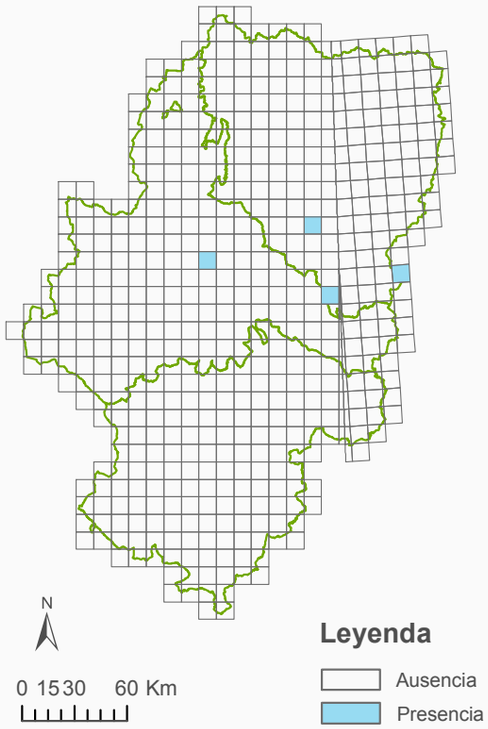
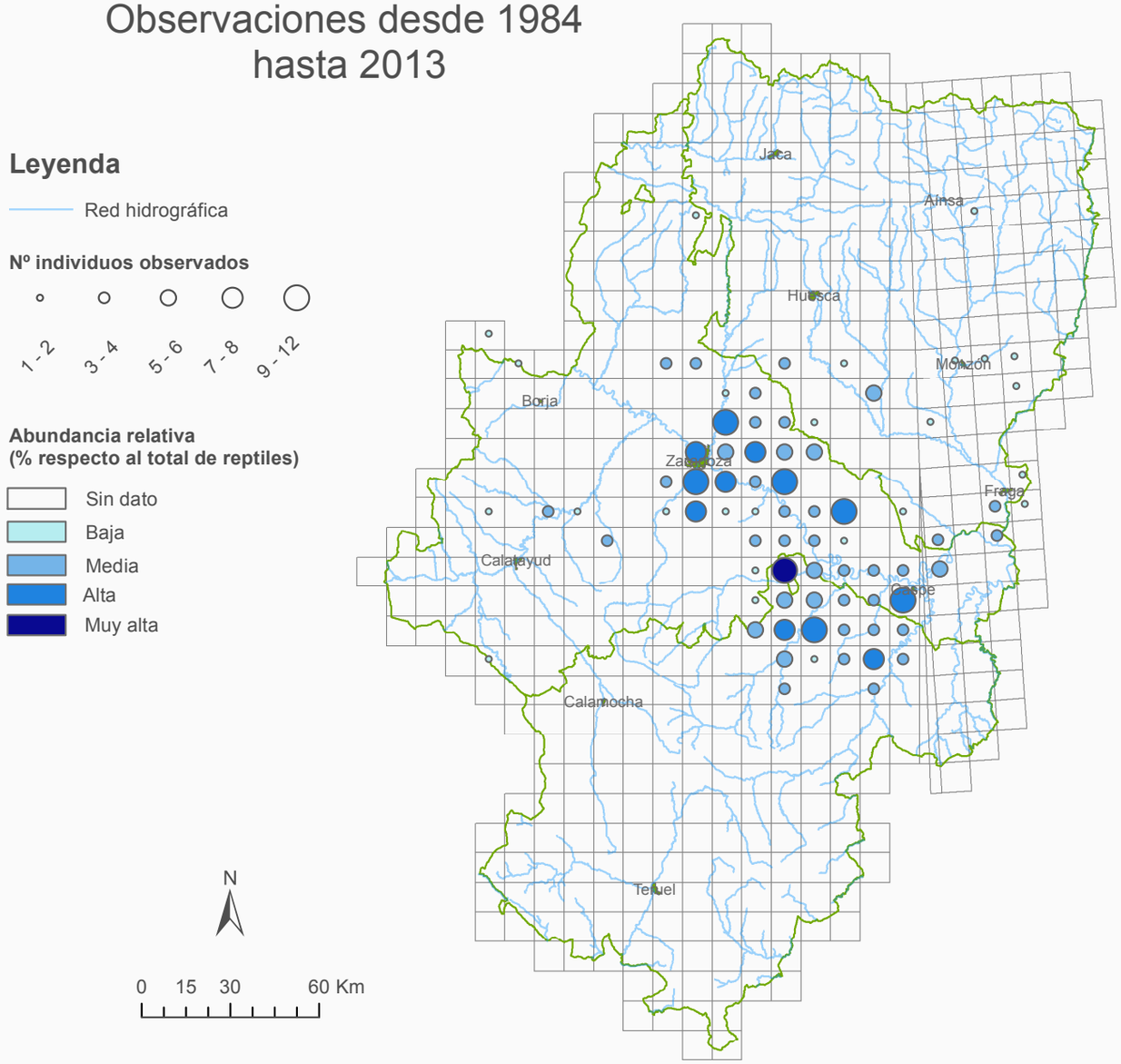
Anexo 1

Lagartija colirroja *(Acanthodactylus erythrurus)*

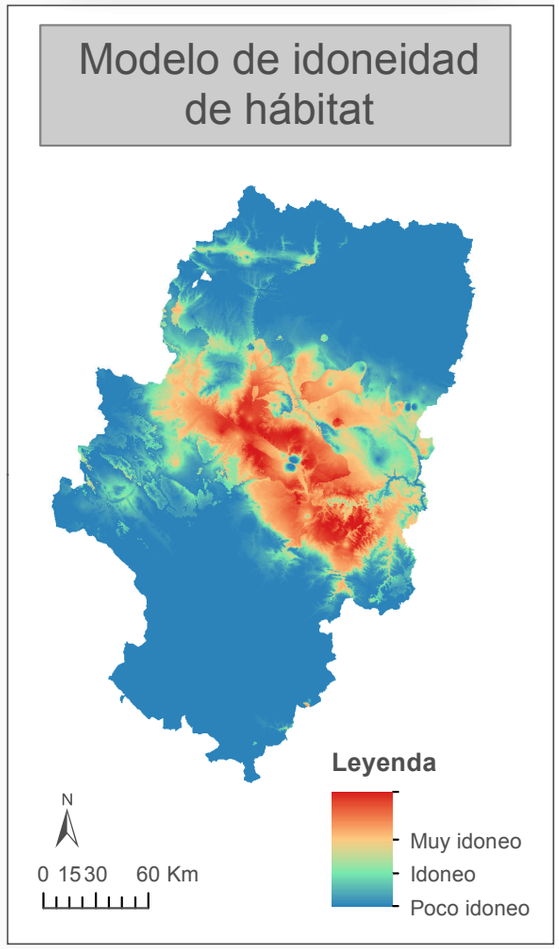
Distribución histórica hasta 1984

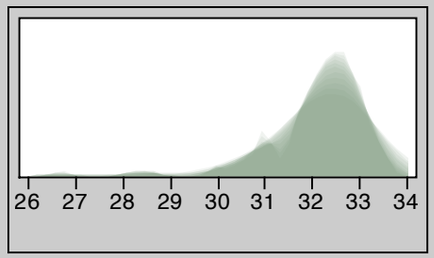


Observaciones desde 1984 hasta 2013

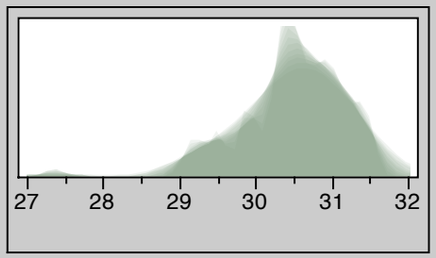


Modelo de idoneidad de hábitat

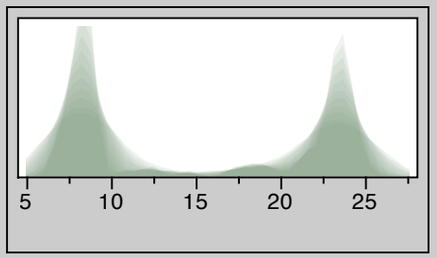




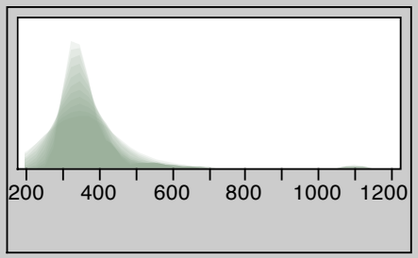
BIO5
Tª max. mes más cálido (ºC)



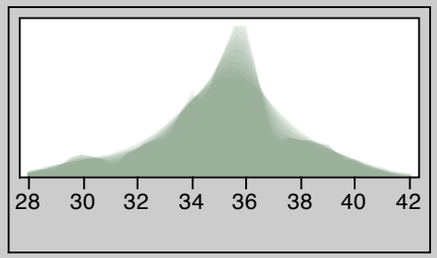
BIO7
Rango de Tª anual (ºC)



BIO9
Tª media trimestre más seco (ºC)



BIO12
Precipitación anual (mm)

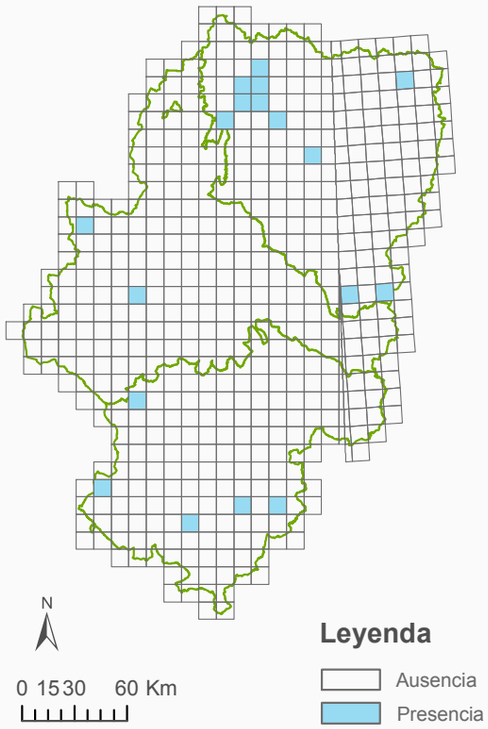


BIO15
Estacionalidad de precipitación (mm)

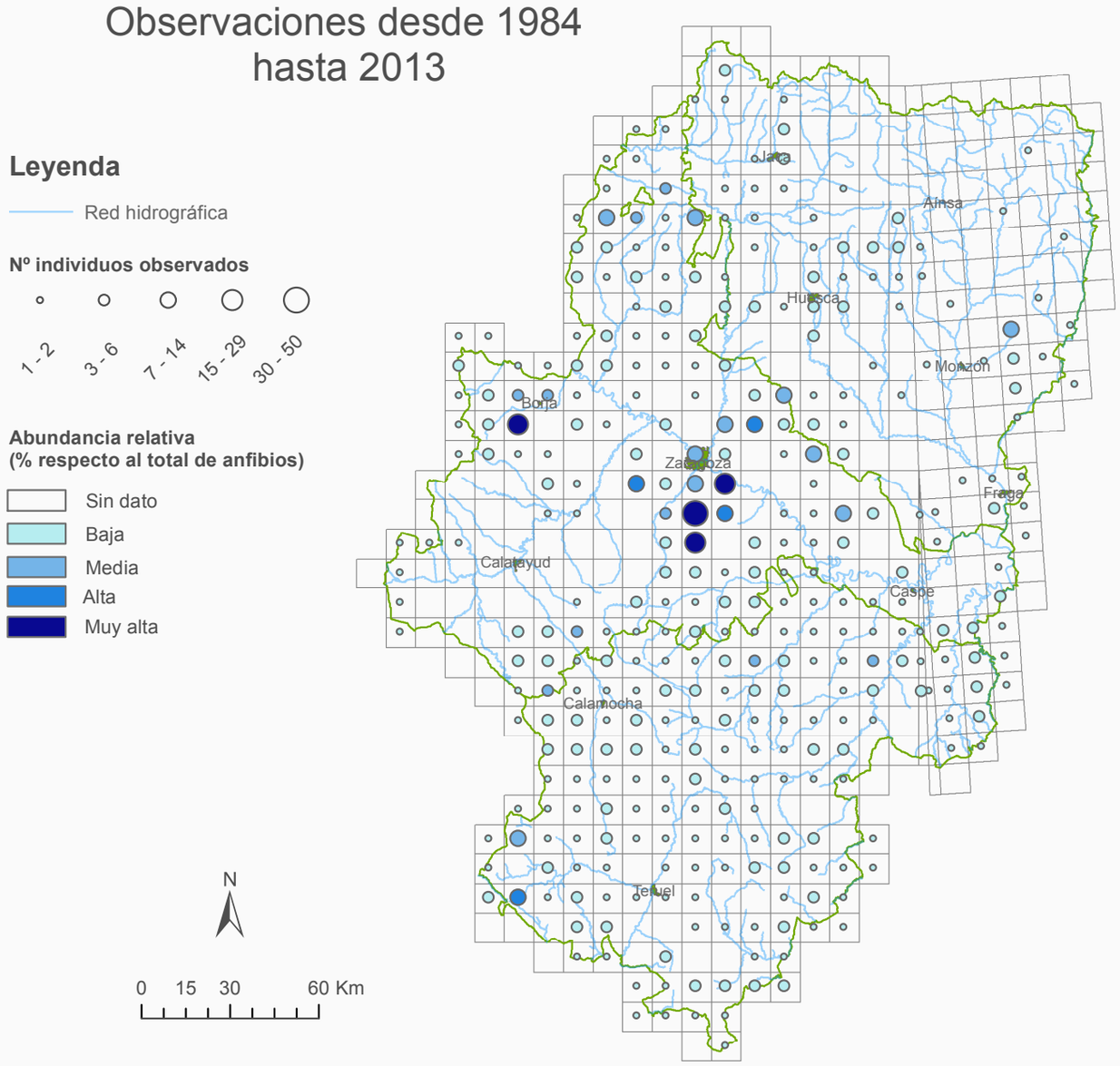
Elaboración propia. Fuente: DGA, ANSAR y AHE. Zaragoza a 29 de Noviembre de 2014

Sapo corredor *(Bufo calamita)*

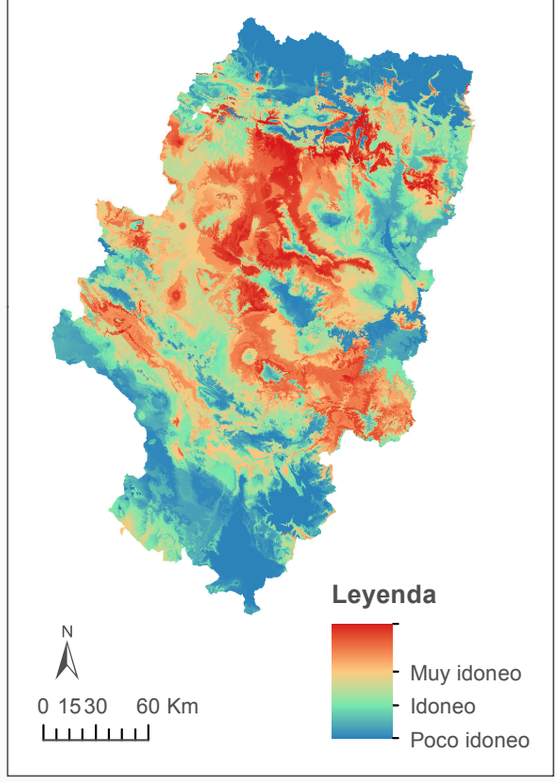
Distribución histórica hasta 1984

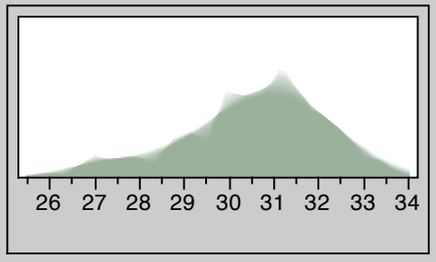


Observaciones desde 1984 hasta 2013

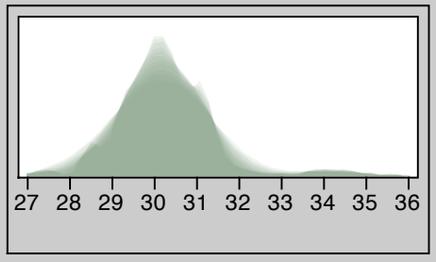


Modelo de idoneidad de hábitat

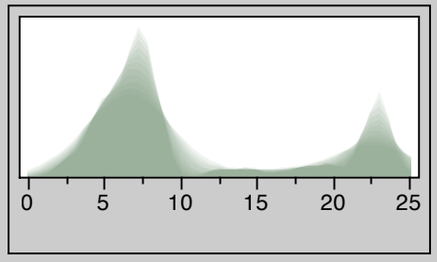




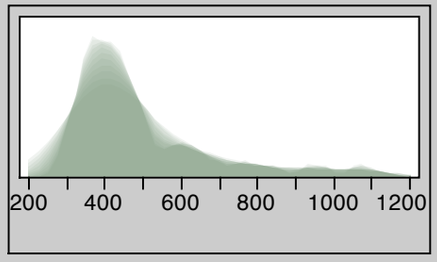
BIO5
Tª max. mes más cálido (ºC)



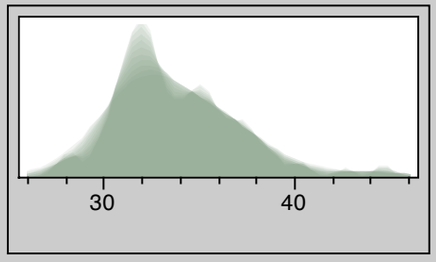
BIO7
Rango de Tª anual (ºC)



BIO9
Tª media trimestre más seco (ºC)



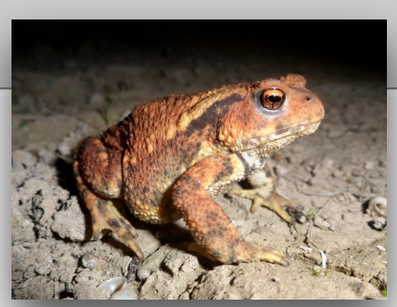
BIO12
Precipitación anual (mm)



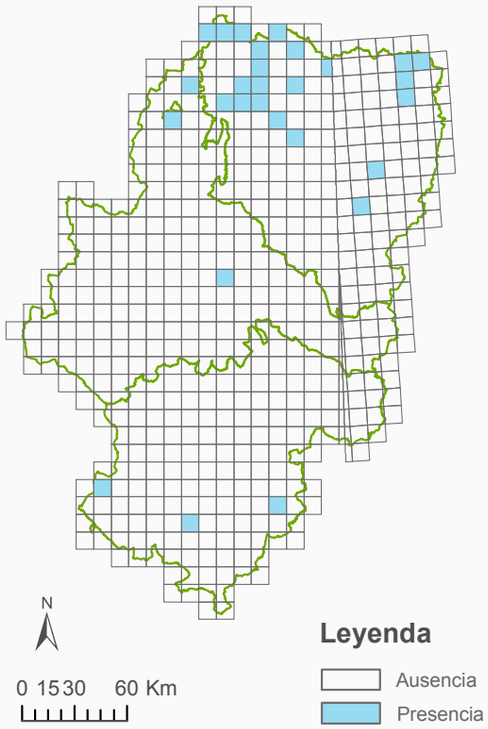
BIO15
Estacionalidad de precipitación (mm)

Elaboración propia. Fuente: DGA, ANSAR y AHE. Zaragoza a 29 de Noviembre de 2014

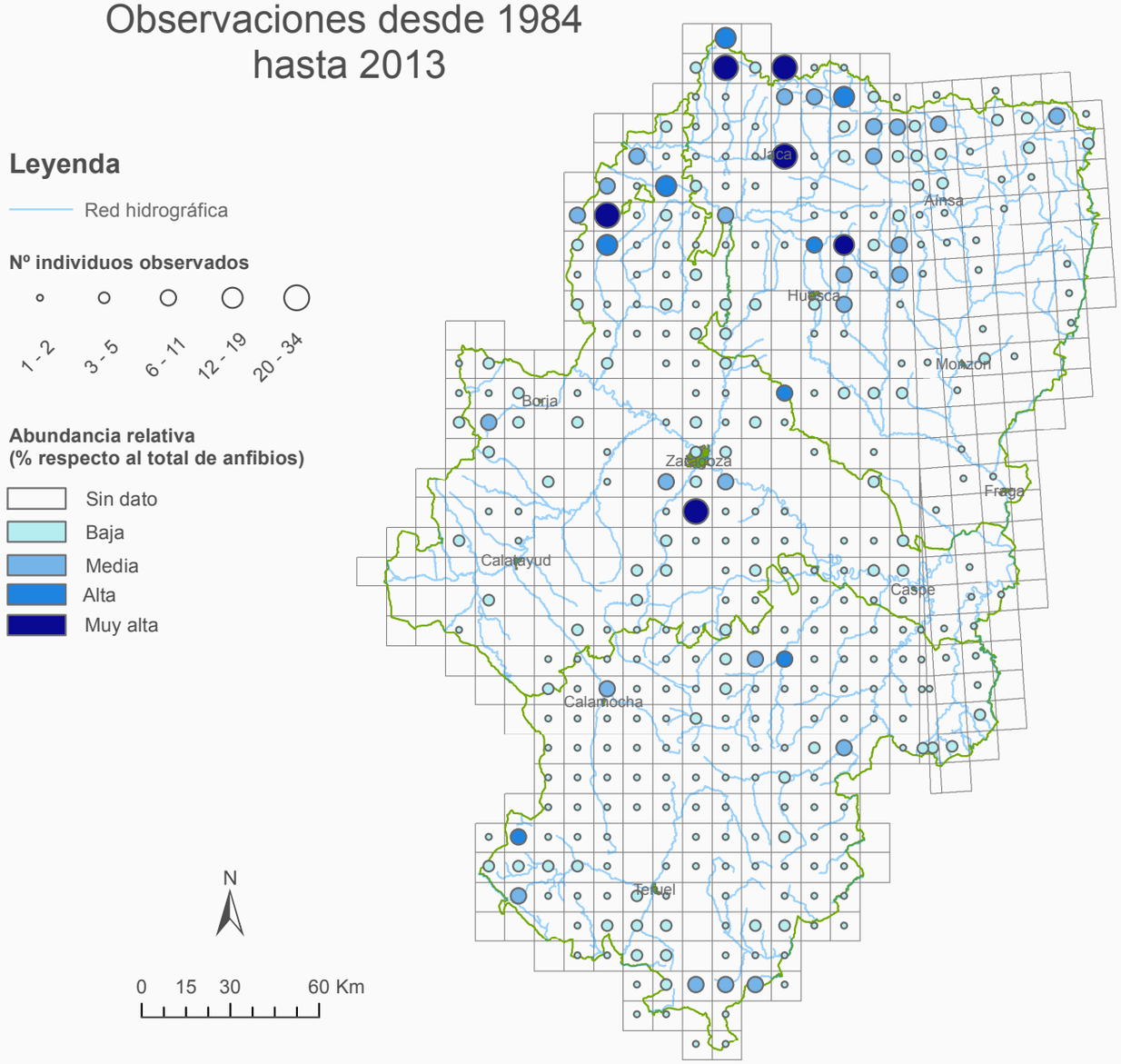
Sapo común *(Bufo spinosus)*



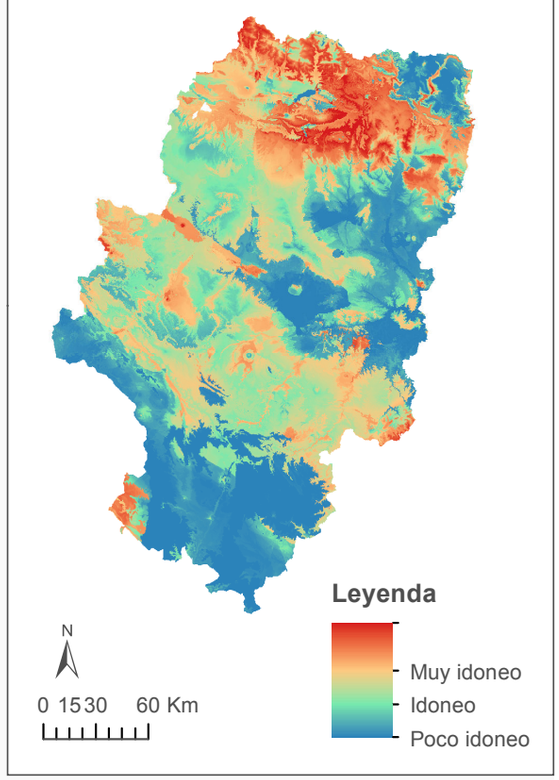
Distribución histórica hasta 1984

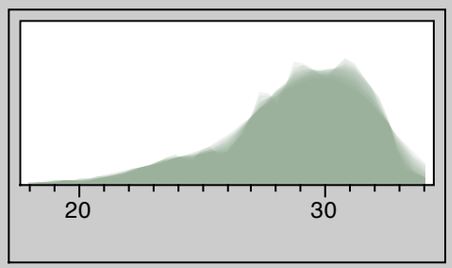


Observaciones desde 1984 hasta 2013

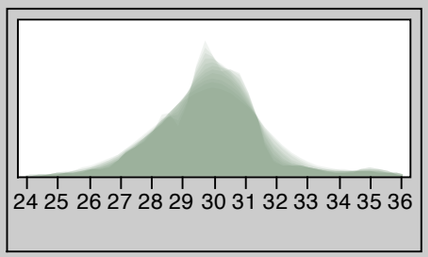


Modelo de idoneidad de hábitat

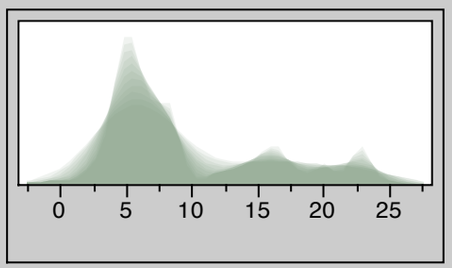




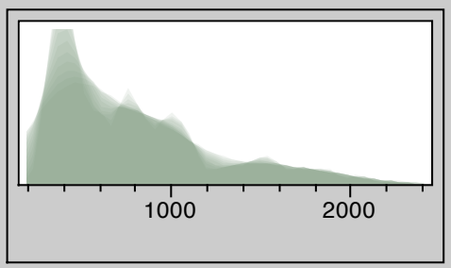
BIO5
Tª max. mes más cálido (ºC)



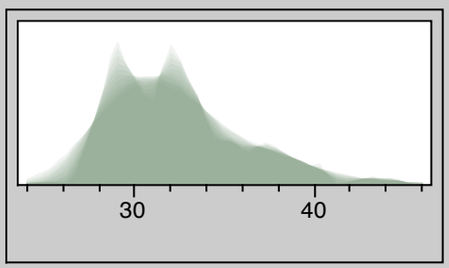
BIO7
Rango de Tª anual (ºC)



BIO9
Tª media trimestre más seco (ºC)



BIO12
Precipitación anual (mm)

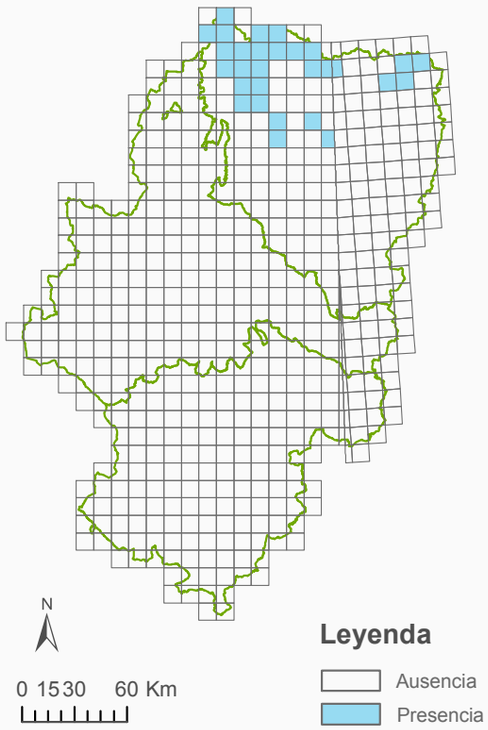


BIO15
Estacionalidad de precipitación (mm)

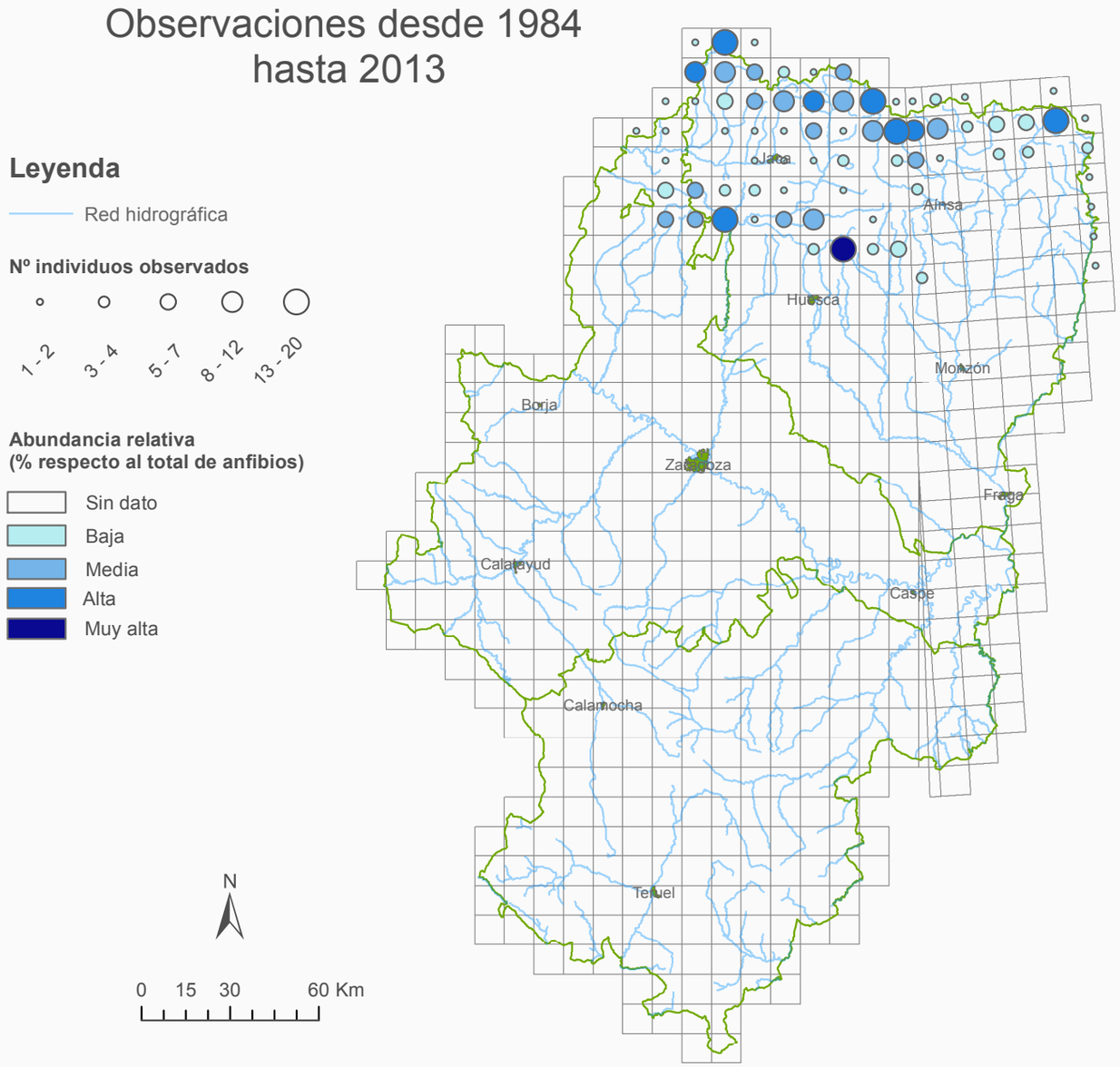
Elaboración propia. Fuente: DGA, ANSAR y AHE. Zaragoza a 29 de Noviembre de 2014

Tritón pirenaico *(Calotriton asper)*

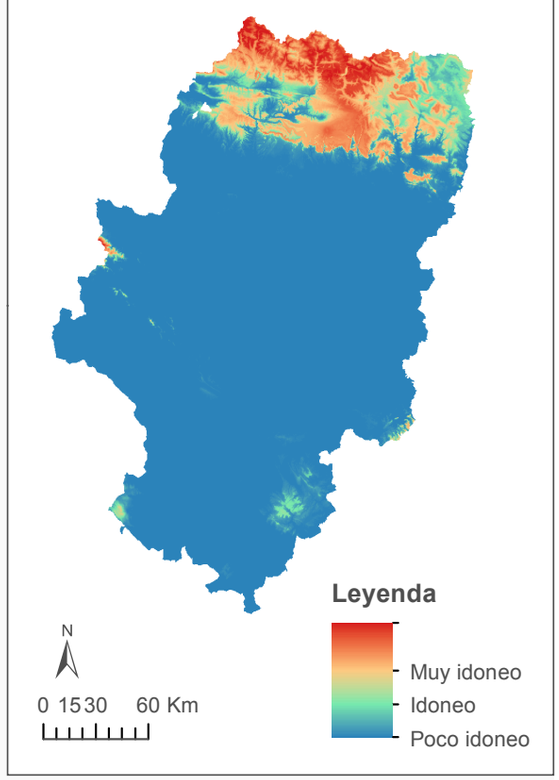
Distribución histórica hasta 1984

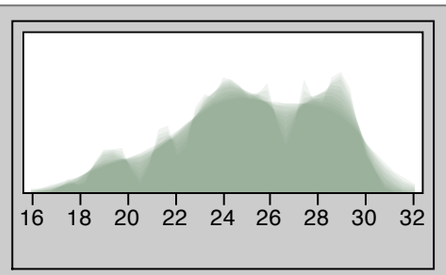


Observaciones desde 1984 hasta 2013

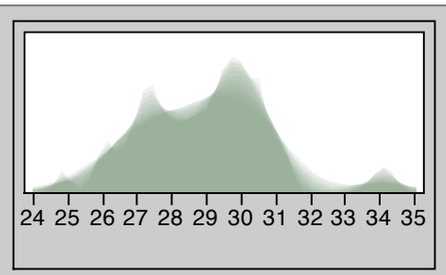


Modelo de idoneidad de hábitat

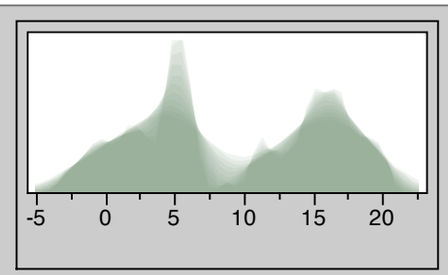




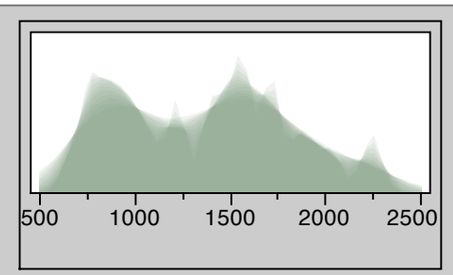
BIO5
Tª max. mes más cálido (ºC)



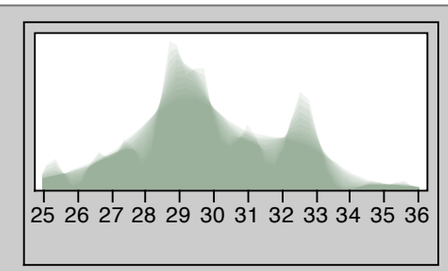
BIO7
Rango de Tª anual (ºC)



BIO9
Tª media trimestre más seco (ºC)



BIO12
Precipitación anual (mm)

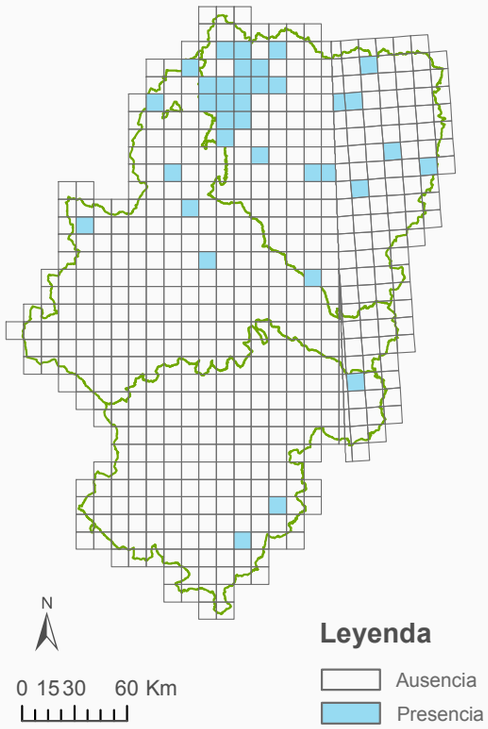


BIO15
Estacionalidad de precipitación (mm)

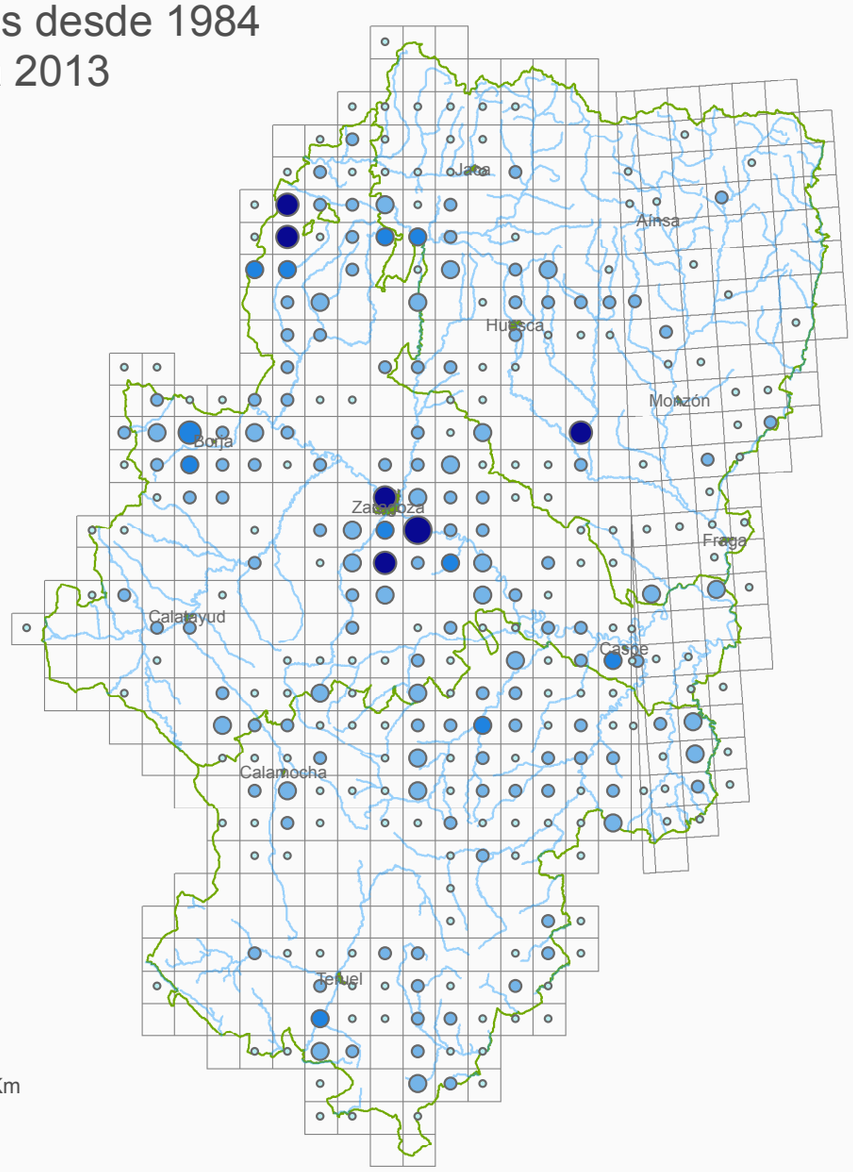
Elaboración propia. Fuente: DGA, ANSAR y AHE. Zaragoza a 29 de Noviembre de 2014

Culebra bastarda *(Malmolon monspessulanus)*

Distribución histórica hasta 1984



Observaciones desde 1984 hasta 2013



Leyenda

Red hidrográfica

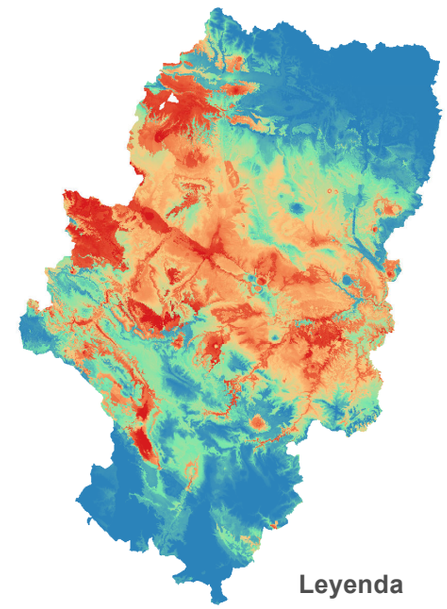
Nº individuos observados

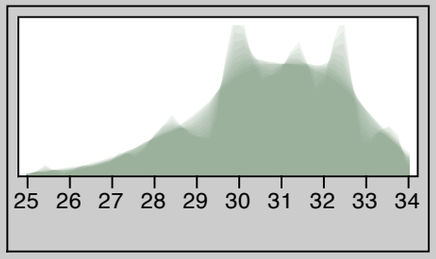
1 - 2 | 3 - 4 | 5 - 9 | 10 - 17 | 18 - 33

Abundancia relativa
(% respecto al total de reptiles)

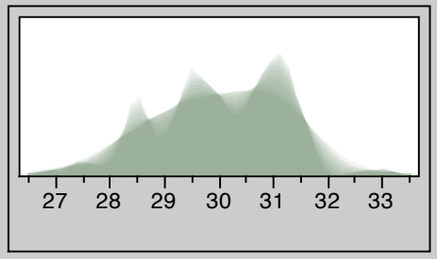
- Sin dato
- Baja
- Media
- Alta
- Muy alta

Modelo de idoneidad de hábitat

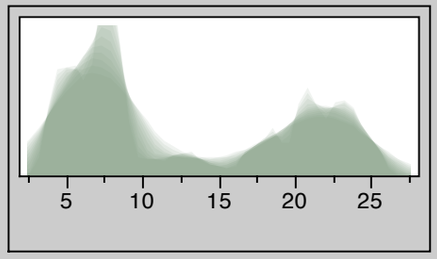




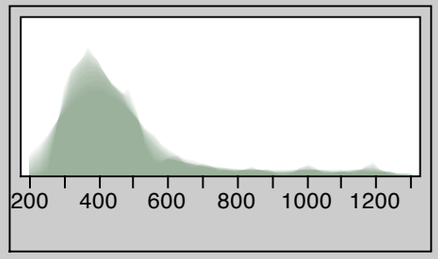
BIO5
Tª max. mes más cálido (ºC)



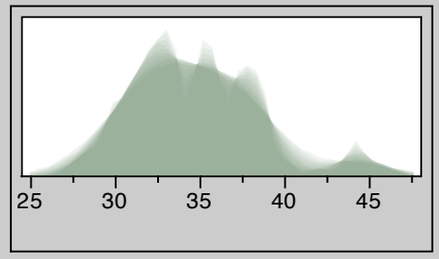
BIO7
Rango de Tª anual (ºC)



BIO9
Tª media trimestre más seco (ºC)



BIO12
Precipitación anual (mm)

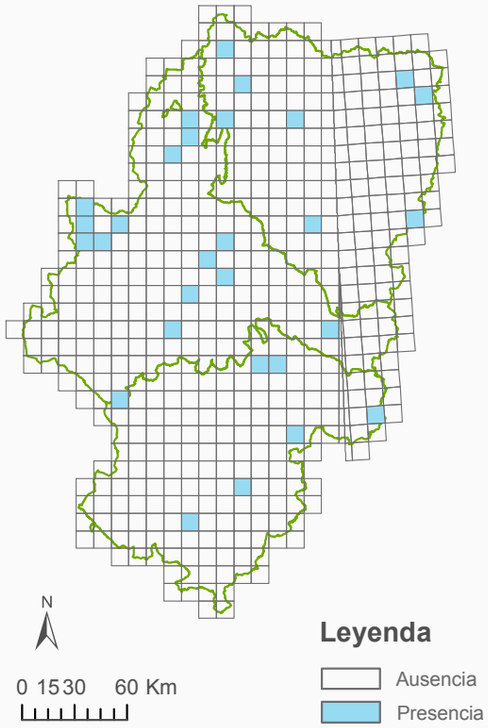


BIO15
Estacionalidad de precipitación (mm)

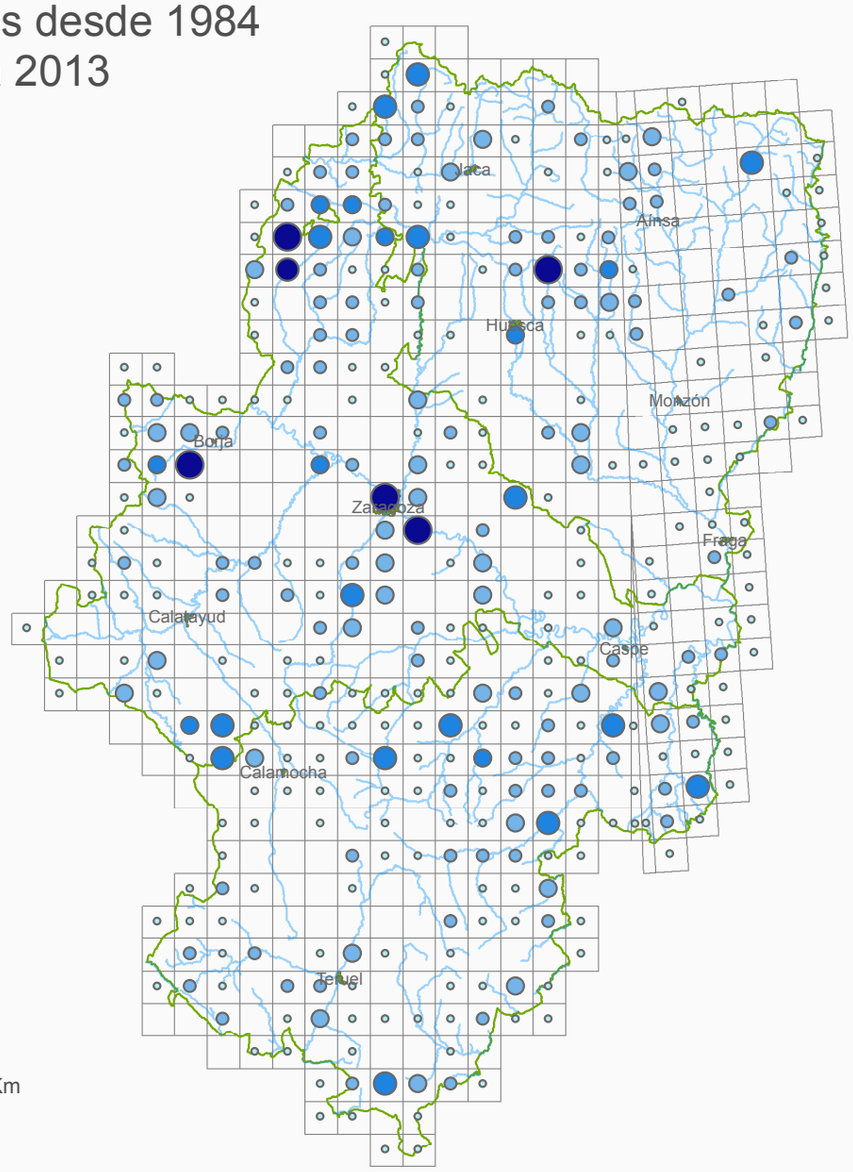
Elaboración propia. Fuente: DGA, ANSAR y AHE. Zaragoza a 29 de Noviembre de 2014

Culebra viperina *(Natrix maura)*

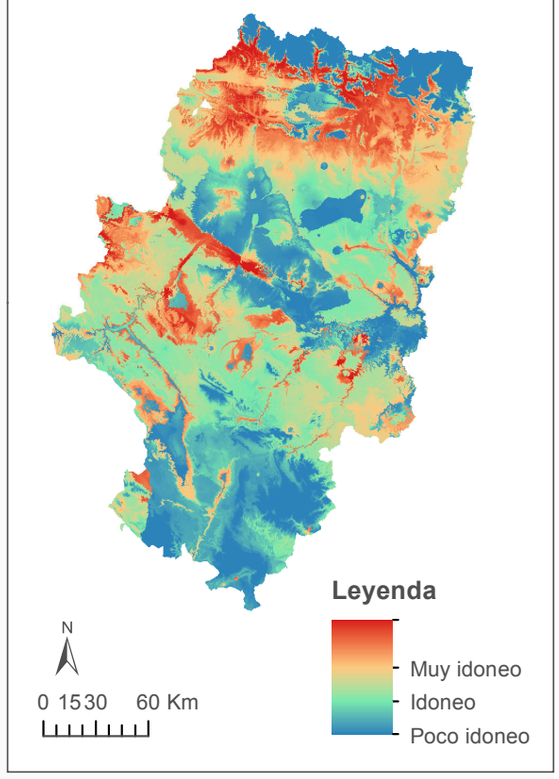
Distribución histórica hasta 1984

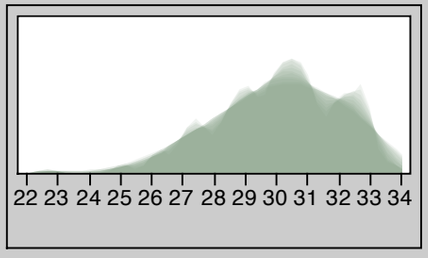


Observaciones desde 1984 hasta 2013

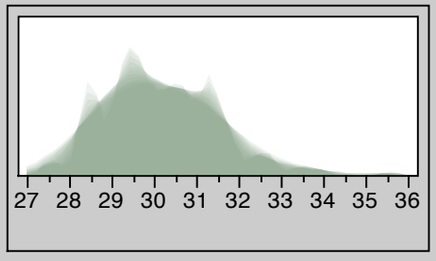


Modelo de idoneidad de hábitat

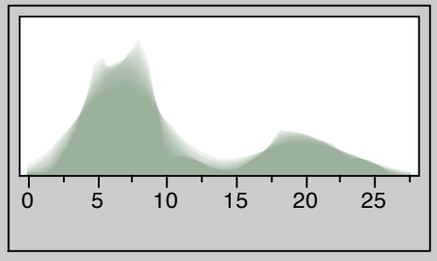




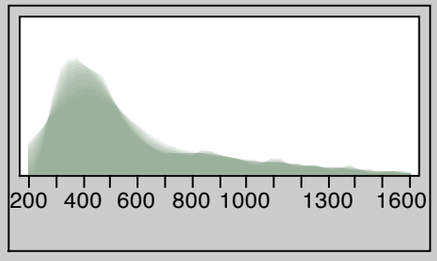
BIO5
Tª max. mes más cálido (ºC)



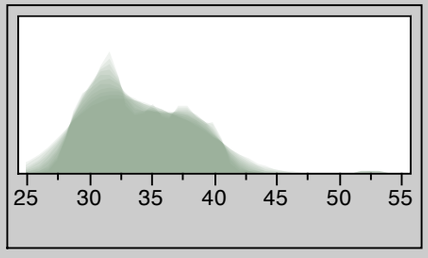
BIO7
Rango de Tª anual (ºC)



BIO9
Tª media trimestre más seco (ºC)



BIO12
Precipitación anual (mm)

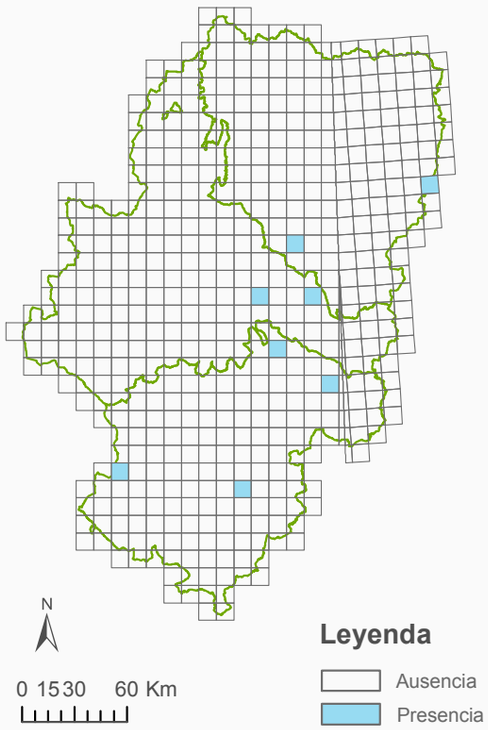


BIO15
Estacionalidad de precipitación (mm)

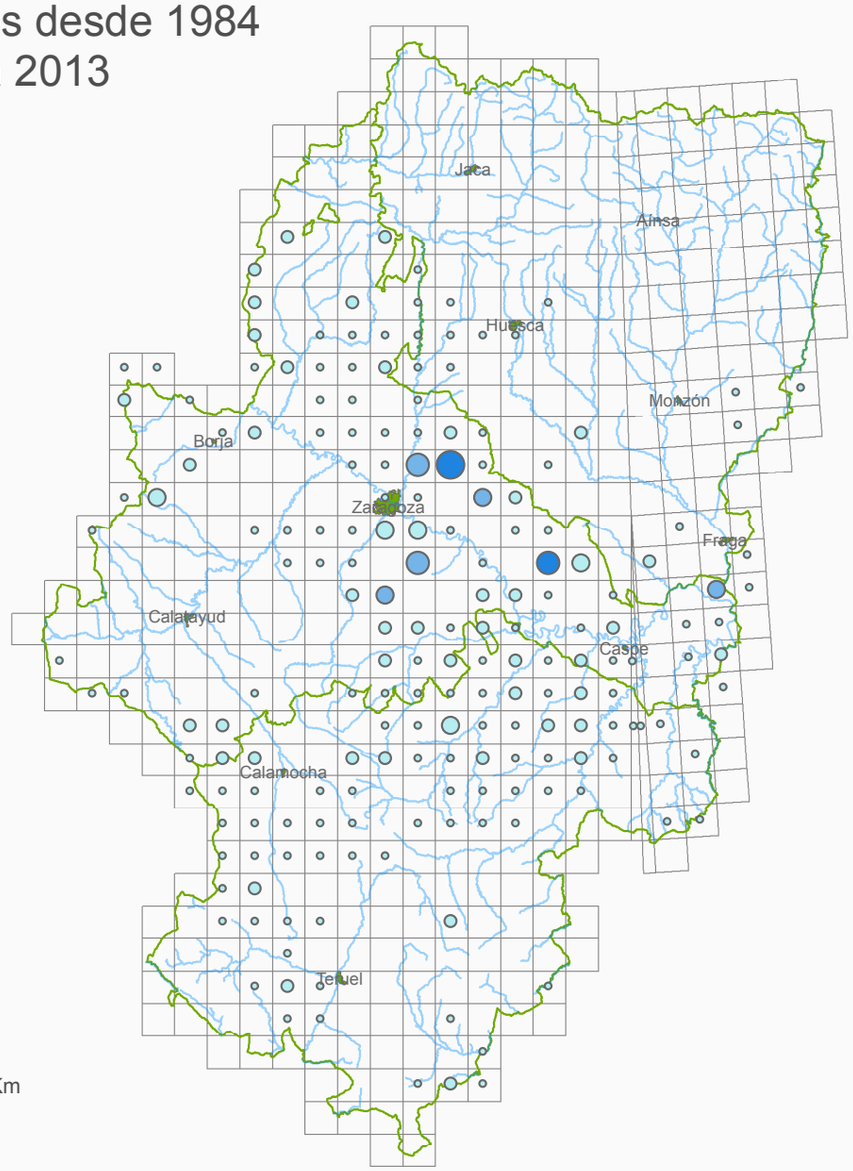
Elaboración propia. Fuente: DGA, ANSAR y AHE. Zaragoza a 29 de Noviembre de 2014

Sapo de espuelas *(Pelobates cultripes)*

Distribución histórica hasta 1984



Observaciones desde 1984 hasta 2013



Leyenda

Red hidrográfica

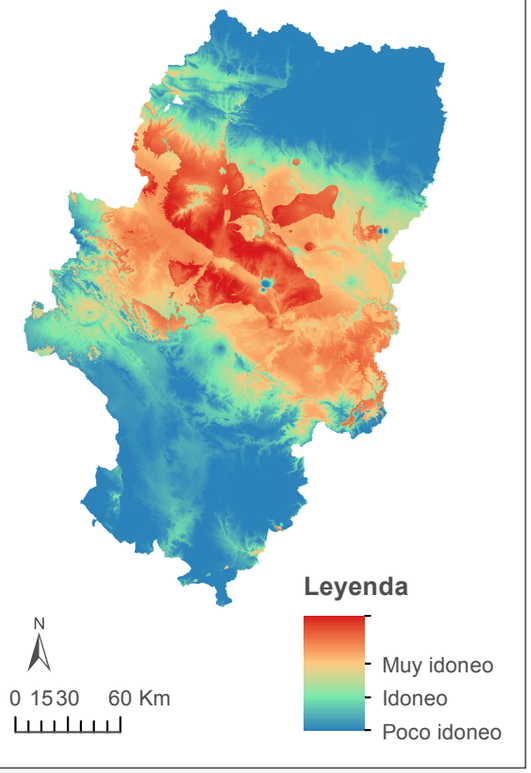
Nº individuos observados

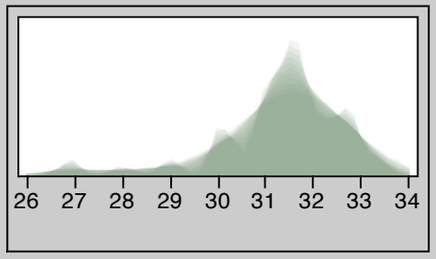
1 - 2 | 3 - 4 | 5 - 8 | 9 - 12 | 13 - 21

Abundancia relativa (% respecto al total de anfibios)

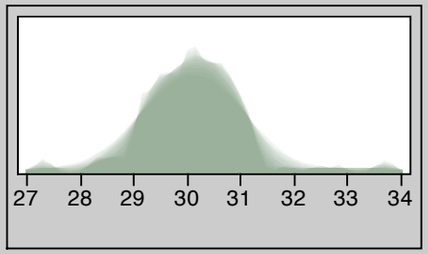
- Sin dato
- Baja
- Media
- Alta
- Muy alta

Modelo de idoneidad de hábitat

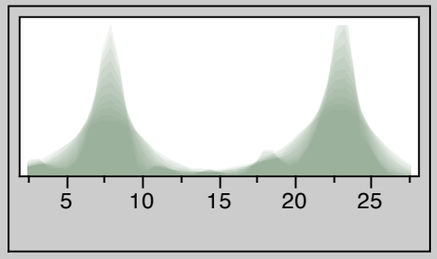




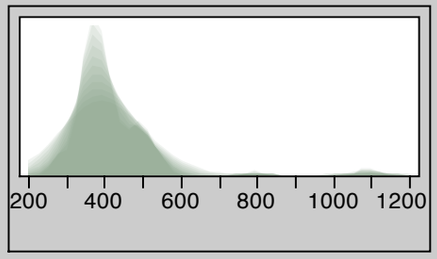
BIO5
Tª max. mes más cálido (ºC)



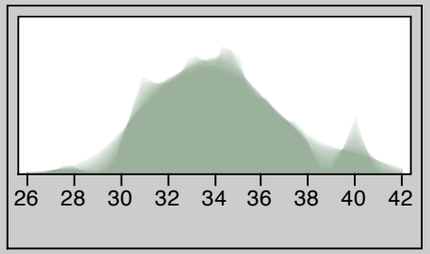
BIO7
Rango de Tª anual (ºC)



BIO9
Tª media trimestre más seco (ºC)



BIO12
Precipitación anual (mm)

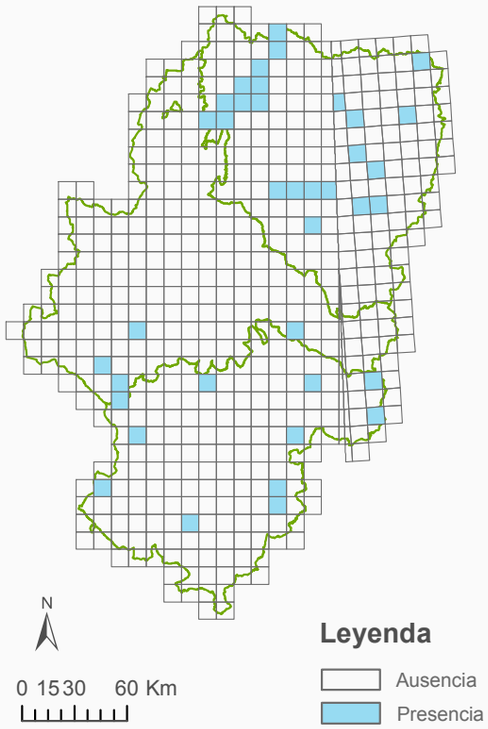


BIO15
Estacionalidad de precipitación (mm)

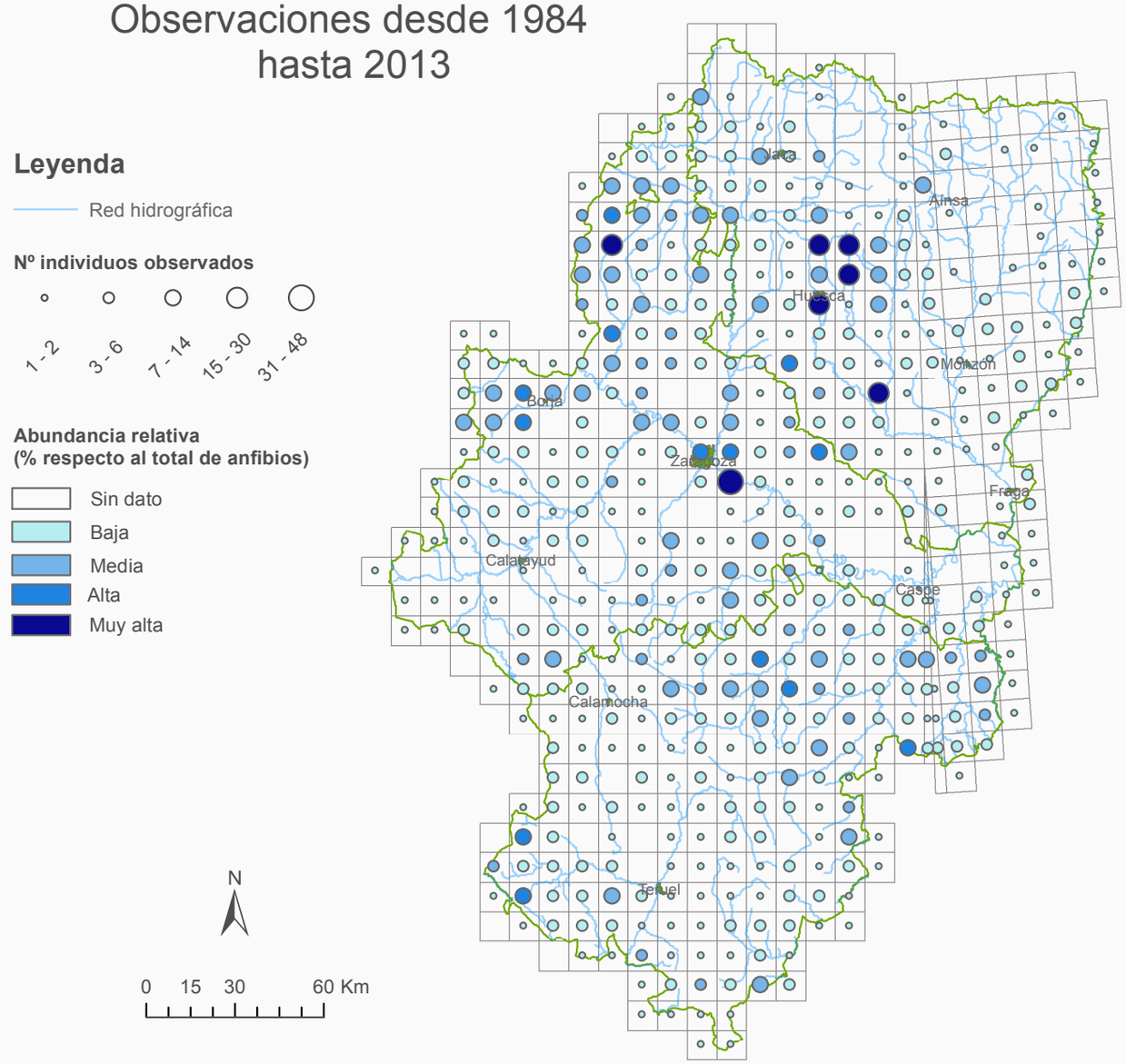
Elaboración propia. Fuente: DGA, ANSAR y AHE. Zaragoza a 29 de Noviembre de 2014

Rana común *(Pelophylax perezi)*

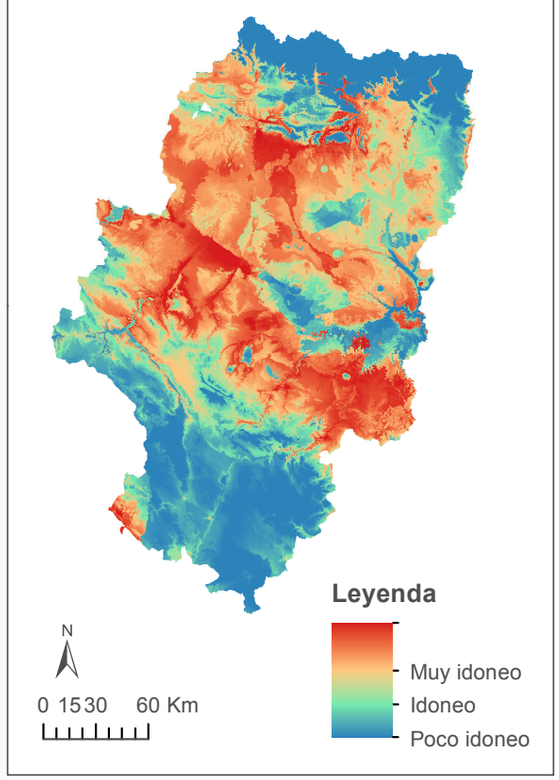
Distribución histórica hasta 1984

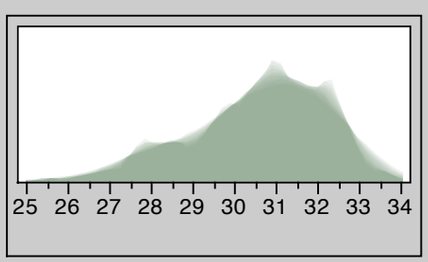


Observaciones desde 1984 hasta 2013

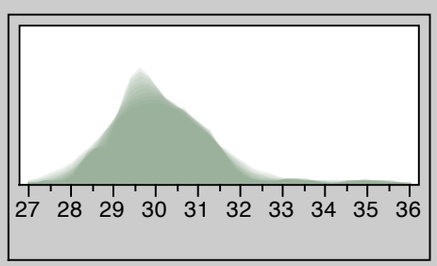


Modelo de idoneidad de hábitat

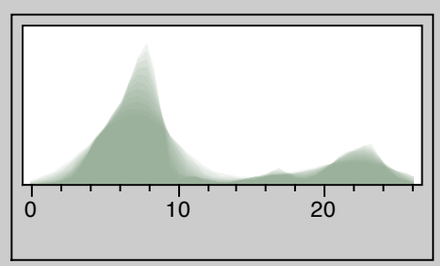




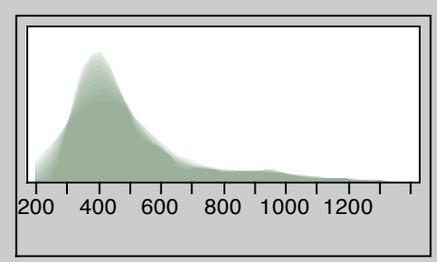
BIO5
Tª max. mes más cálido (ºC)



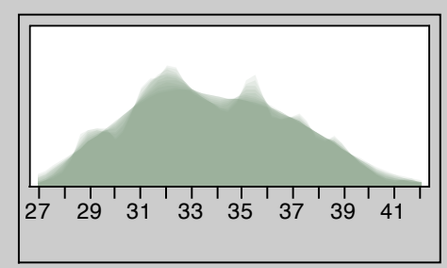
BIO7
Rango de Tª anual (ºC)



BIO9
Tª media trimestre más seco (ºC)



BIO12
Precipitación anual (mm)

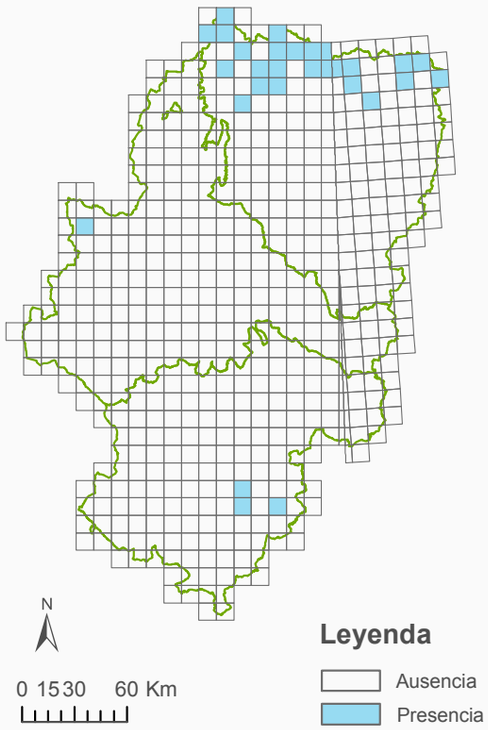


BIO15
Estacionalidad de precipitación (mm)

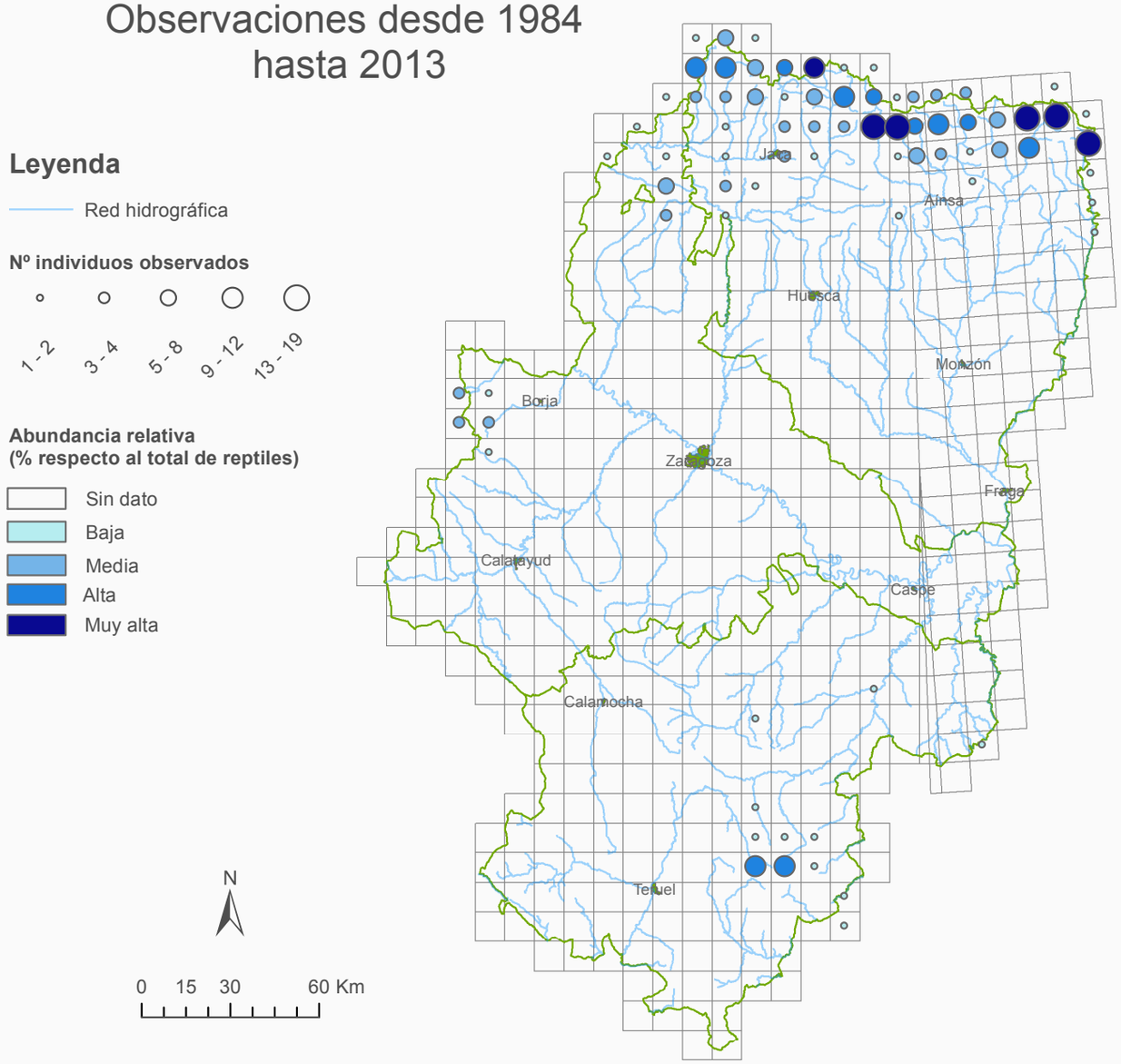
Elaboración propia. Fuente: DGA, ANSAR y AHE. Zaragoza a 29 de Noviembre de 2014

Lagartija roquera *(Podarcis muralis)*

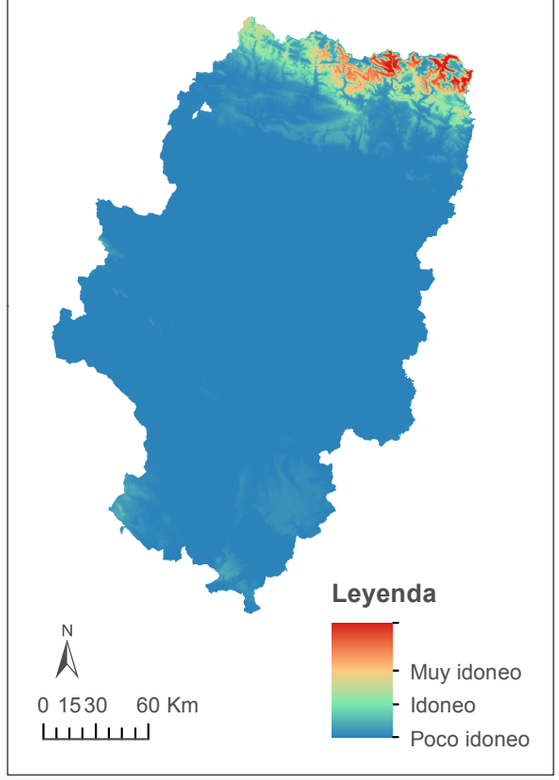
Distribución histórica hasta 1984

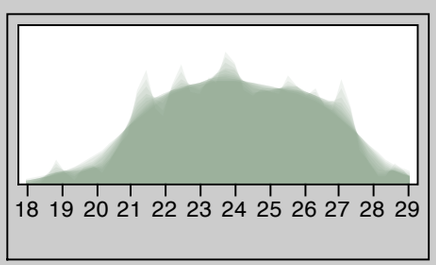


Observaciones desde 1984 hasta 2013

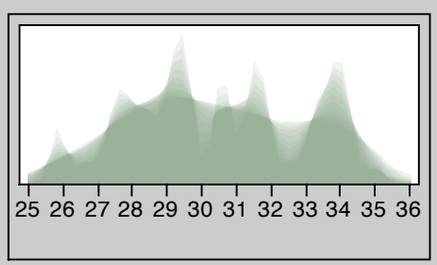


Modelo de idoneidad de hábitat

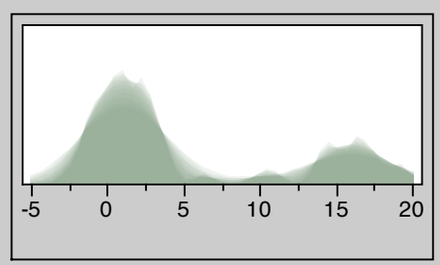




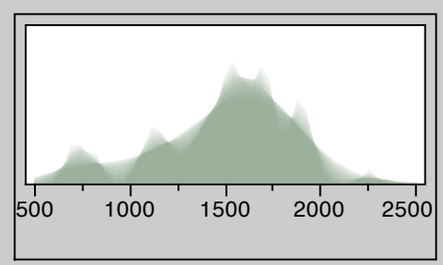
BIO5
Tª max. mes más cálido (ºC)



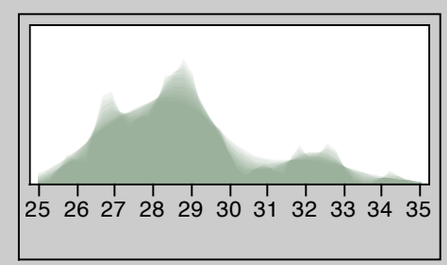
BIO7
Rango de Tª anual (ºC)



BIO9
Tª media trimestre más seco (ºC)



BIO12
Precipitación anual (mm)

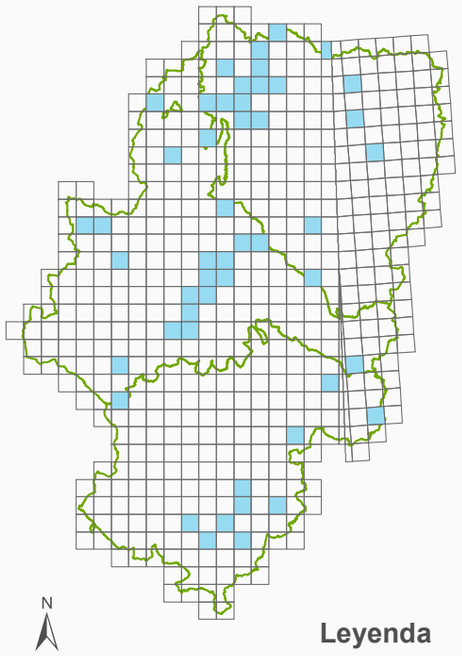


BIO15
Estacionalidad de precipitación (mm)

Elaboración propia. Fuente: DGA, ANSAR y AHE. Zaragoza a 29 de Noviembre de 2014

Lagarto ocelado *(Timon lepidus)*

Distribución histórica hasta 1984



Leyenda

- Ausencia
- Presencia

Observaciones desde 1984 hasta 2013

Leyenda

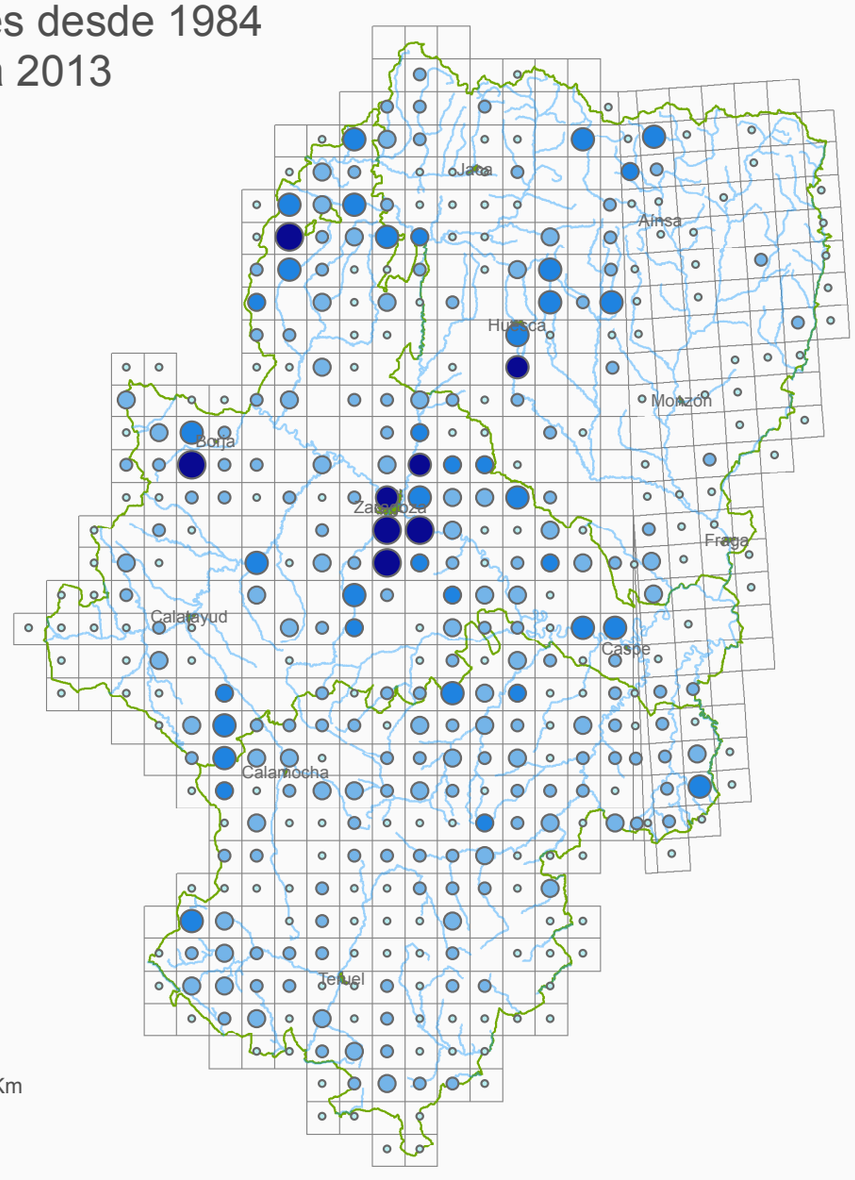
Red hidrográfica

Nº individuos observados

1 - 2 | 3 - 4 | 5 - 7 | 8 - 13 | 14 - 27

Abundancia relativa (% respecto al total de reptiles)

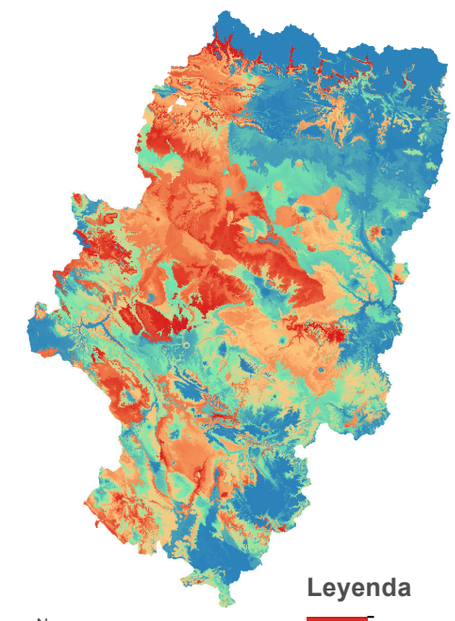
- Sin dato
- Baja
- Media
- Alta
- Muy alta



N

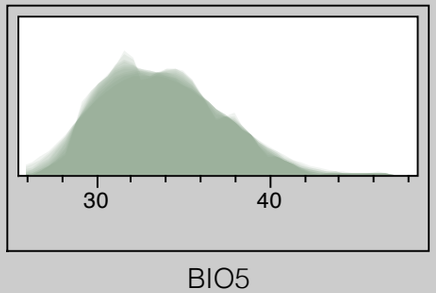
0 15 30 60 Km

Modelo de idoneidad de hábitat

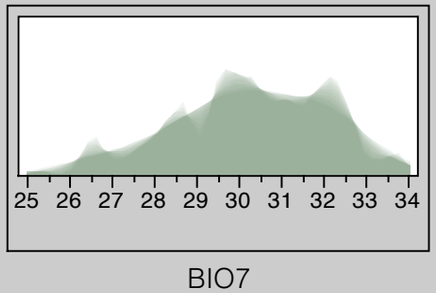


Leyenda

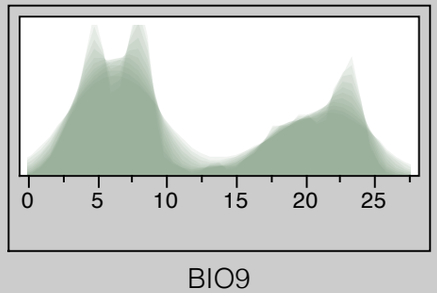
- Muy idoneo
- Idoneo
- Poco idoneo



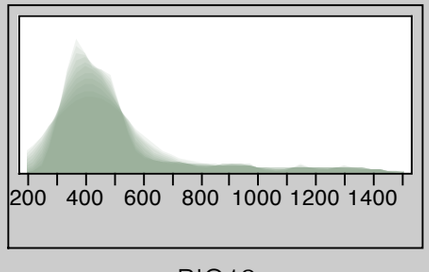
BIO5
Tª max. mes más cálido (ºC)



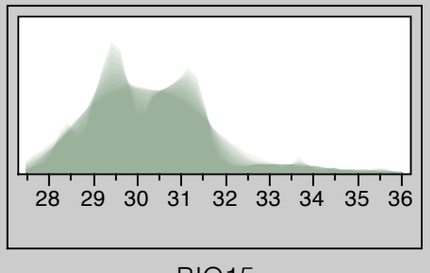
BIO7
Rango de Tª anual (ºC)



BIO9
Tª media trimestre más seco (ºC)



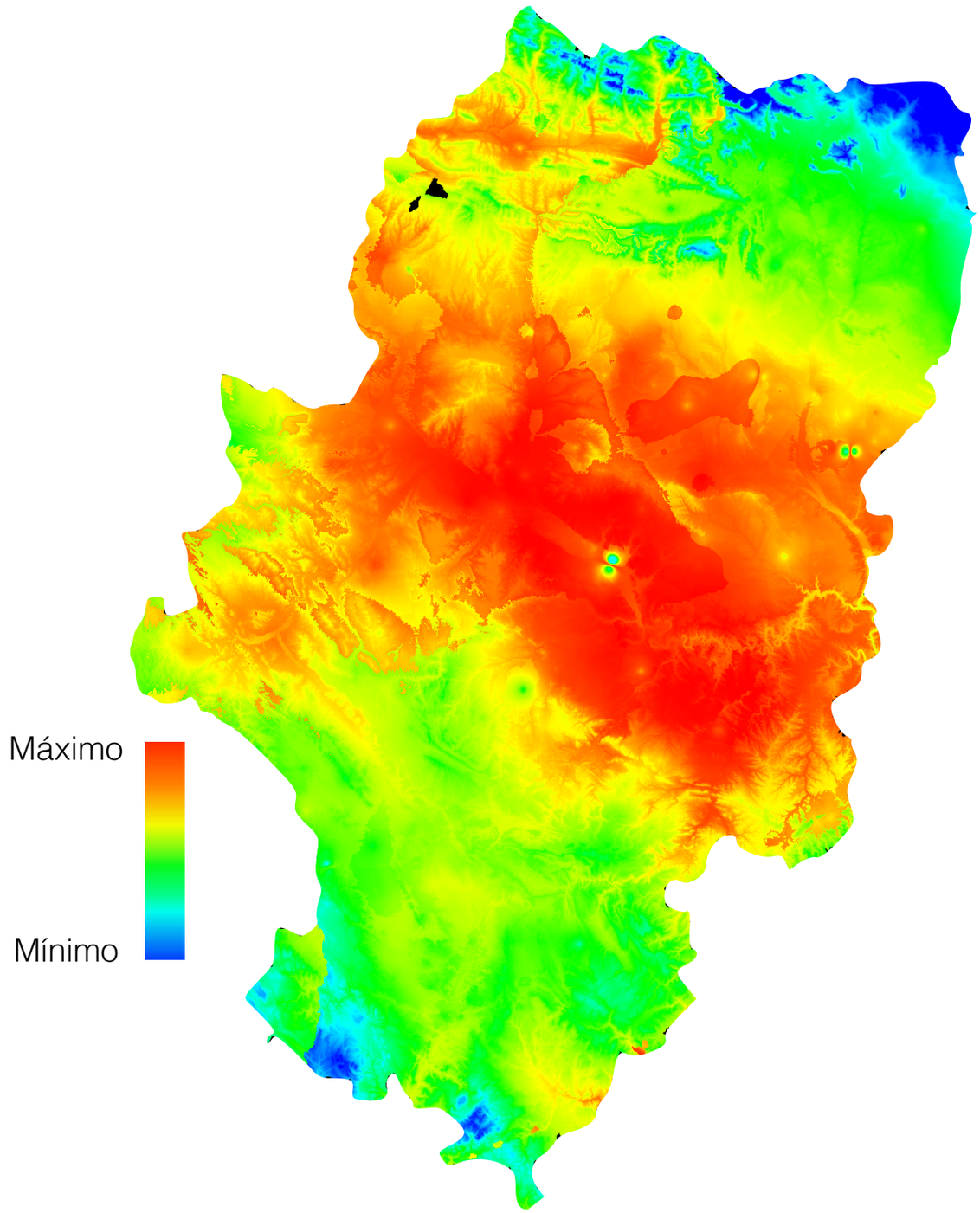
BIO12
Precipitación anual (mm)



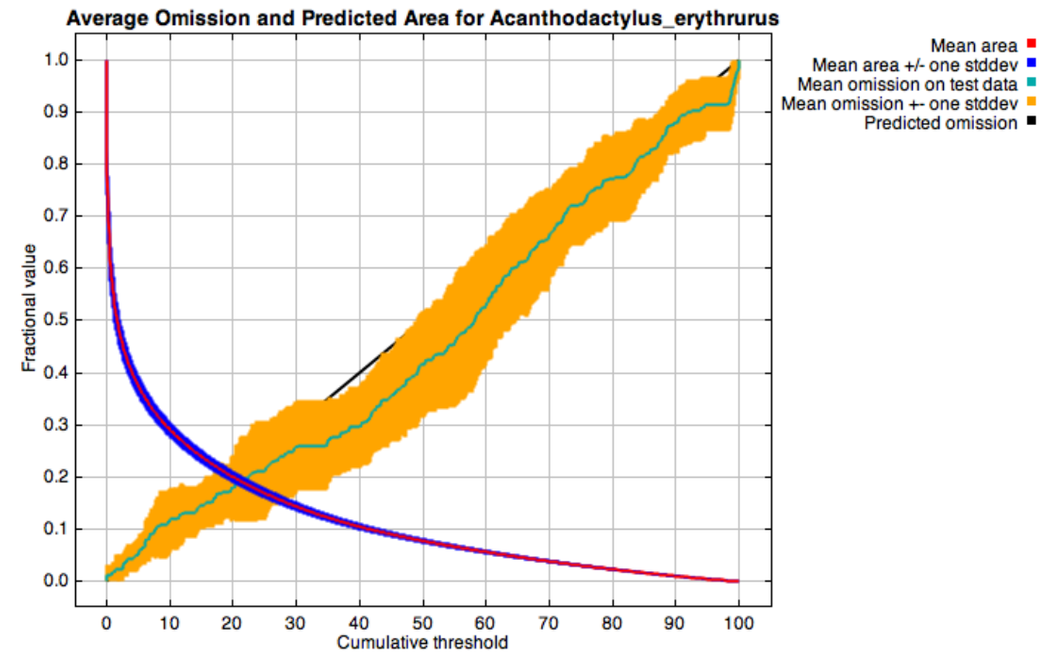
BIO15
Estacionalidad de precipitación (mm)

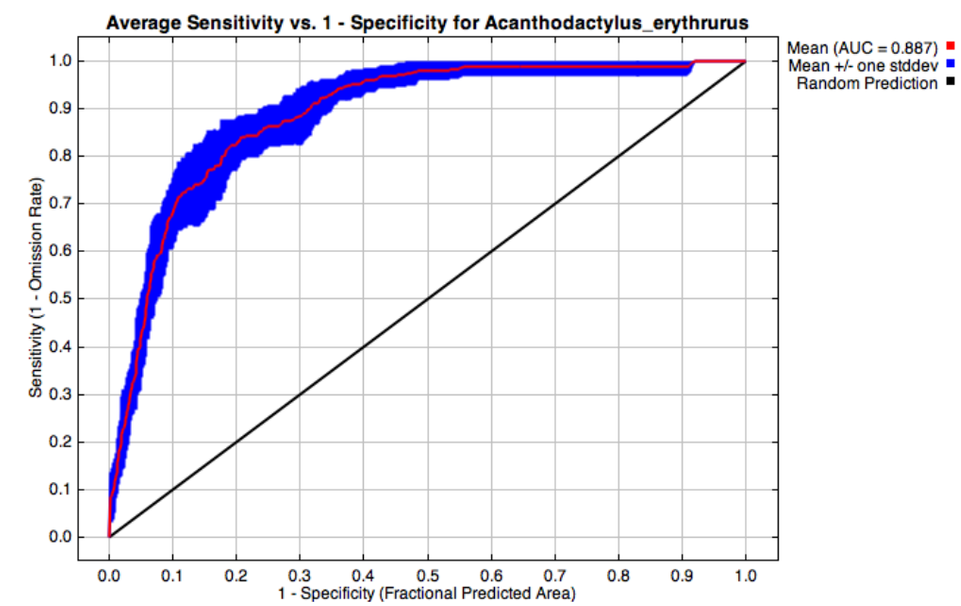
Elaboración propia. Fuente: DGA, ANSAR y AHE. Zaragoza a 29 de Noviembre de 2014

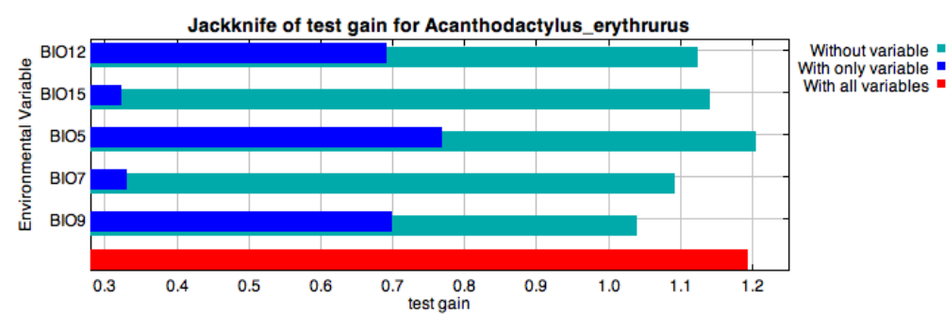
Anexo 2

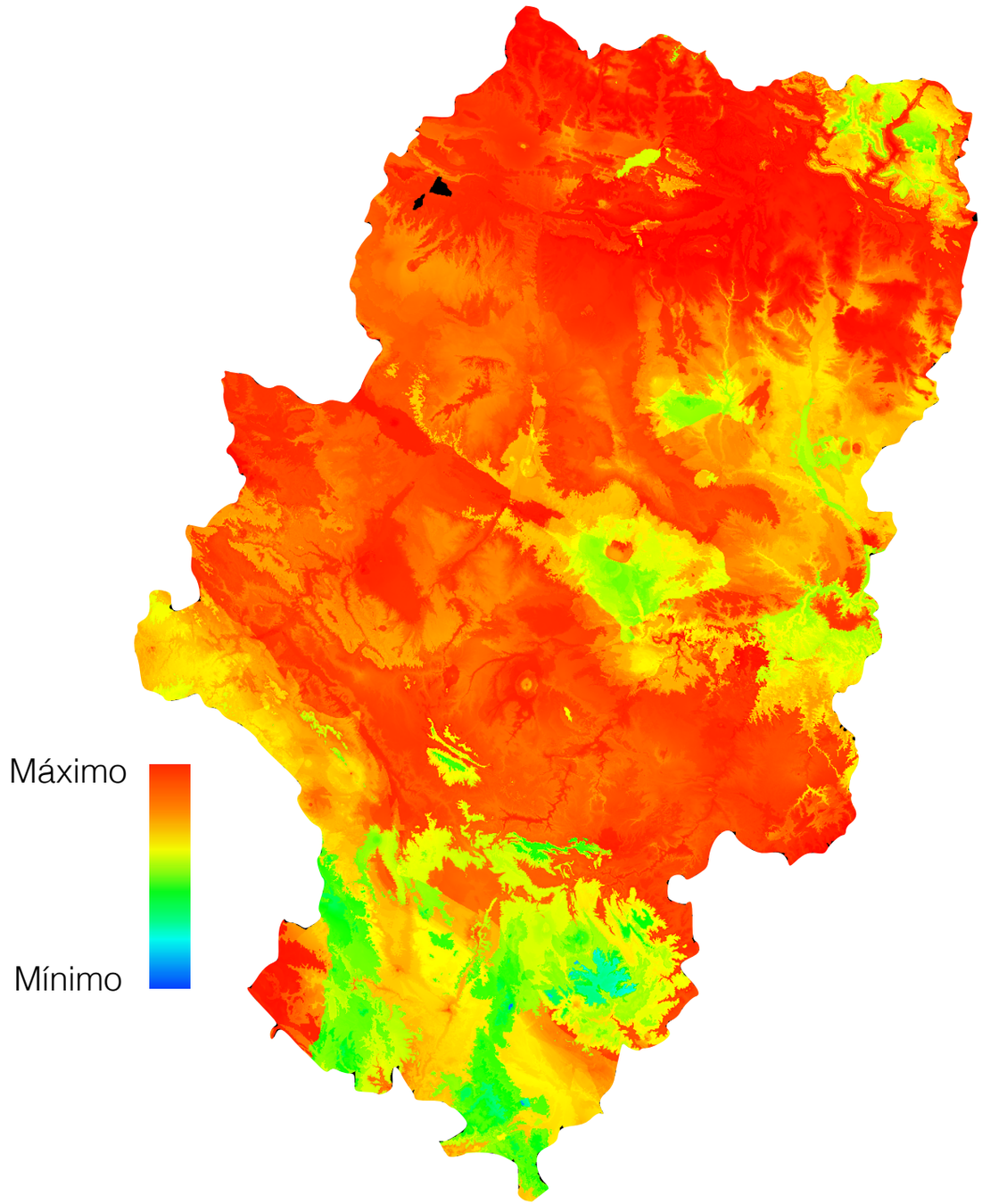


Acanthodactylus erithrurus

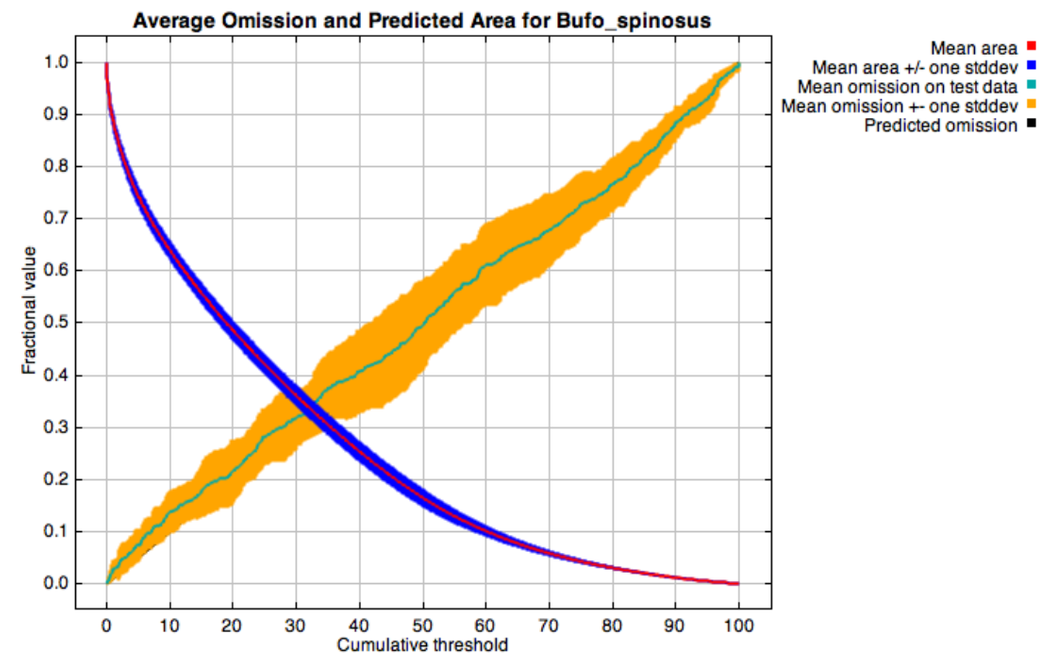


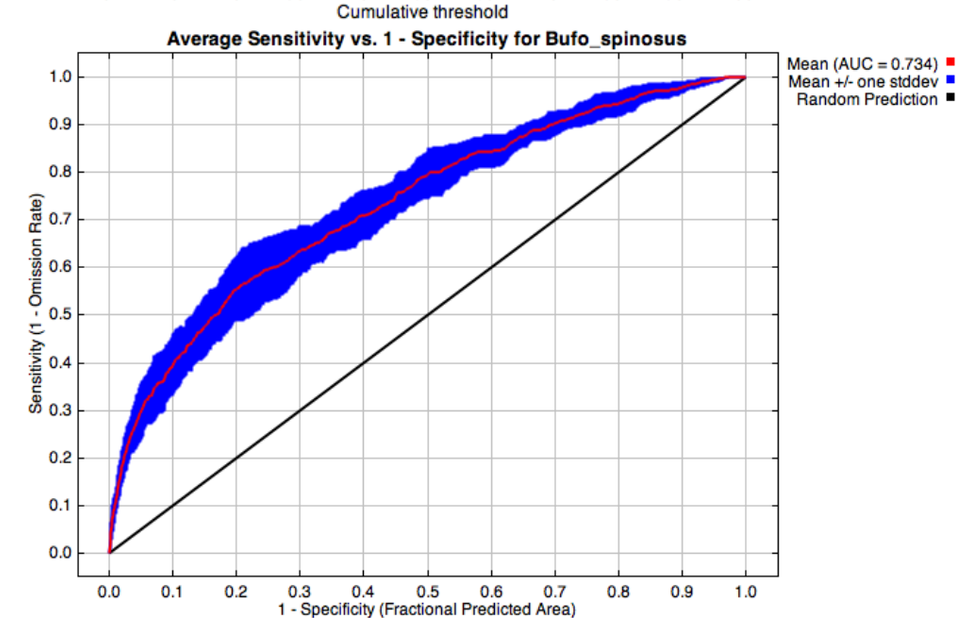


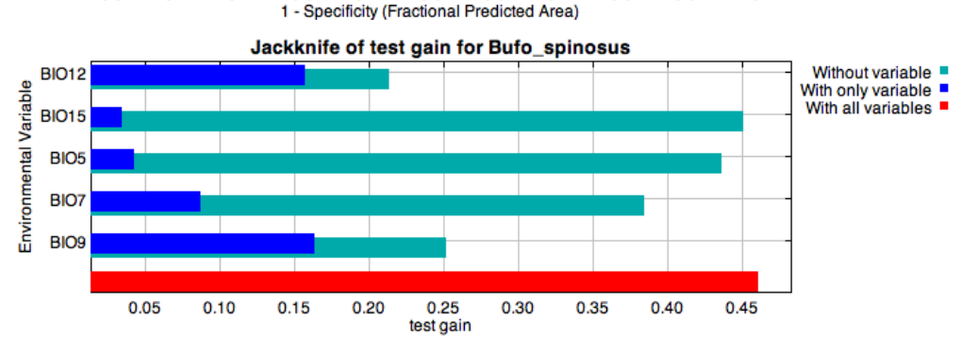


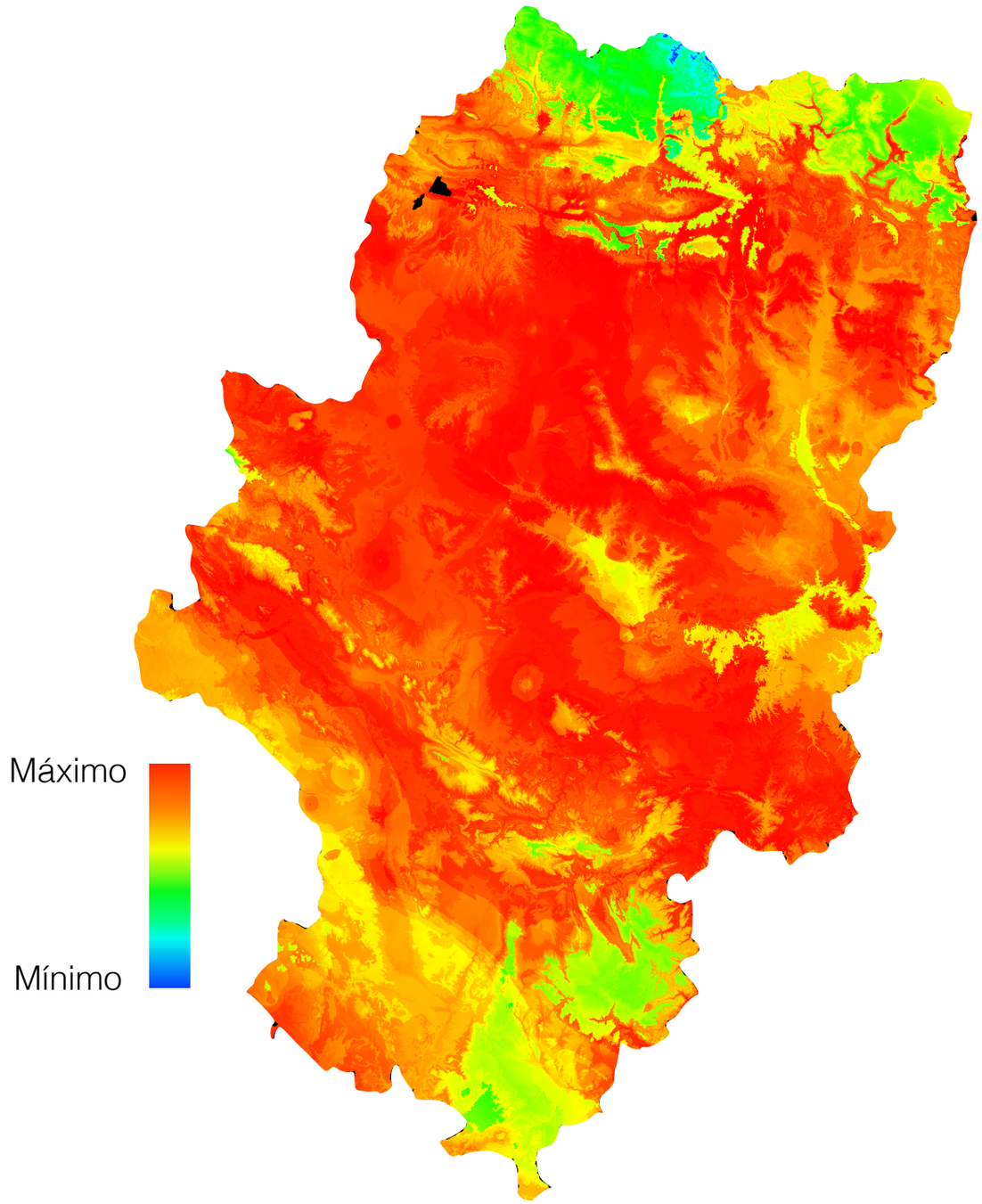


Bufo spinosus

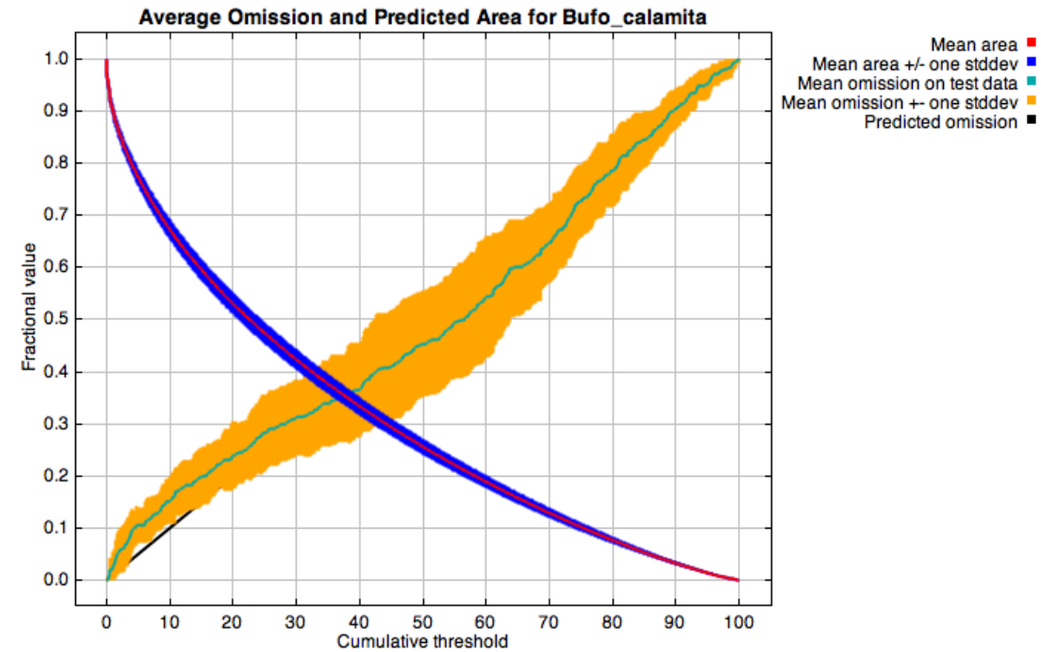


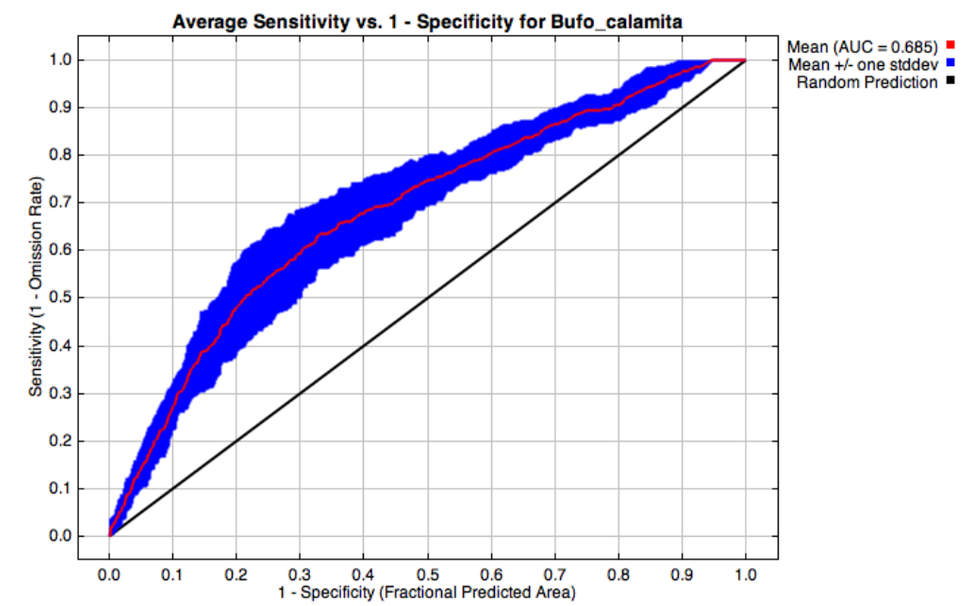


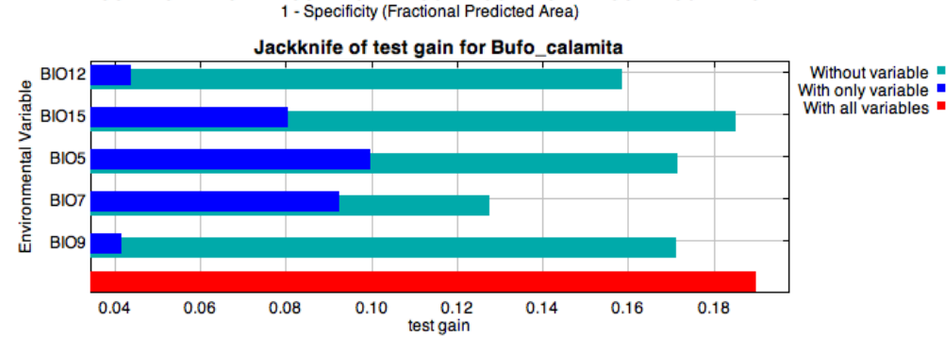


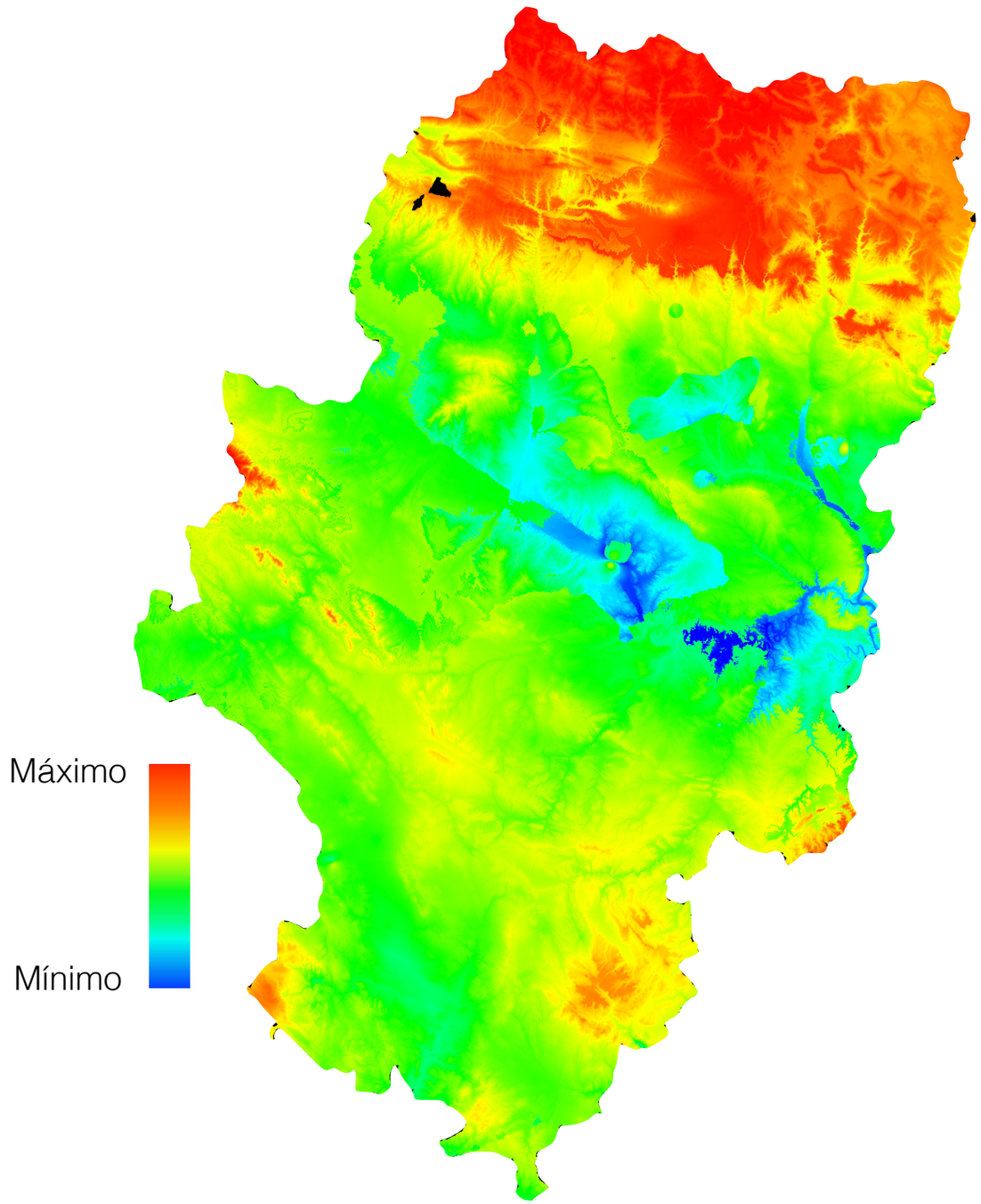


Bufo calamita

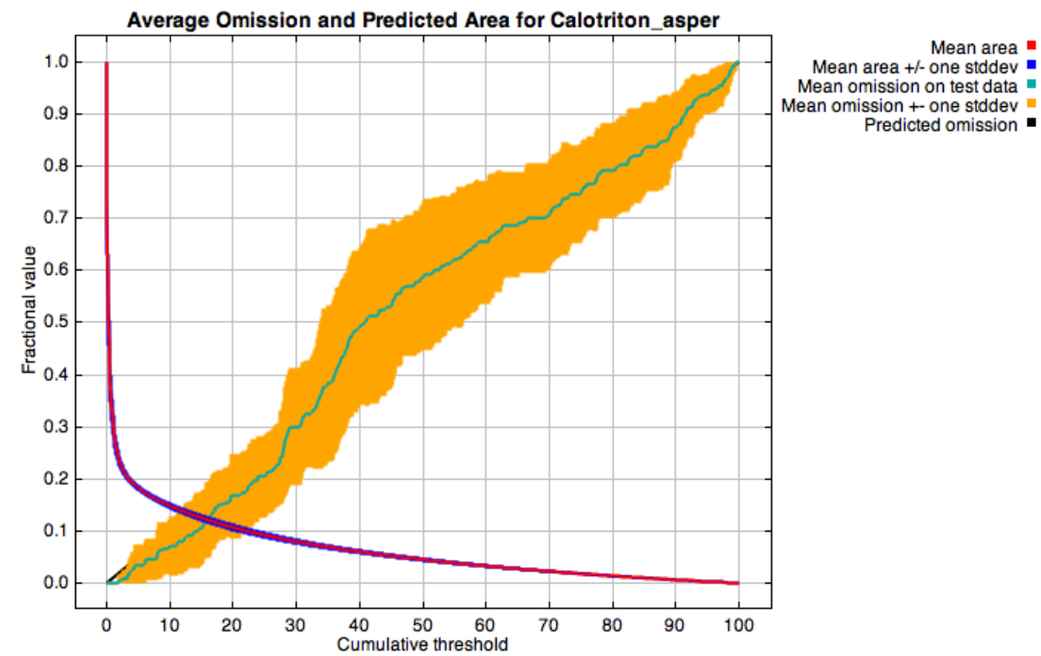


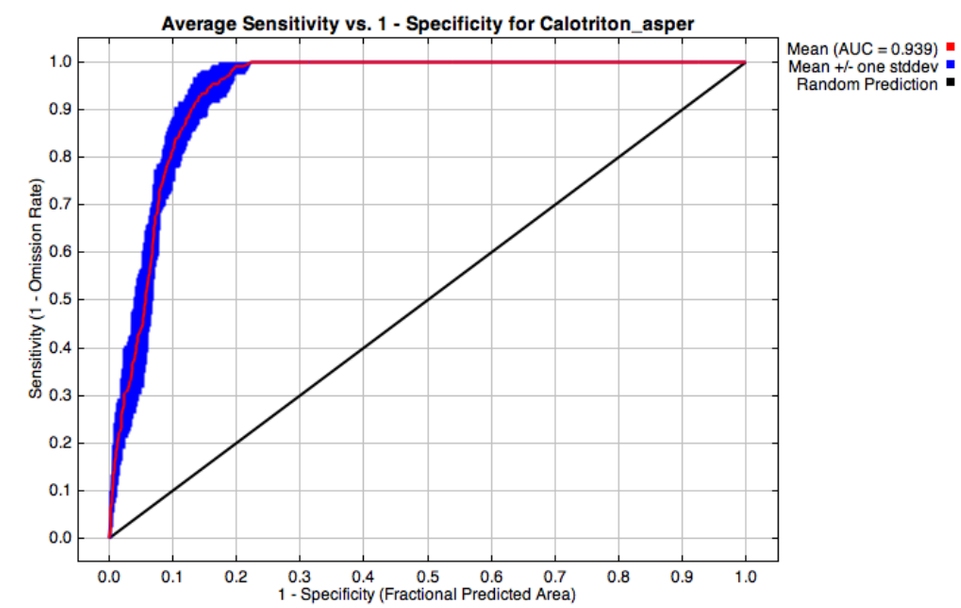


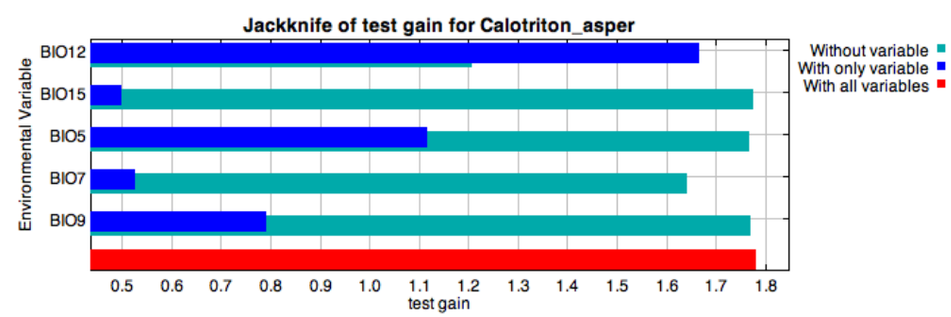


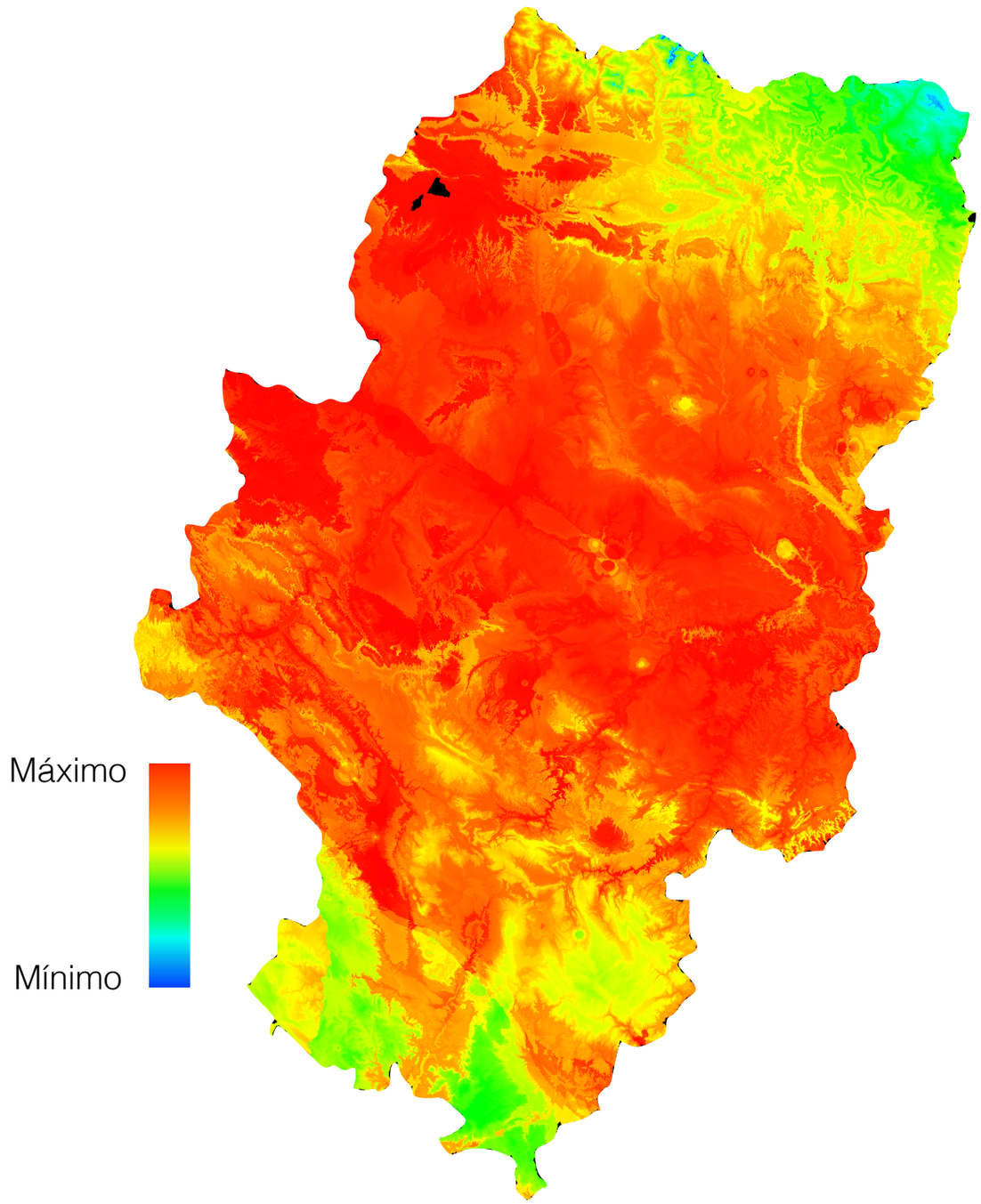


Calotriton asper

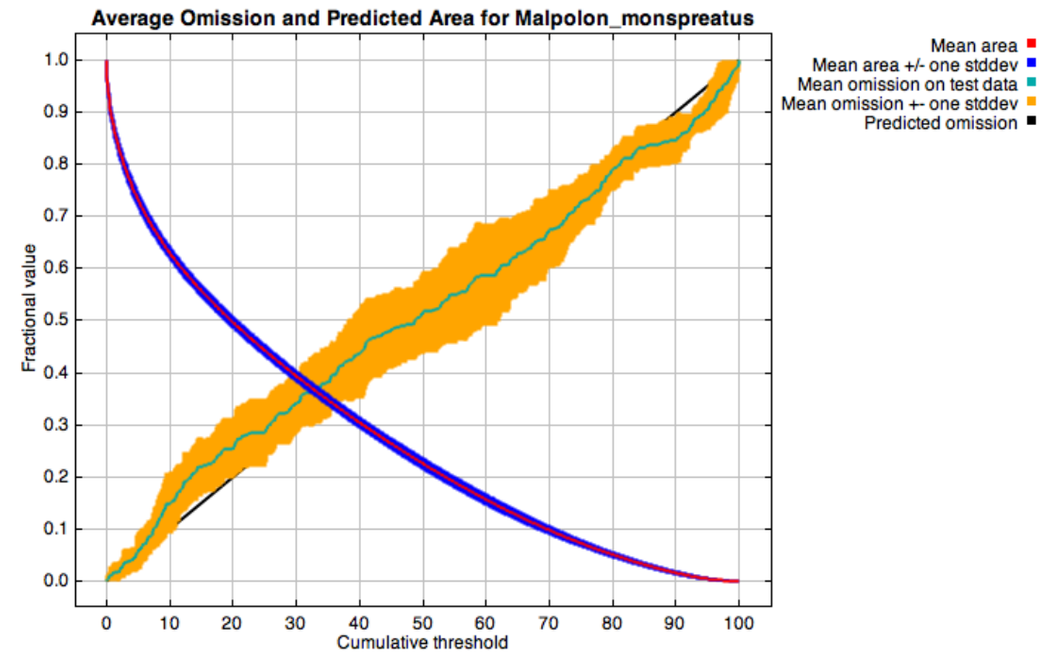


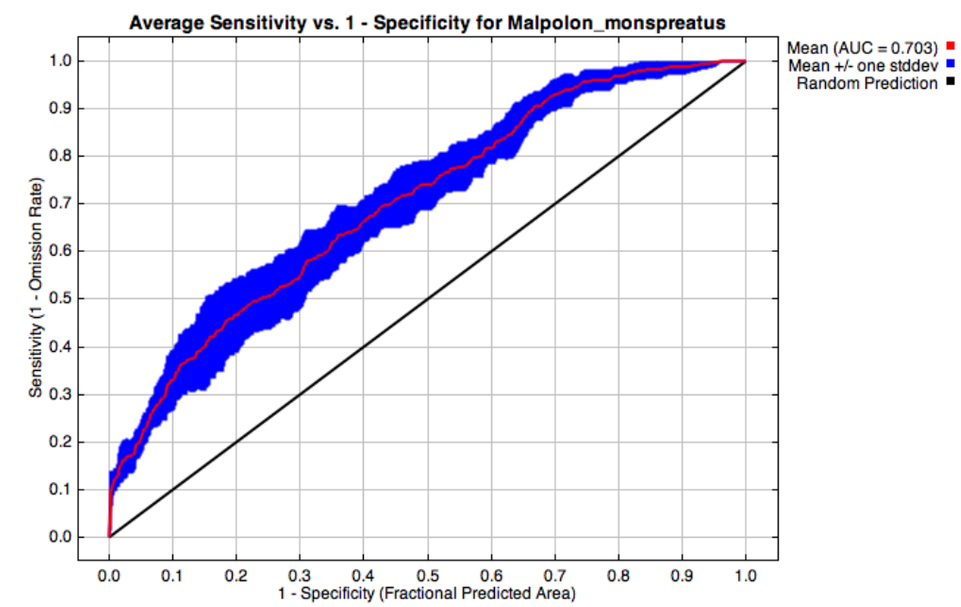


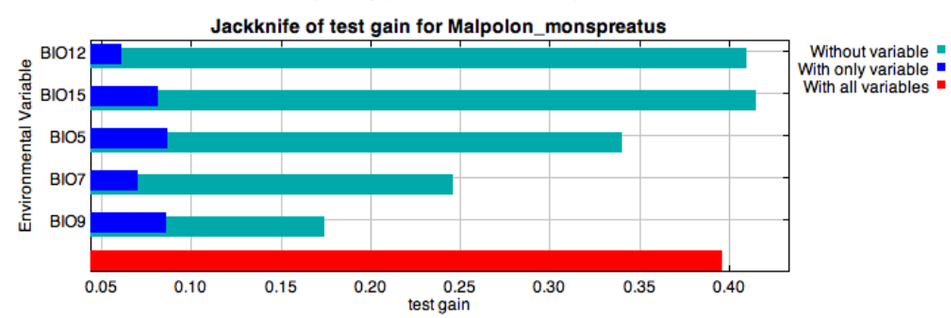


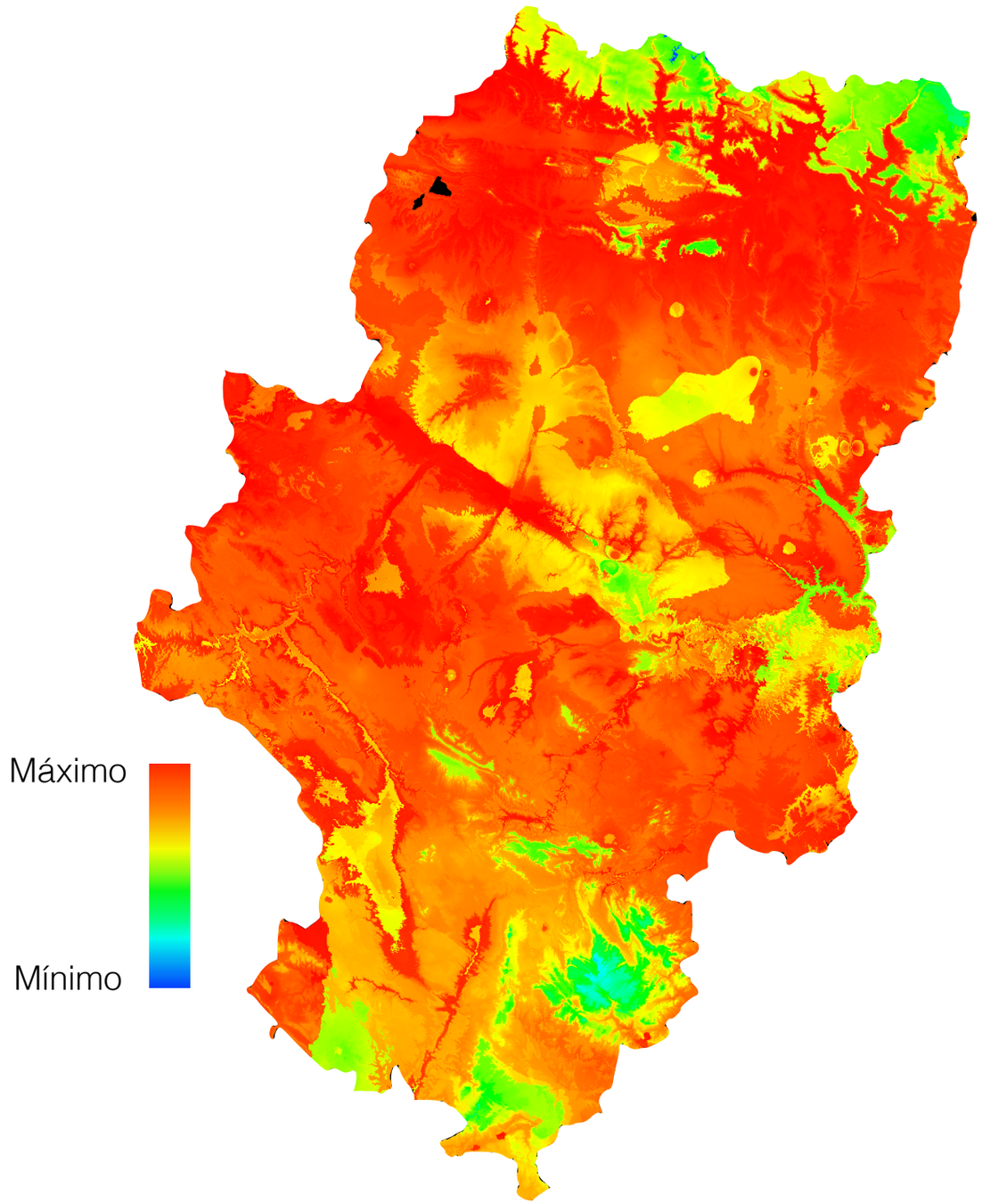


Malpolon monspessulanus

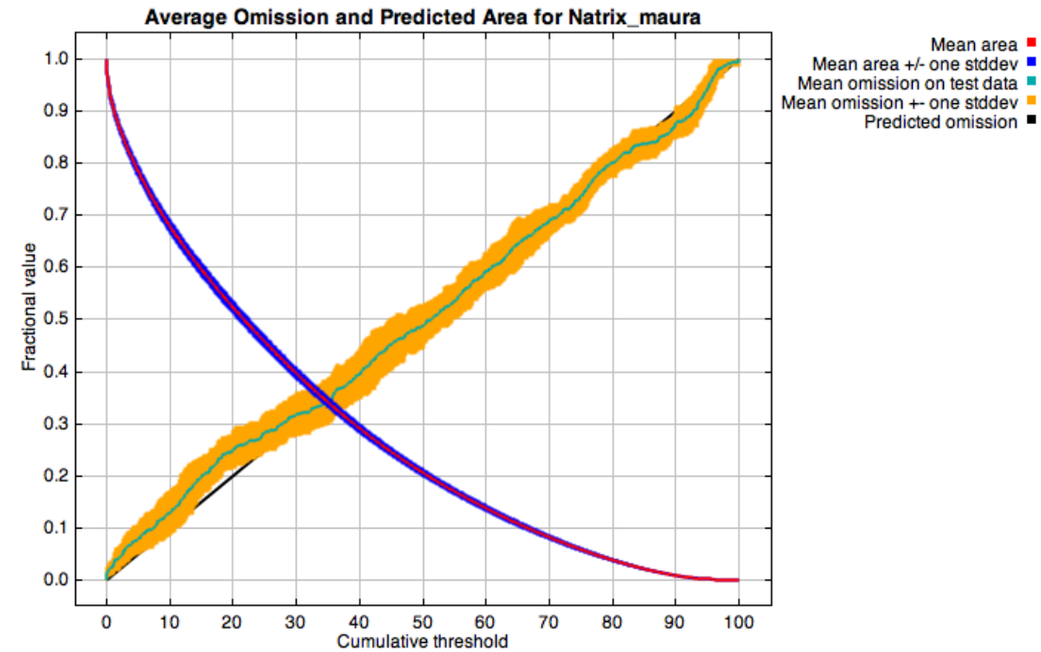


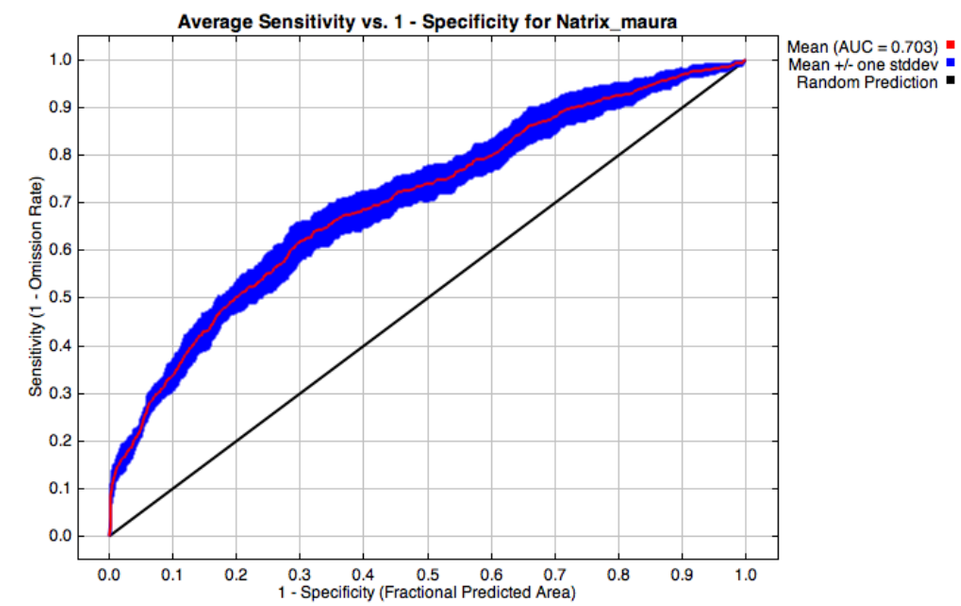


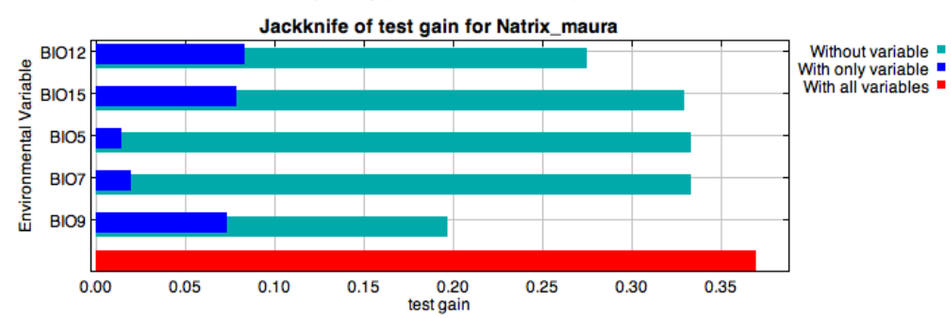


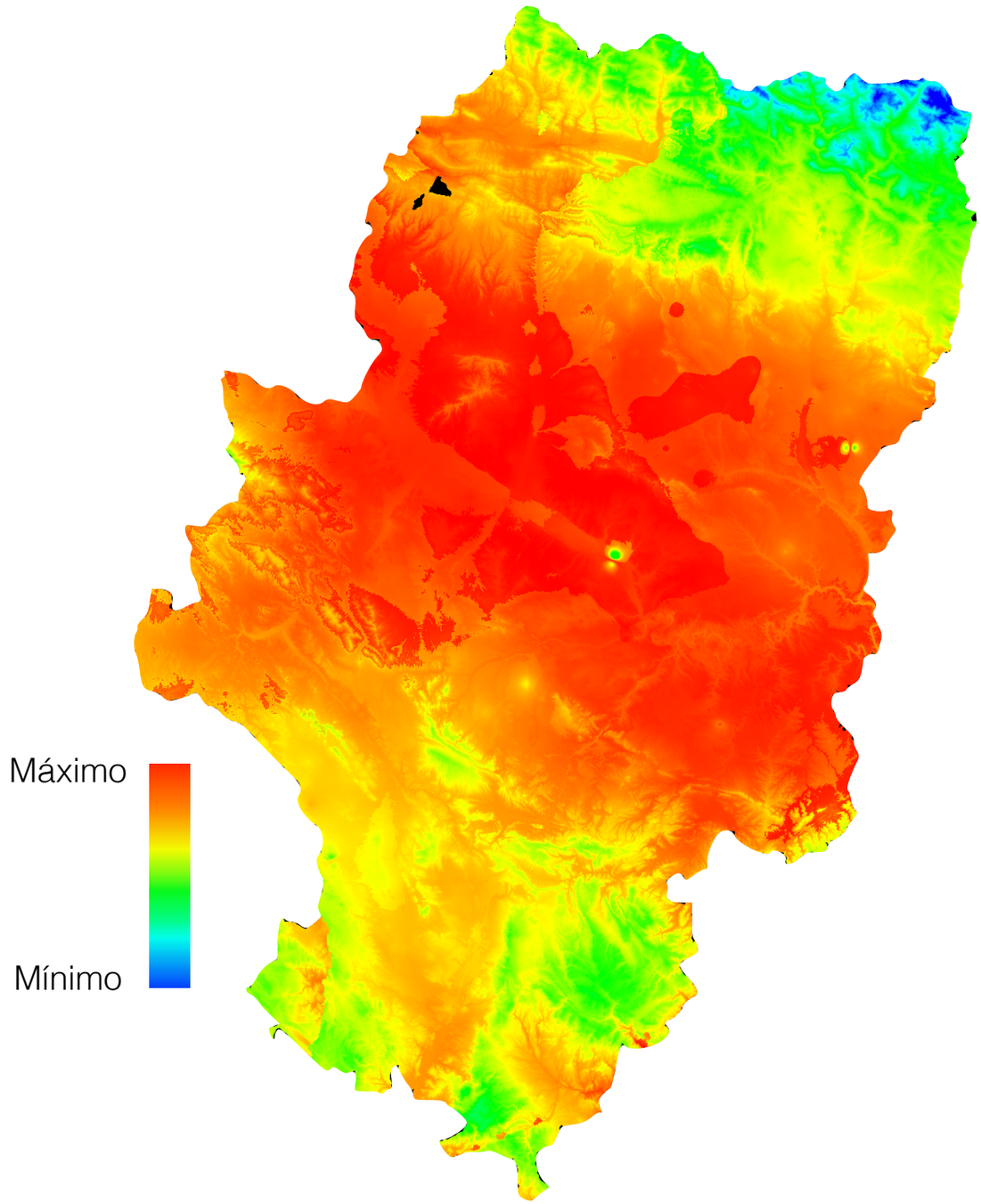


Natrix maura

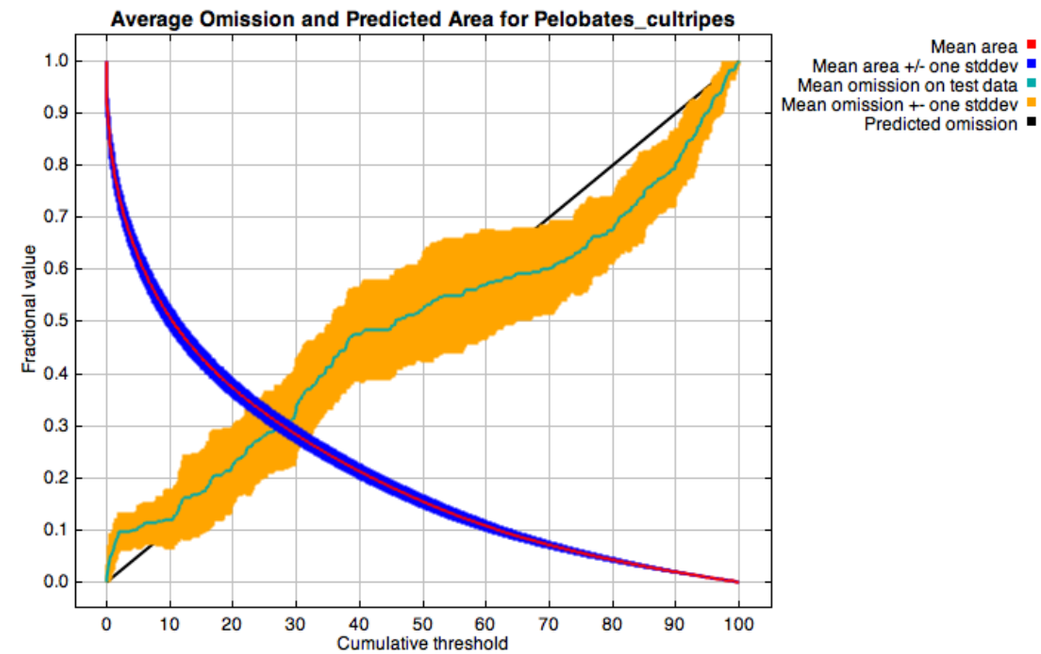


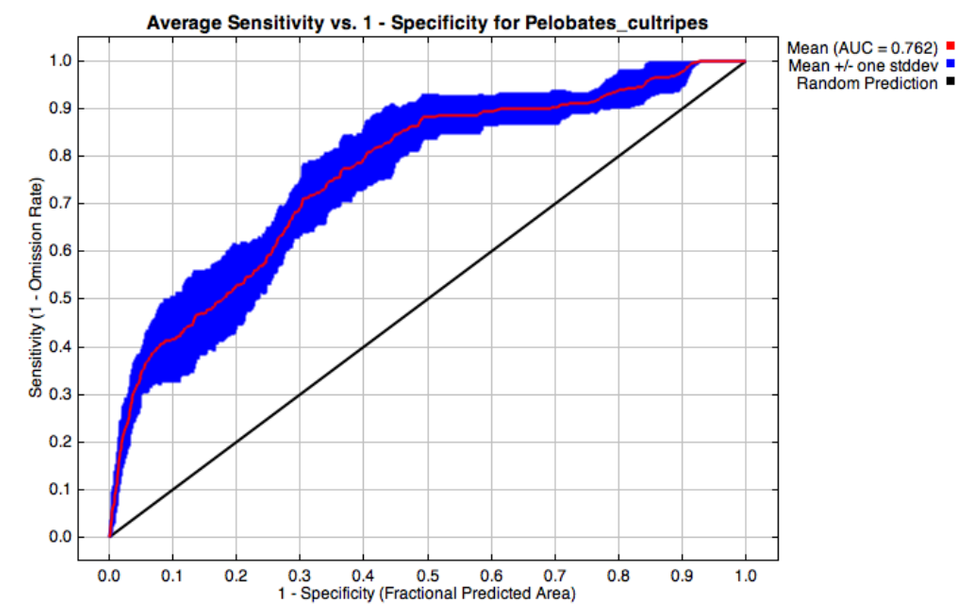


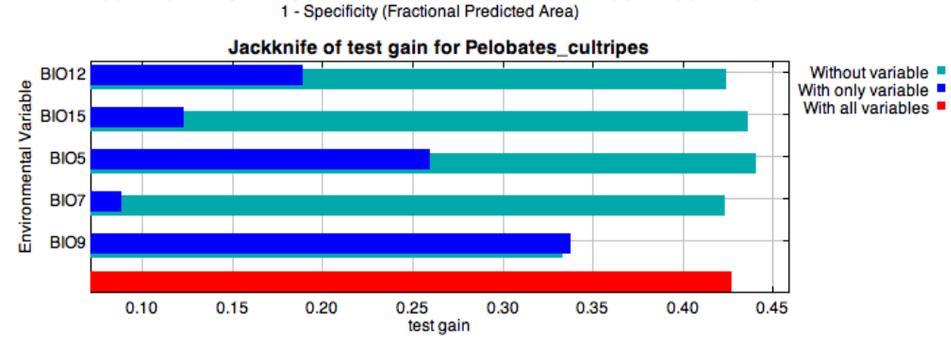


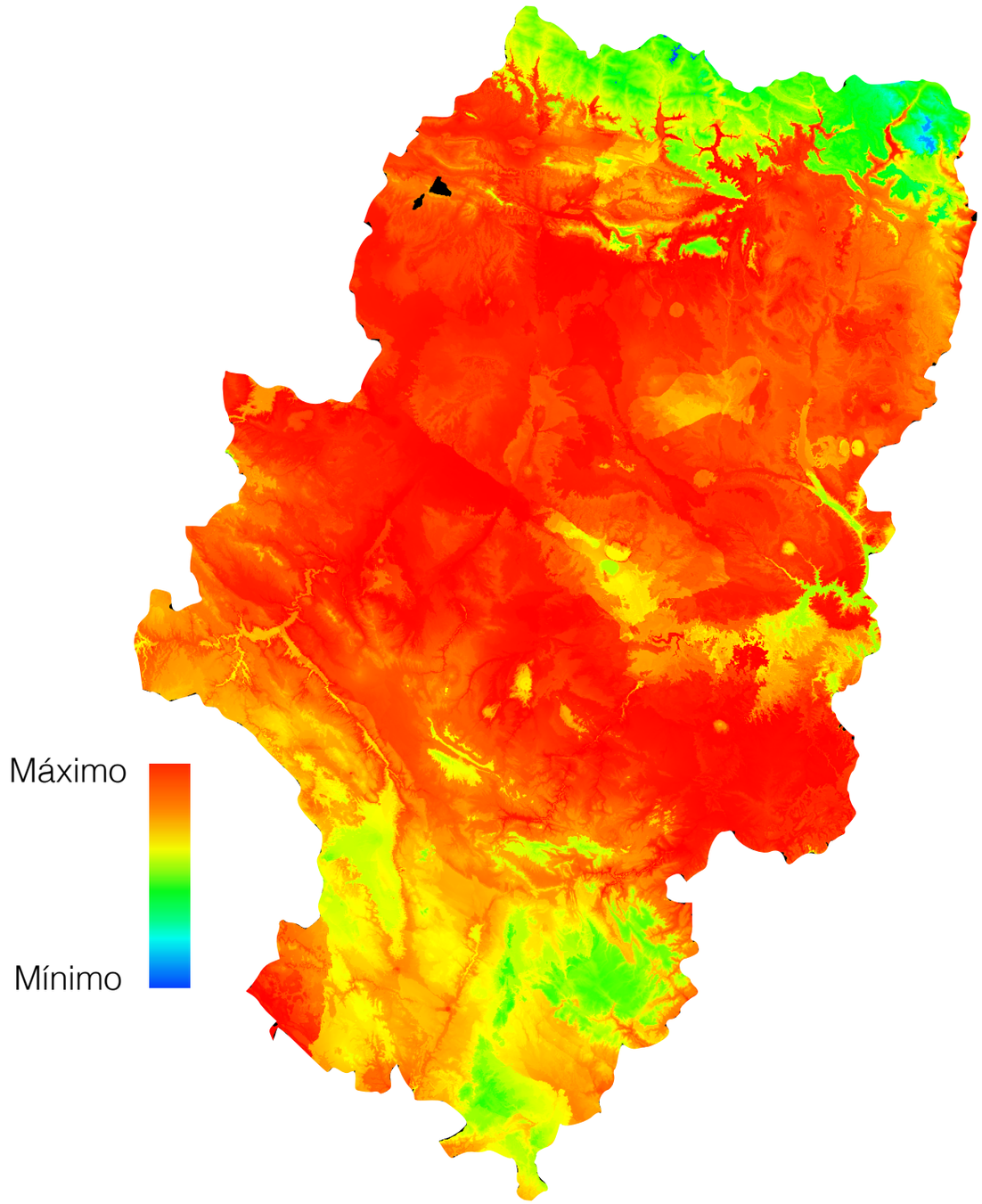


Pelobates cultripes

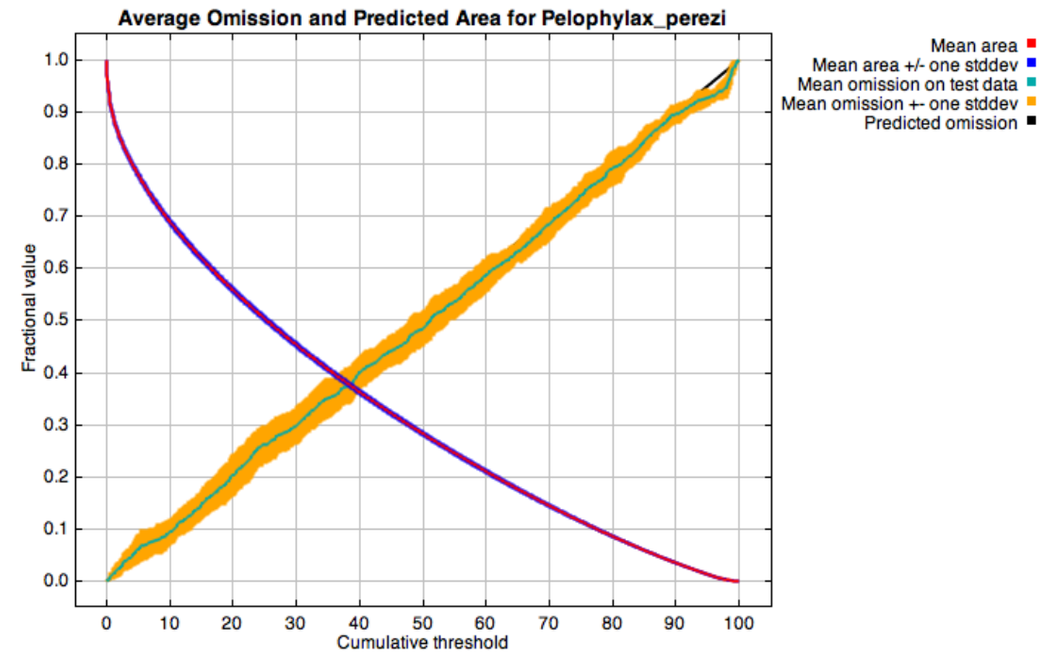


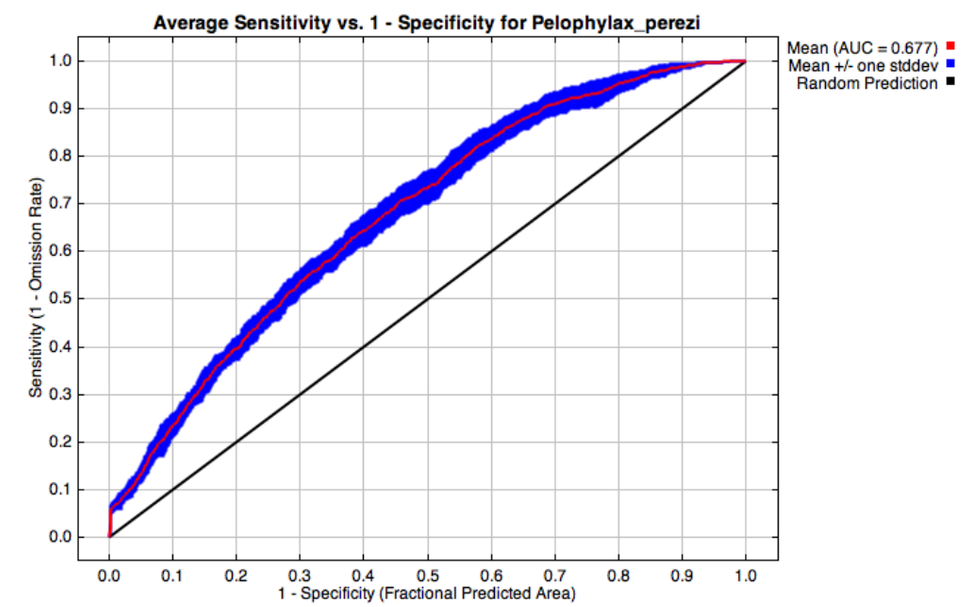


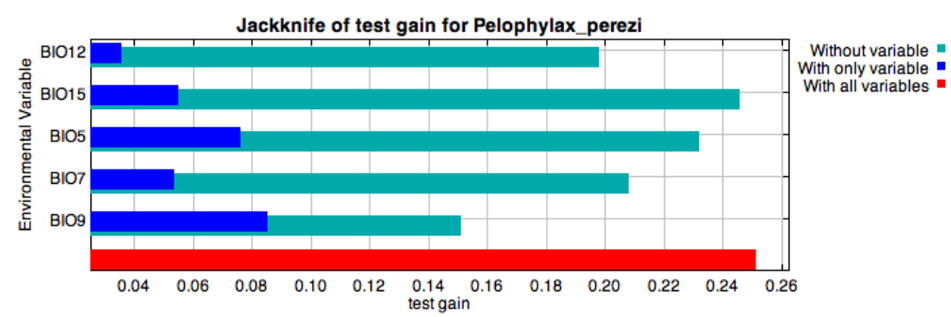


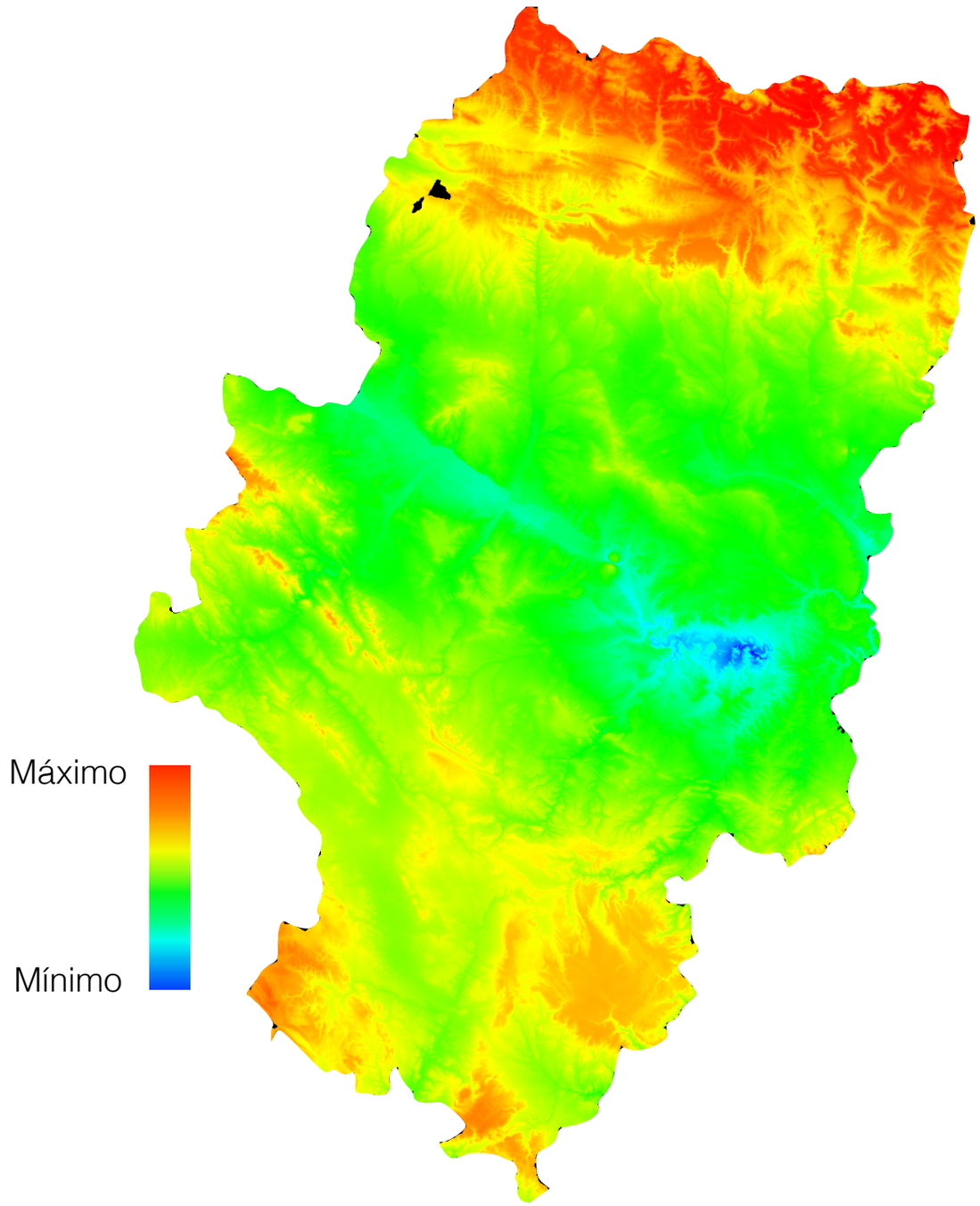


Pelophylax perezi

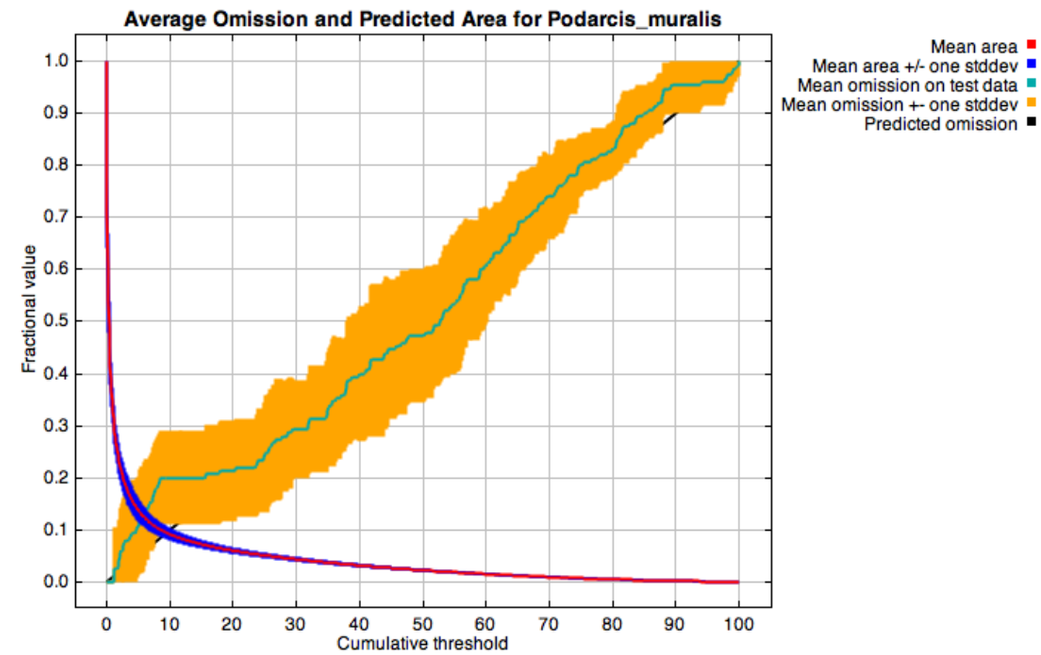


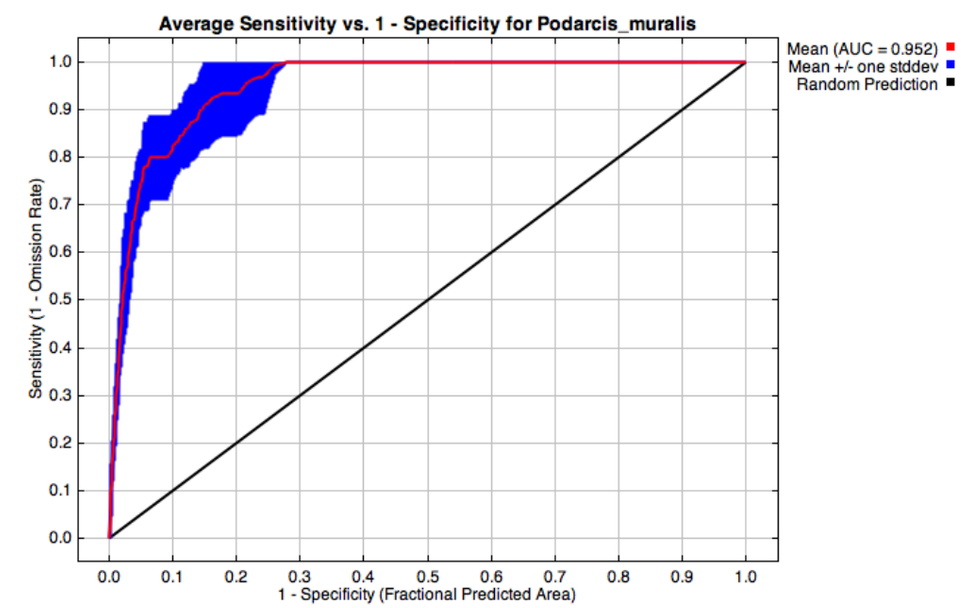


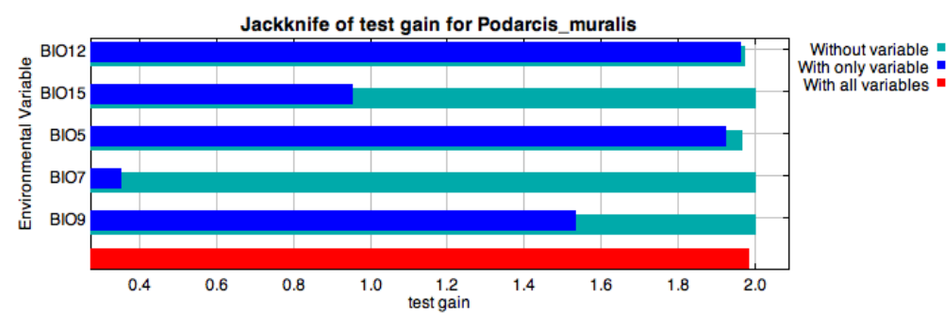


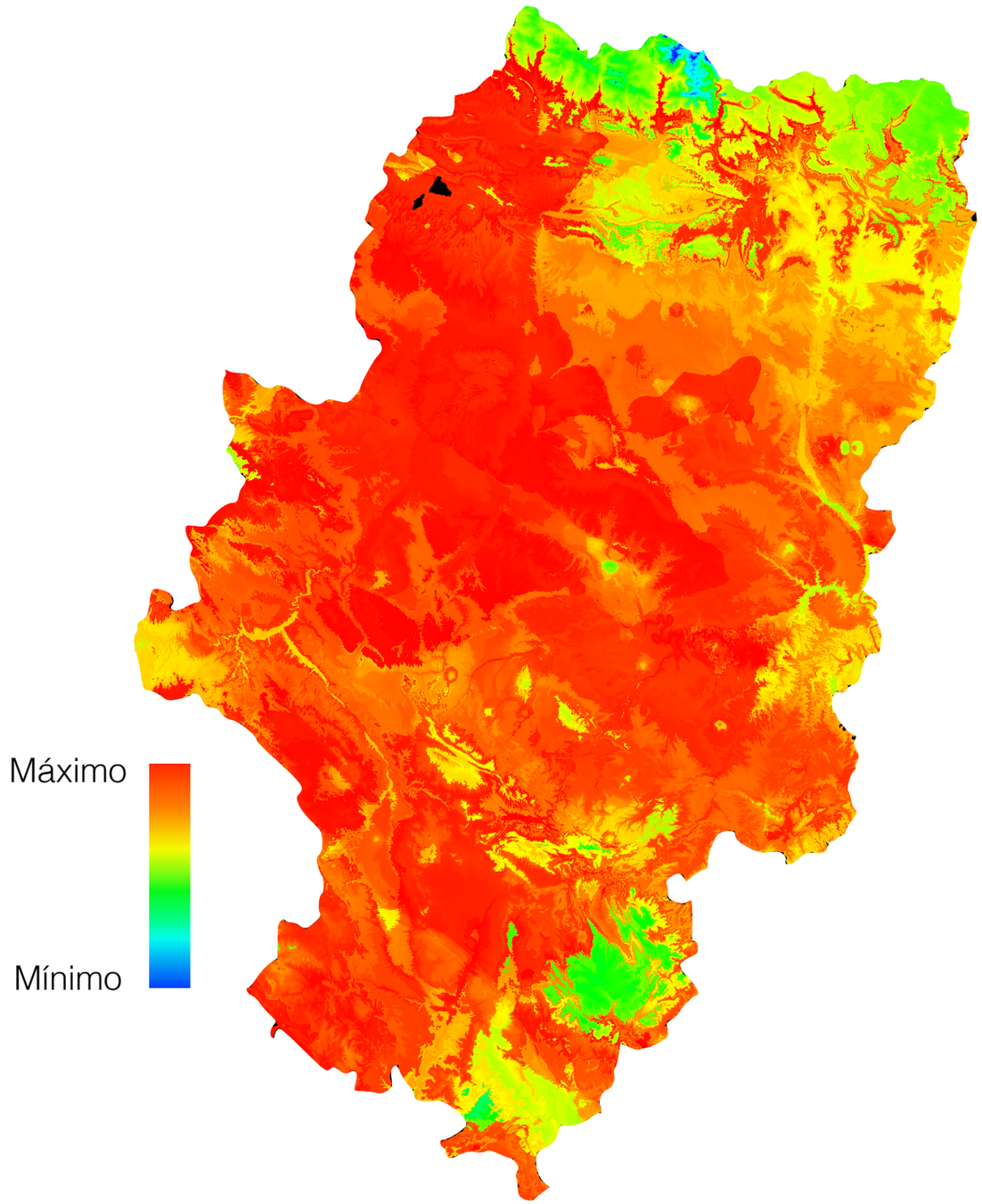


Podarcis muralis

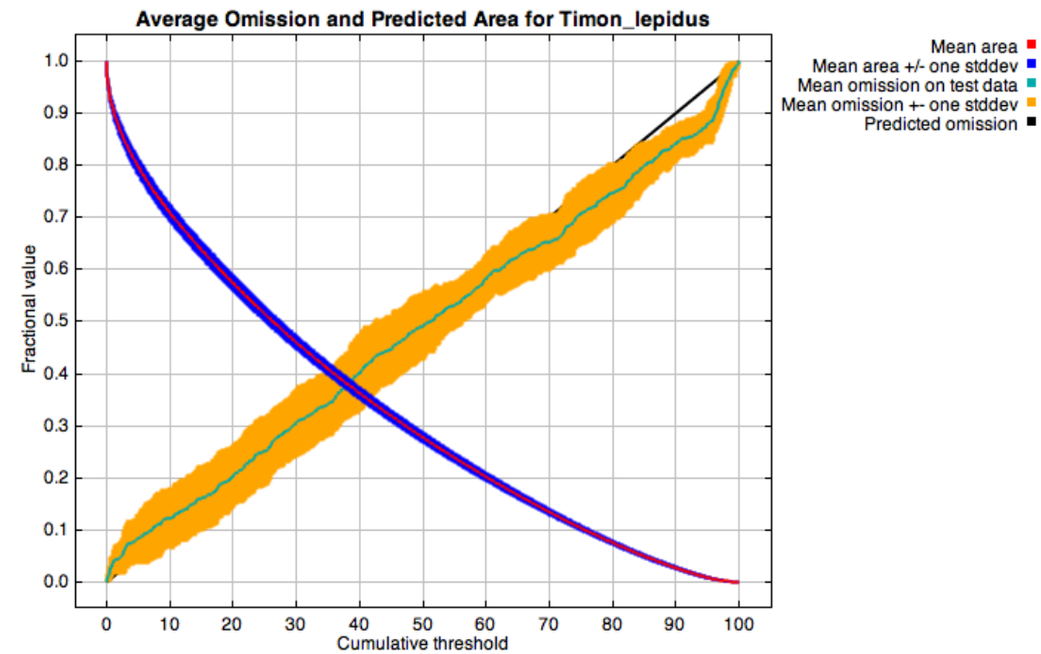


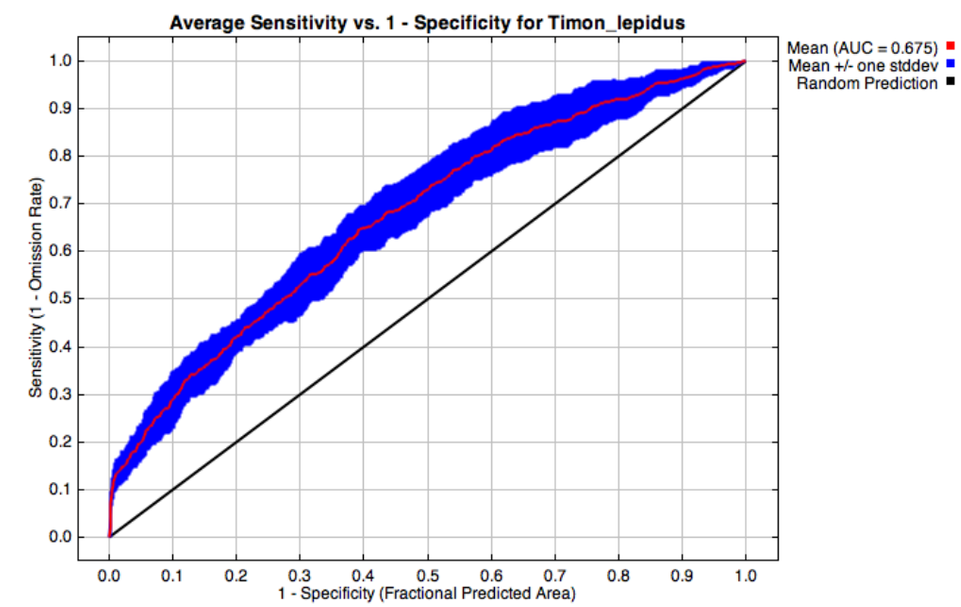


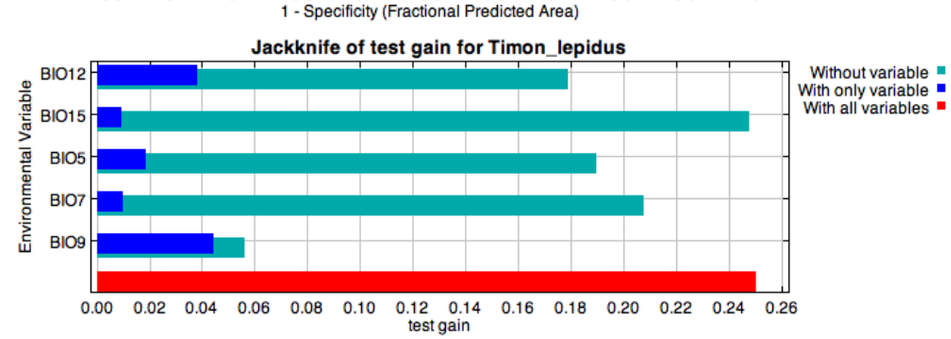




Timon lepidus







Anexo 3

```html
<!DOCTYPE html>
<html>
<head>
    <meta charset="UTF-8">
    <title>Atlas Herpetológico de Aragón</title>
    <script
        src="http://www.openlayers.org/api/OpenLayers.js">
    </script>
    <style type="text/css">
        #miMapa {
            width: 100%;
            height: 600px;
            border: solid 2px #808080;
        }

        #legend
        {
            width: 100%;
            float: right;
        }

        .legend_elem
        {
            position: relative;
            float: left;
            width: 40%;
            display: inline-block;
            margin: 1%;
            padding: 1%;
        }

        h3
        {
            width: 100%;
            text-align: center;
        }

    </style>
        <script type="text/javascript">

        // Definimos las variables

        var mapa, base, a1, a2, a3, r1, r2, r3, info, leyenda ;
        var lon = -0.60;
        var lat = 41.40;
        var zoom = 8;



        // Definimos una función que arranque al cargar la página
        window.onload= function() {
```

```
            // Creamos el mapa
             mapa = new OpenLayers.Map( 'miMapa' );

            // Creamos un limite
             //limite = new OpenLayers.Layer.WMS(
                //"Orto",
                //"http://idearagon.aragon.es/AragonFoto",
                //{layers: 'MODIS,spot,orto_reciente',
                //transparent: "false"
                //}


            //);
             a1 = new OpenLayers.Layer.WMS(
                "Rana Común",
                "http://idearagon.aragon.es/DIT?",
                {layers: '141',
                transparent: "false",
                isBaseLayer: "false"
                }

            );
             a2 = new OpenLayers.Layer.WMS(
                "Sapo de espuelas",
                "http://idearagon.aragon.es/DIT?",
                {layers: '142',
                transparent: "false",
                isBaseLayer: "false"
                }

            );
             a3 = new OpenLayers.Layer.WMS(
                "Sapo corredor",
                "http://idearagon.aragon.es/DIT?",
                {layers: '143',
                transparent: "false",
                isBaseLayer: "false"
                }

            );
             r1 = new OpenLayers.Layer.WMS(
                "Lagarto ocelado",
                "http://idearagon.aragon.es/DIT?",
                {layers: '145',
                transparent: "false",
                isBaseLayer: "false"
                }

            );
             r2 = new OpenLayers.Layer.WMS(
                "Culebra viperina",
```

```
                "http://idearagon.aragon.es/DIT?",
                {layers: '146',
                transparent: "false",
                isBaseLayer: "false"
                }

            );
             r3 = new OpenLayers.Layer.WMS(
                "Culebra bastarda",
                "http://idearagon.aragon.es/DIT?",
                {layers: '147',
                transparent: "false",
                isBaseLayer: "false"

                }

            );
             base = new OpenLayers.Layer.WMS(
                "Limites",
                "http://idearagon.aragon.es/DIT?",
                {layers: '139,66',
                transparent: "true",
                isBaseLayer: "true",
                singleTile: "true", ratio: 1
                }

            );
            //mapa.addLayer(limite);

            mapa.addLayer(a3);
            mapa.addLayer(r2);
            mapa.addLayer(r3);
            mapa.addLayer(a2);
            mapa.addLayer(a1);
            mapa.addLayer(r1);
            mapa.addLayer(base);
            info = new OpenLayers.Control.WMSGetFeatureInfo({
                url: "http://sita1.aragon.local:8399/arcgis/services/AtlasHerpetologico/MapServer/WMSServer?",
                title: 'Identify features by clicking',
                queryVisible: true,
                eventListeners: {
                    getfeatureinfo: function(event) {
                        map.addPopup(new OpenLayers.Popup.FramedCloud(
                            "chicken",
                            map.getLonLatFromPixel(event.xy),
                            null,
                            event.text,
                            null,
                            true
                        ));
                    }
```

```
                }
            });
            mapa.addControl(new OpenLayers.Control.MousePosition());
            mapa.addControl(new OpenLayers.Control.ScaleLine());
            mapa.addControl(info);
            info.activate();

            mapa.setCenter(new OpenLayers.LonLat(lon, lat), zoom);

            mapa.addControl( new OpenLayers.Control.LayerSwitcher () );

        }
    </script>

</head>
<body>
            <table width="90%" cellspacing="0" cellpadding="0" style="margin-left: 5%">
                <tr>
                    <td align="left">
                    <a id="logo" title="Departamento Geografia" target="_blank" href="http://geografia.unizar.es/html/paeu.php">
                    <img width="40%" src="http://www.unizar.es/sites/default/files/identidadCorporativa/imags/geo_ordenacion.png"/>
                    </a>
                    </td>
                    <td align="right">
                    <a id="logo" title="Gobierno de Arag&oacute;n" target="_blank" href="http://www.aragon.es/cinta">
                    <img src="http://idearagon.aragon.es/visor/images/Logo-CINTA.png" alt="Centro de informaci&oacute;n territorial de Arag&oacute;n" />
                    </a>
                    </td>
                </tr>
            </table>
    <h1 id="title" align="center">Atlas Herpetológico de Aragón</h1>
    <p id="shortdesc">
    </p>
    <table width="94%" style="margin-left: 3%">
    <tr>
    <td width="50%" valign="top">
    <div id="miMapa"></div>
    </td>
    <td>
    <div id="legend" width="50%" valign="top" style="height: 600px; overflow-x: hidden">


    <div class="legend_elem">
    <h3>Sapo corredor</h3>
    <img src="calamita_img.jpg" width="100%"/><br>
    <b>Leyenda</b>
    <table width="100%">
    <tr><td colspan="2">Presencia<br>(% respecto al total de anfibios)</td></tr>
    <tr><td width="10%" style="background: rgb(182, 237, 240)"></td><td>Baja</td></tr>
    <tr><td width="10%" style="background: rgb(116, 180, 232)"><td>Media</td></tr>
    <tr><td width="10%" style="background: rgb(31, 131, 224)"><td>Alta</td></tr>
```

```
    <tr><td width="10%" style="background: rgb(9, 9, 145)"><td>Muy alta</td></tr>
    </table>
    <table width="100%">
    <tr><td colspan="5">N&uacute;mero de individuos observados</td></tr>
    <tr>
    <td width="20%" align="center"><img src="grados/grado-1.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-2.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-3.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-4.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-5.png"/></td></tr>
    <tr>
    <td align="center">1-2</td>
    <td align="center">3-6</td>
    <td align="center">7-14</td>
    <td align="center">15-29</td>
    <td align="center">30-50</td></tr>
    </table>

    </div>

    <div class="legend_elem">
    <h3>Culebra viperina</h3>
    <img src="viperina.jpg" width="100%"/><br>
    <b>Leyenda</b>
    <table width="100%">
    <tr><td colspan="2">Presencia<br>(% respecto al total de reptiles)</td></tr>
    <tr><td width="10%" style="background: rgb(182, 237, 240)"></td><td>Baja</td></tr>
    <tr><td width="10%" style="background: rgb(116, 180, 232)"><td>Media</td></tr>
    <tr><td width="10%" style="background: rgb(31, 131, 224)"><td>Alta</td></tr>
    <tr><td width="10%" style="background: rgb(9, 9, 145)"><td>Muy alta</td></tr>
    </table>
    <table width="100%">
    <tr><td colspan="5">N&uacute;mero de individuos observados</td></tr>
        <tr>
    <td width="20%" align="center">
    <td width="20%" align="center">
    <td width="20%" align="center">
    <td width="20%" align="center">
    <td width="20%" align="center">
    <tr>
    <td align="center">1-2</td>
    <td align="center">3-4</td>
    <td align="center">5-7</td>
    <td align="center">8-13</td>
    <td align="center">14-34</td></tr>
    </table>
        </div>
    <div class="legend_elem">
    <h3>Culebra bastarda</h3>
    <b>Leyenda</b>
```

```
    <table width="100%">
    <tr><td colspan="2">Presencia<br>(% respecto al total de reptiles)</td></tr>
    <tr><td width="10%" style="background: rgb(182, 237, 240)"></td><td>Baja</td></tr>
    <tr><td width="10%" style="background: rgb(116, 180, 232)"><td>Media</td></tr>
    <tr><td width="10%" style="background: rgb(31, 131, 224)"><td>Alta</td></tr>
    <tr><td width="10%" style="background: rgb(9, 9, 145)"><td>Muy alta</td></tr>
    </table>
    <table width="100%">
    <tr><td colspan="5">N&uacute;mero de individuos observados</td></tr>
        <tr>
    <td width="20%" align="center"><img src="grados/grado-1.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-2.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-3.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-4.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-5.png"/></td></tr>
    <tr>
    <td align="center">1-2</td>
    <td align="center">3-4</td>
    <td align="center">5-9</td>
    <td align="center">10-17</td>
    <td align="center">18-33</td></tr>
    </table>

    </div>

    <div class="legend_elem">
    <h3>Sapo de espuelas</h3>
    <img src="espuelas_img.jpg" width="100%"/><br>
    <b>Leyenda</b>
    <table width="100%">
    <tr><td colspan="2">Presencia<br>(% respecto al total de anfibios)</td></tr>
    <tr><td width="10%" style="background: rgb(182, 237, 240)"></td><td>Baja</td></tr>
    <tr><td width="10%" style="background: rgb(116, 180, 232)"><td>Media</td></tr>
    <tr><td width="10%" style="background: rgb(31, 131, 224)"><td>Alta</td></tr>
    <tr><td width="10%" style="background: rgb(9, 9, 145)"><td>Muy alta</td></tr>
    </table>
    <table width="100%">
    <tr><td colspan="5">N&uacute;mero de individuos observados</td></tr>
        <tr>
    <td width="20%" align="center"><img src="grados/grado-1.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-2.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-3.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-4.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-5.png"/></td></tr>
    <tr>
    <td align="center">1-2</td>
    <td align="center">3-4</td>
    <td align="center">5-8</td>
    <td align="center">9-12</td>
    <td align="center">13-21</td></tr>
    </table>
```

```
    </div>
    <div class="legend_elem">
    <h3>Rana común</h3>
    <img src="perezi_img.jpg" width="100%"/><br>
    <b>Leyenda</b>
    <table width="100%">
    <tr><td colspan="2">Presencia<br>(% respecto al total de anfibios)</td></tr>
    <tr><td width="10%" style="background: rgb(182, 237, 240)"></td><td>Baja</td></tr>
    <tr><td width="10%" style="background: rgb(116, 180, 232)"><td>Media</td></tr>
    <tr><td width="10%" style="background: rgb(31, 131, 224)"><td>Alta</td></tr>
    <tr><td width="10%" style="background: rgb(9, 9, 145)"><td>Muy alta</td></tr>
    </table>
    <table width="100%">
    <tr><td colspan="5">N&uacute;mero de individuos observados</td></tr>
        <tr>
    <td width="20%" align="center"><img src="grados/grado-1.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-2.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-3.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-4.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-5.png"/></td></tr>
    <tr>
    <td align="center">1-2</td>
    <td align="center">3-6</td>
    <td align="center">7-14</td>
    <td align="center">15-29</td>
    <td align="center">30-48</td></tr>
    </table>

    </div>

<div class="legend_elem">
    <h3>Lagarto ocelado</h3>
    <img src="Timon_lepidus_BM.jpg" width="100%"/><br>
    <b>Leyenda</b>
    <table width="100%">
    <tr><td colspan="2">Presencia<br>(% respecto al total de reptiles)</td></tr>
    <tr><td width="10%" style="background: rgb(182, 237, 240)"></td><td>Baja</td></tr>
    <tr><td width="10%" style="background: rgb(116, 180, 232)"><td>Media</td></tr>
    <tr><td width="10%" style="background: rgb(31, 131, 224)"><td>Alta</td></tr>
    <tr><td width="10%" style="background: rgb(9, 9, 145)"><td>Muy alta</td></tr>
    </table>
    <table width="100%">
    <tr><td colspan="5">N&uacute;mero de individuos observados</td></tr>
    <tr>
    <td width="20%" align="center"><img src="grados/grado-1.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-2.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-3.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-4.png"/></td>
    <td width="20%" align="center"><img src="grados/grado-5.png"/></td></tr>
    <tr>
```

```
    <td align="center">1-2</td>
    <td align="center">3-4</td>
    <td align="center">5-7</td>
    <td align="center">8-13</td>
    <td align="center">14-27</td></tr>
    </table>

    </div>
    </div>
    </td>
       </tr>
       </table>

</body>
<footer>
    <p>Creado por Adrián Estrada</p>
    <p>Información de contacto:
    577096@unizar.es</a>
    </p>
</footer>
</html>
```