="panel-media" src="{media-source}" />
  <Text color="0xffffffff" x="{description-x}" width="{description-width}" class="panel-
text">{description-en}</Text>
  <Gesture ref="n-tap"/>
</TouchContainer>
```

## library/locations/

This folder contains the locations on the gigapixel image.

## library/locations/index.cml

This file contains the includes for each individual location.

```
<Include src="locations/sculptured-hills.cml" />
<Include src="locations/bear-mtn.cml" />
<Include src="locations/east-massif.cml" />
<Include src="locations/south-massif.cml" />
<Include src="locations/family-mtn.cml" />
<Include src="locations/north-massif.cml" />
```

## library/locations/media

This folder contains the media for the location hotspot panels.

## library/css/styles.css

This file contains the cascading style definitions.

## library/cml/buttons/closeButton.cml

This file contains the CML for the hotspot panel close button.

```
<Button id="close-btn" class="close_btn" dispatch="down:close" hit="close-hit" initial="close-up"
down="close-down" up="close-up" out="close-up" scale="0.75">
  <Container id="close-up" class="up" >
    <Graphic alpha="0.8" shape="circle" radius="20" lineStroke="0" color="0x653a28" />
    <SWF alpha="1" x="11" y="11" color="0xFFFFFFFF" scale="1.6"
ref="org.openexhibits.assets.Close"/>
  </Container>
  <Container id="close-down" class="down">
    <Graphic alpha="0.8" shape="circle" radius="20" lineStroke="0" color="0x653a28" />
    <SWF alpha="1" x="11" y="11" color="0x202020" scale="1.6"
ref="org.openexhibits.assets.Close" />
  </Container>
  <Container id="close-hit" class="hit">
    <Graphic id="close-hit-bg" shape="circle" radius="20" alpha="0" />
  </Container>
</Button>
```