DRONE SURVEY

Scale Accurate Photographic Recording
of
Structures, Surfaces, Landform and Detail

DRONE SURVEY

Useful for Recording

Buildings, Facades, Piers
Structures Large and Small

Anything accessible or inaccessible

DRONE SURVEYS

involve drones flying predetermined regular horizontal or vertical patterns

or flying paths chosen by an operator controlling the drone from the ground or from a suitable vantage point

DRONE SURVEYS

Typically drones capture multiple overlapping images that are later combined by software

to provide

photomosaic plans or elevations
or 3D photomodels

Both Photomosaics and 3D photomodels
are true photographic images

On the following pages some examples are provided
of photomosaic plans and elevations
and of 3D photomodels

Some of the photomodels shown were
derived from drone images
others from ground level photographs

Photomosaic plan of the Joyce Tower & Sandycove Harbour

Detail of the Harbour
Flown at 50 metres altitude • 75% image overlap

Detail of the Joyce Tower

Photomosaic elevation of the rear of Bonnettstown House, County Kilkenny

Detail of the photomosaic elevation

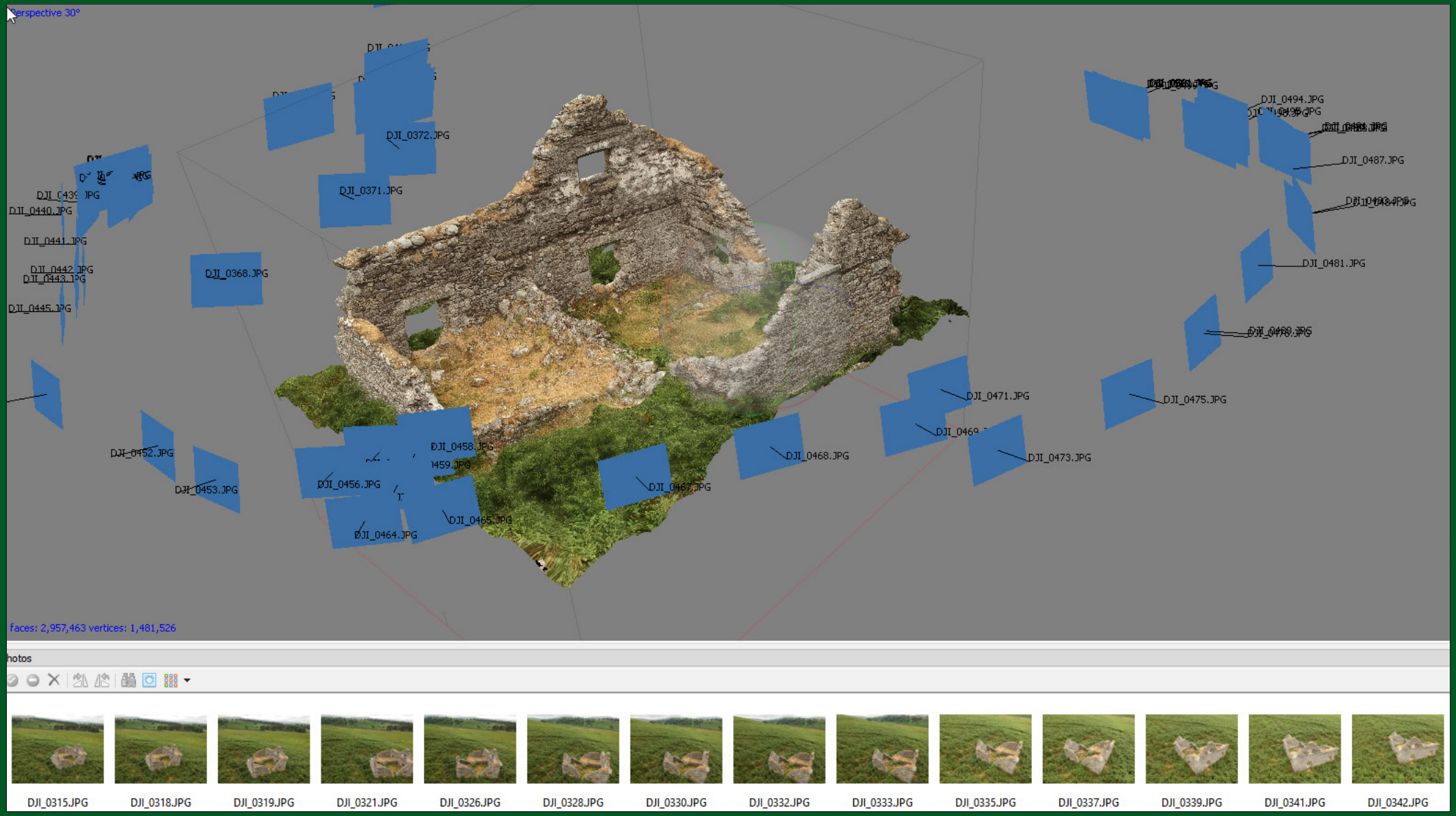
DJI Phantom 4

DJI Mavic 2

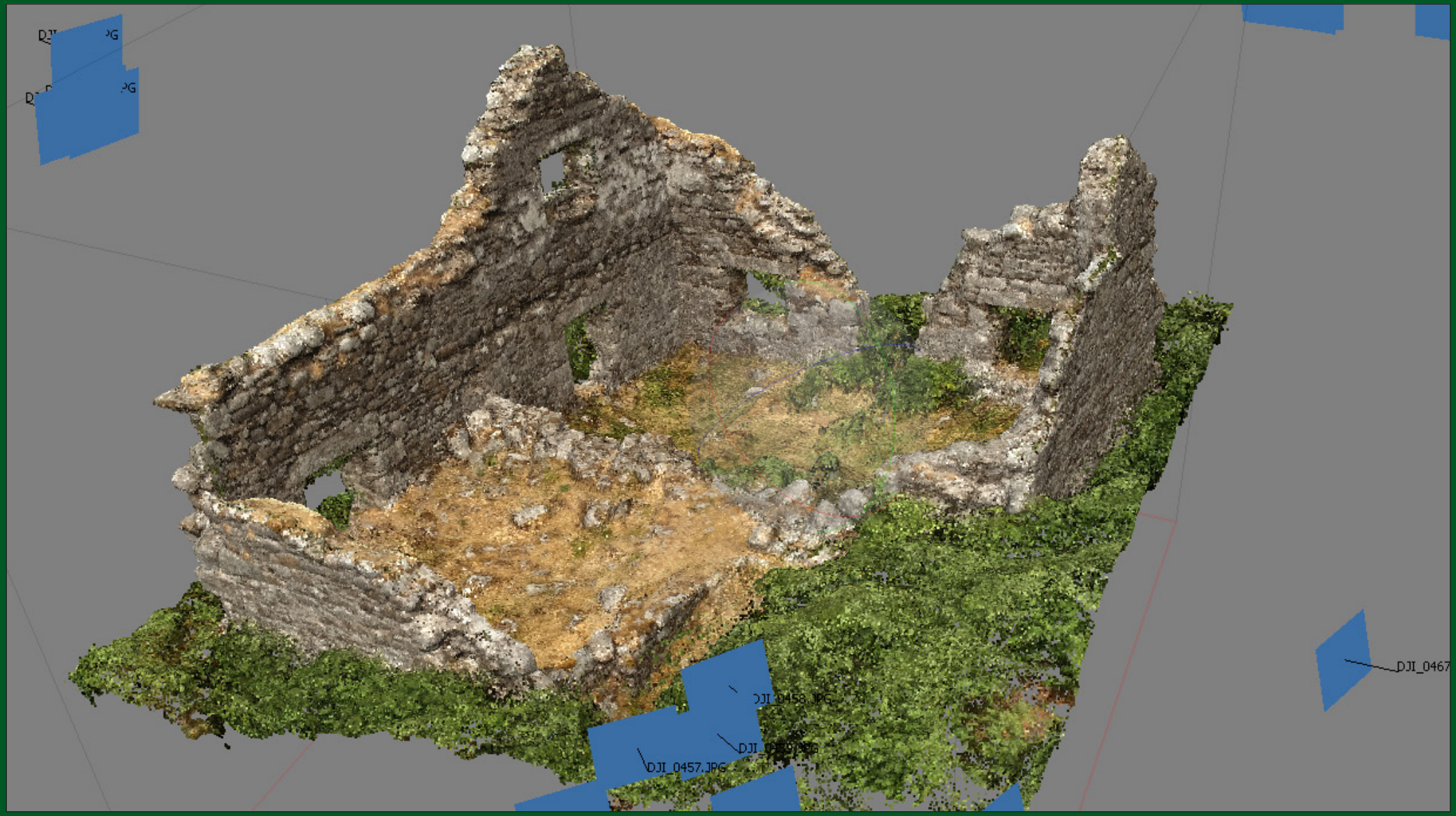
DJI Spark

DJI Spark Controller

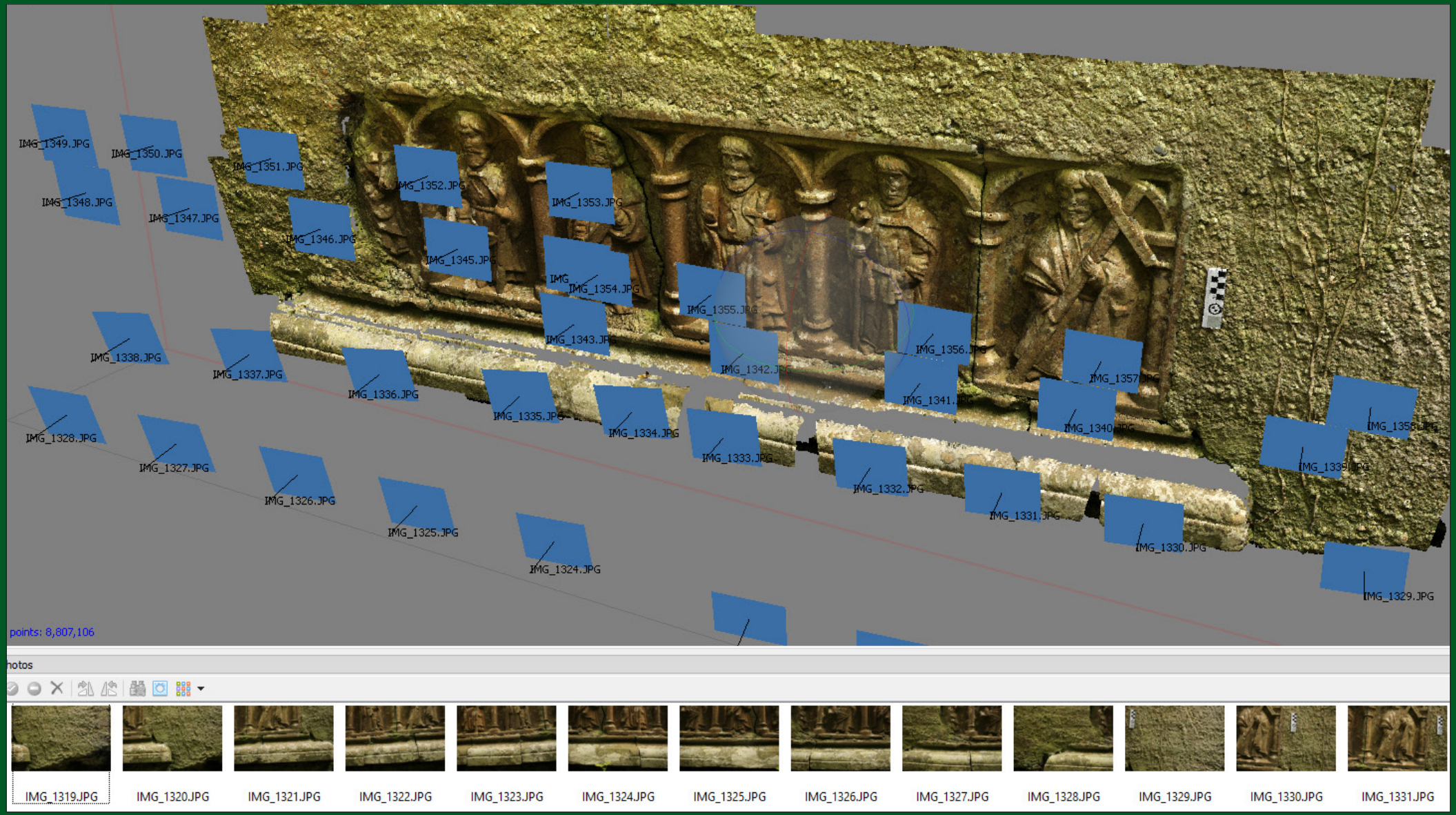
Photomodel of a ruin showing the flight path and the images captured



Closer view of the photomodel



Photomodel of a wall panel at Dunfierth Church showing the location of captured images



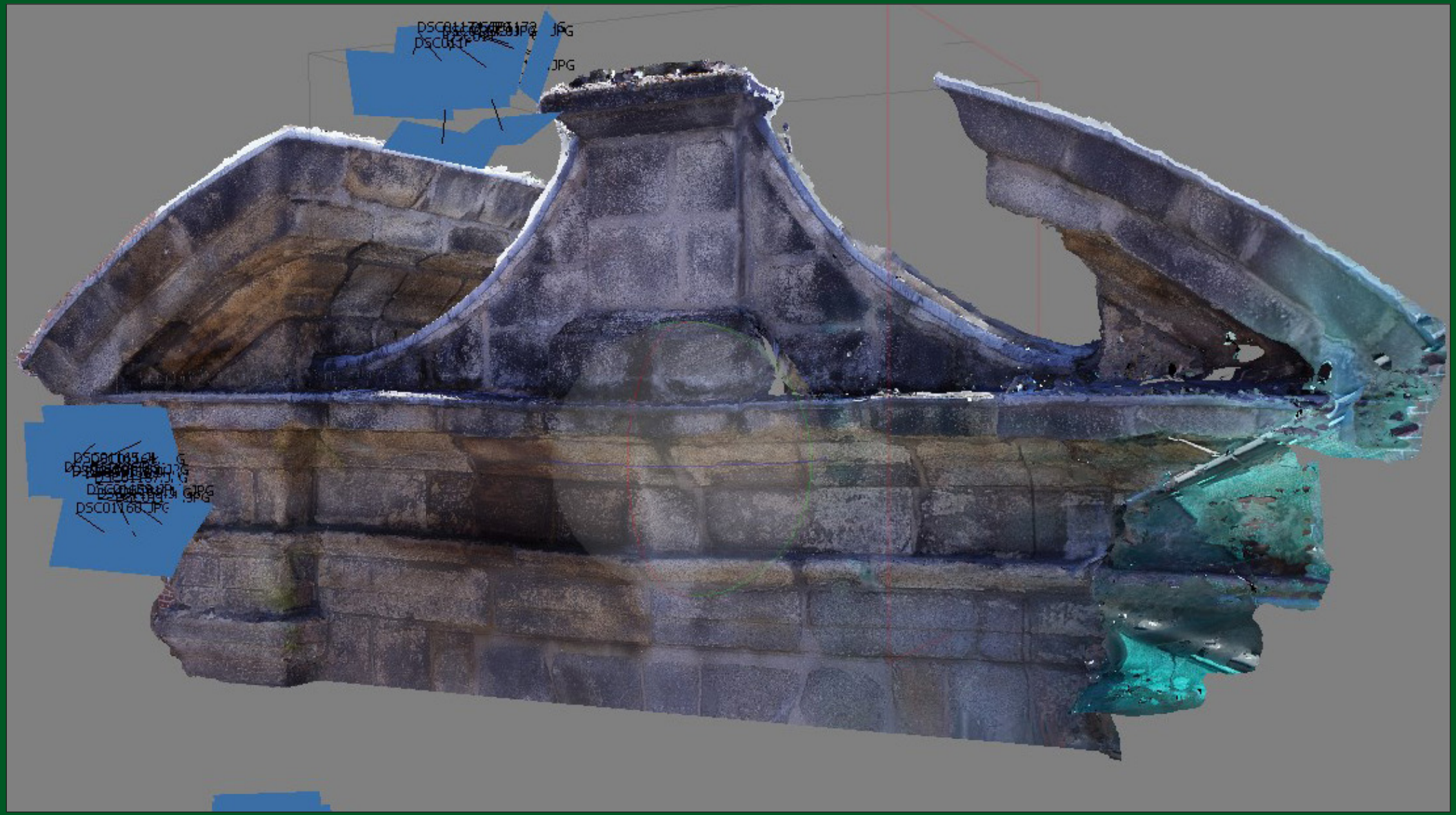
Photograph of the wall panel

Detail of the photomodel of the wall panel

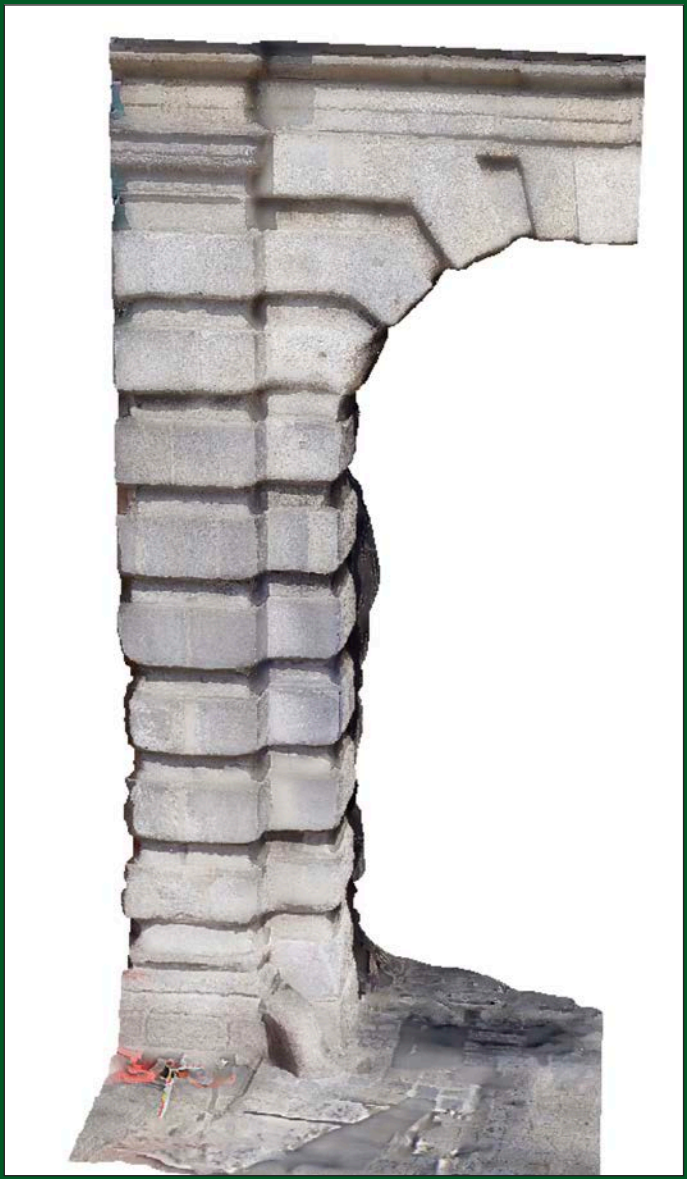
Detail of a photomodel of a smaller wall panel

Detail of the small photomodel from a different angle

Photomodel of part of a gateway to Dublin Castle



Photomodel of one pier of a gateway to Dublin Castle With an enlargement shown on the right



Enlargement of part of the photomodel lookimg upwards

When multiple overlapping images
from a drone survey are combined by software

they generate a point cloud

Parts of that point cloud can be selected and cut out

Point clouds from downward looking drone surveys
often contain sufficient information
to generate outline elevations of buildings
in the area being surveyed

Outline point cloud elevation of St Mary's Church Kilkenny generated from a downward looking drone survey

Outline point cloud elevation of St Canice's Cathedral generated from a downward looking drone survey