

```
// 点密度渲染
private void btnDotDensityRender_Click(object sender, EventArgs e)
{
    // 获取目标图层
    IGeoFeatureLayer geoFeatureLayer = getGeoLayer("GDP");

    // 创建点密度渲染器
    IDotDensityRenderer dotDensityRenderer = new DotDensityRendererClass();
    IRendererFields rendererFields = dotDensityRenderer as IRendererFields;

    // 添加字段, 用于点密度渲染
    string field1 = "GDP_20";
    rendererFields.AddField(field1, field1);

    // 设置点密度填充符号和背景颜色
    IDotDensityFillSymbol dotDensityFillSymbol = new DotDensityFillSymbolClass();
    dotDensityFillSymbol.DotSize = 3; // 设置点大小
    dotDensityFillSymbol.Color = getRGB(255, 0, 0); // 设置点颜色
    dotDensityFillSymbol.BackgroundColor = getRGB(0, 255, 0); // 设置背景颜色

    // 创建点符号并将其添加到符号数组中
    ISymbolArray symbolArray = dotDensityFillSymbol as ISymbolArray;
    ISimpleMarkerSymbol simpleMarkerSymbol = new SimpleMarkerSymbolClass();
    simpleMarkerSymbol.Style = esriSimpleMarkerStyle.esriSMSCircle;
    simpleMarkerSymbol.Size = 2;
    simpleMarkerSymbol.Color = getRGB(0, 0, 255);
    symbolArray.AddSymbol(simpleMarkerSymbol as ISymbol);

    // 配置点密度渲染器
    dotDensityRenderer.DotDensitySymbol = dotDensityFillSymbol;
    dotDensityRenderer.DotValue = 30; // 设置每个点代表的字段值

    // 应用点密度渲染器
    geoFeatureLayer.Renderer = dotDensityRenderer as IFeatureRenderer;
    this.axMapControl1.Refresh();
}
```