

```

function convert2redians(deg){
    return deg*Math.PI/180;
}
//角度转换为弧度的函数
function mercator2y(lat) {
    y=Math.log(Math.tan(lat)+(1.0)/Math.cos(lat));
    return y;
}
//纬度的莫卡托转换的函数

function degree2xy(lat,lon,north,south,west,east,size,zoom)
{
    lat=convert2redians(lat);
    lon=convert2redians(lon); //将经纬度转为弧度

    north=convert2redians(north);
    south=convert2redians(south);
    west=convert2redians(west);
    east=convert2redians(east); //将经纬度转为弧度

    let yMin=mercator2y(south);
    let yMax=mercator2y(north); //纬度边界做莫卡托转换

    let y=mercator2y(lat); //目标纬度做莫卡托转换

    let xfactor=size/(east-west);
    let yfactor=size/(yMax-yMin); //计算单位经纬度的像素值

    let x=(lon-west)*xfactor;
    y=(yMax-y)*yfactor; //计算目标坐标的像素值

    x=x/256;
    y=y/256; //得出栅格坐标值

    return {"x":x,"y":y}
}

```