xBD Metadata Explanation

sensor

 The satellite platform the imagery was collected from. DigitalGlobe operates a constellation of satellites. These include WorldView-1, GeoEye-1, WorldView-2, WorldView-3, and WorldView-4.

gsd

- Ground sample distance. GSD is the distance between pixel centers as measured on the ground.
- o Meters.
- capture_date
 - The date the image was captured.
- off_nadir_angle
 - This is the angle at which the satellite sensor captures the imagery. 0 would be looking straight down. As off-nadir angle increases, you will notice the image contains the sides of buildings rather than just their tops.
 - Degrees
- pan_resolution
 - The images provided in xBD are pansharpened, a process in which a high-resolution panchromatic image is merged with lower-resolution multispectral imagery to create a high-resolution color image. This field reports the GSD of the panchromatic image.
 - o Meters.
- sun azimuth
 - The azimuth of the sun as measured clockwise from true north to the projection of the sun perpendicular to the Earth's horizon.
 - Degrees.
- sun_elevation
 - The elevation of the sun is the angle between the Earth's horizon and the sun.
- target_azimuth
 - The angle of the satellite sensor as measured from true north to the projection of the sensor perpendicular to the Earth's horizon.
- disaster
 - Which disaster event this imagery is from.

- disaster_type
 - What was this disaster event? Was it a fire, flood, volcanic eruption, etc.
- catalog_id
 - o The CatID that this image corresponds to in DigitalGlobe's database.
- original_width
 - o The width of this image as annotated by the labeling process.
 - o Pixels.
- original_height
 - o The width of this image as annotated by the labeling process.
 - o Pixels.
- width
 - o The width of the image.
 - o Pixels.
- height
 - o The height of the image.
 - o Pixels.
- id
- o A unique identifier randomly assigned to each image.
- img_name
 - o The name assigned to this image during the labeling process.