DIE UNSICHTBAREN VERSCHMUTZUNGEN

Ein Web Mapping Projekt

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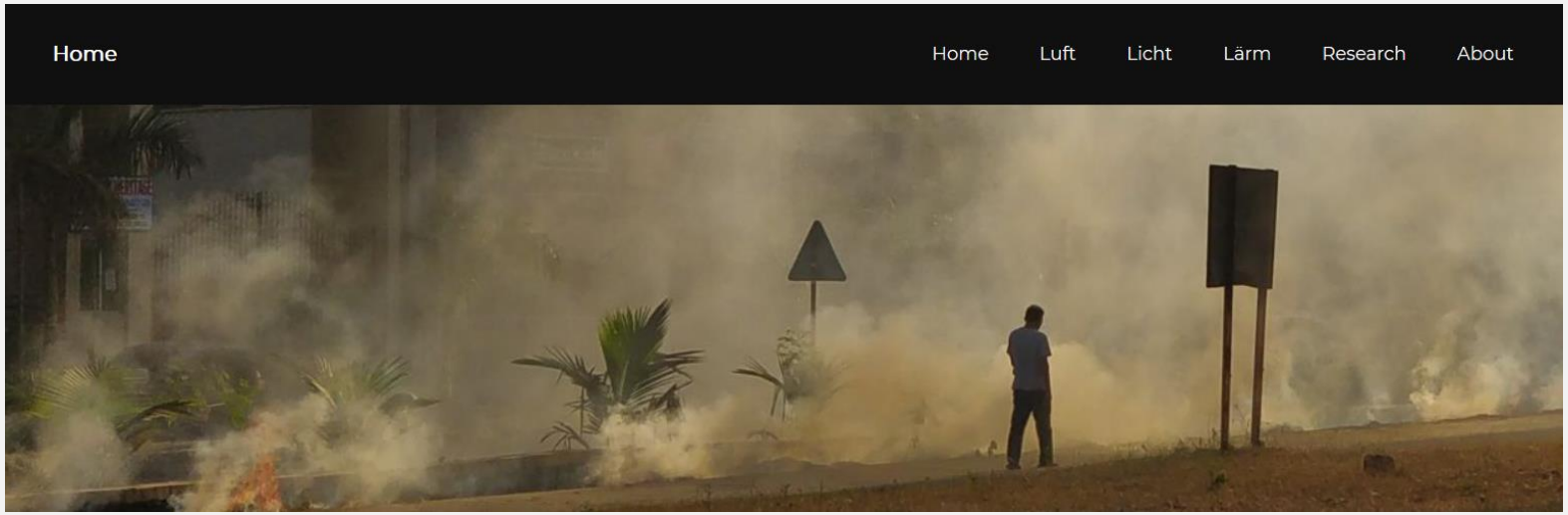
19. Juni 2019

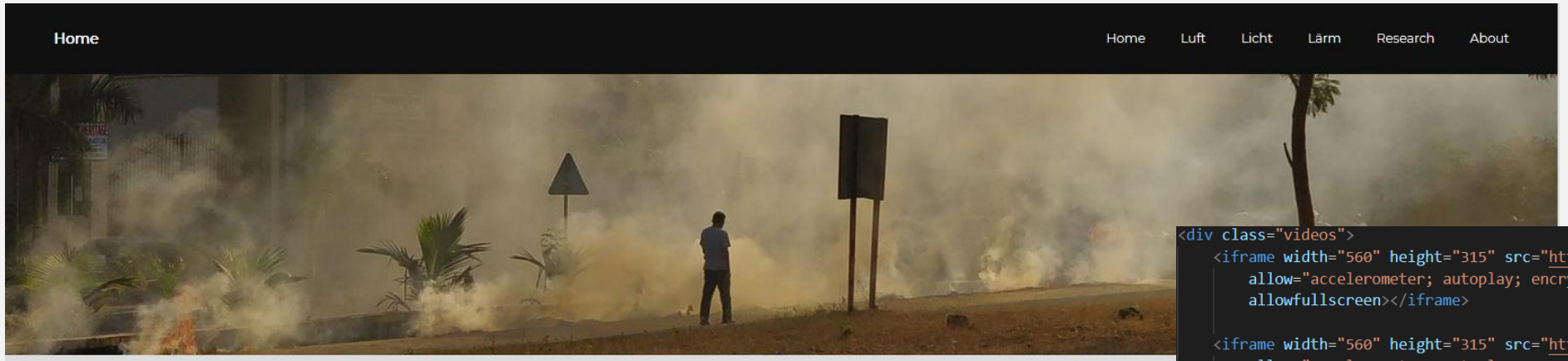
LAYOUT

```css
.header {
    margin: auto;
    height: 80px;
    display: block;
    background-color: #101010;
    width: 80vw;

}

.inner_header {
    width: 75vw;
    height: 100%;
    display: block;
    margin: 0 auto;
    background-color: #101010;
}

.logo_container {
    height: 100%;
    /* 100% vom Header */
    display: table;
    float: left;
}

.logo_container h1 {
    color: white;
    height: 100%;
    display: table-cell;
    vertical-align: middle;
    font-family: 'Montserrat';
    font-size: 2em;
}

.navigation {
    float: right;
    height: 60%;
}
.navigation a {
    height: 100%;
    display: table;
    float: left;
    padding: 0px 20px;
    text-decoration: none;
}

.navigation a:last-child {
    padding-right: 0;
}

.navigation a li {
    display: table-cell;
    vertical-align: middle;
    height: 100%;
    color: white;
    font-family: 'Montserrat';
    font-size: 15px;
}
```




```html
<div class="header" id="myheader">
    <div class="inner_header">
        <div class="logo_container">
            <h1> <span>Home</span></h1>
        </div>

        <ul class="navigation">
            <a href="index.html">
                <li> Home</li>
            </a>
            <a href="luft.html">
                <li> Luft</li>
            </a>
            <a href="licht2.html">
                <li> Licht</li>
            </a>
            <a href="laerm.html">
                <li> Lärm</li>
            </a>
            <a href="research.html">
                <li>Research </li>
            </a>
            <a href="about.html">
                <li> About</li>
            </a>

        </ul>
        <br>


    </div>

</div>
```

HOME




```
<div class="videos">
    <iframe width="560" height="315" src="https://www.youtube.com/embed/AURlFlAyXMQ" frameborder="0"
        allow="accelerometer; autoplay; encrypted-media; gyroscope; picture-in-picture"
        allowfullscreen></iframe>

    <iframe width="560" height="315" src="https://www.youtube.com/embed/tlw-WJQLEIU" frameborder="0"
        allow="accelerometer; autoplay; encrypted-media; gyroscope; picture-in-picture"
        allowfullscreen></iframe>

    <iframe width="560" height="315" src="https://www.youtube.com/embed/WxqFoGLFhfk" frameborder="0"
        allow="accelerometer; autoplay; encrypted-media; gyroscope; picture-in-picture"
        allowfullscreen></iframe>

</div>
<div class="text">Quellen: <a href="https://youtu.be/AURlFlAyXMQ">Youtube</a></div>
```

Die unsichtbaren Verschmutzungen

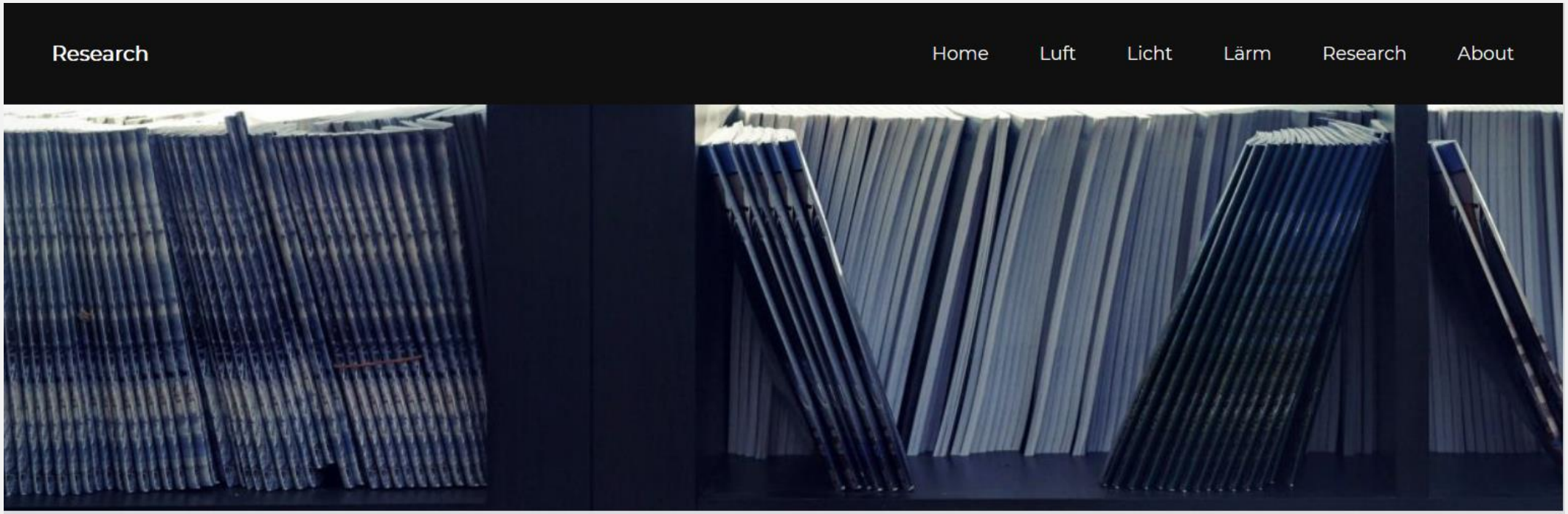
Die Verschmutzungen Luft, Licht und Lärm werden oft im ersten Moment nicht als Verschmutzung wahrgenommen. Diese Themengebiete schlagen aber schnell auf
Diese sind mehr betroffen, als doe Bewohner der ländlichen Räume.
Diese Verschmutzungen werden auf dieser Webseite genauer erläutert und mit HIlfe von interaktiven Karten visualisiert

Zum Einstimmen in das Thema:

Quellen: Youtube

github.com

RESEARCH



Nature (2018): Filthy air is a global disgrace. In: Nature 561, 285. Read Editorial.

Nature (2019): Stop denying the risks of air pollution. In: Nature 568, 433. Read Editorial.

Contestabile, M. (2019): Air pollution regulation. In: Nature Sustainability 2, 10.

Longcore, T.; Rich, C. (2004): Ecological light pollution. In: Front Ecol Enviro. Vol 2. Issue 4. 191-198.

Chepesiuk, R. (2009): Missing the dark: Health Effects of Light Pollution

ABOUT

About Us | Home

Die Happyhackers

Isabelle Beutelspacher

Hauptaufgabengebiet: Lärm

E-Mail
github.com

Alexander Höfner

Hauptaufgabengebiet: Luft

E-Mail
github.com

Robin Kohrs

Hauptaufgabengebiet: Licht

E-Mail
github.com

github.com

```
<table>
  <tr>
    <td><img src="images/happyhackers/isi.jpg" height="200" width="200" border="1px"></td>
    <td>
      <p class="strong">Isabelle Beutelspacher</p>
      <p>Hauptaufgabengebiet: Lärm</p>
      <br>
      <br>
      <br>

      <address>
        <a href="mailto:Isabelle.Beutelspacher@student.uibk.ac.at"><i class="fas fa-envelope"></i>E-Mail</a><br>
        <a href="https://github.com/isabellebeutelspacher"><i class="fab fa-github"></i>github.com</a>
      </address>
    </td>

  </tr>
  <tr>
    <td><img src="images/happyhackers/alex.jpg" height="200" width="200" border="1px"></td>
    <td>
      <p class="strong">Alexander Höfner</p>
      <p>Hauptaufgabengebiet: Luft</p>
      <br>
      <br>
      <br>

      <address>
        <a href="mailto:Alexander.Hoefner@student.uibk.ac.at"><i class="fas fa-envelope"></i>E-Mail</a><br>
        <a href="https://github.com/alexhoefner"><i class="fab fa-github"></i>github.com</a>
      </address>
    </td>
  </tr>
  <tr>
    <td><img src="images/happyhackers/robin.jpg" height="200" width="200" border="1px"></td>
    <td>
      <p class="strong">Robin Kohrs</p>
      <p>Hauptaufgabengebiet: Licht</p>
      <br>
      <br>
      <br>

      <address>
        <a href="mailto:Robin.Kohrs@student.uibk.ac.at"><i class="fas fa-envelope"></i>E-Mail</a><br>
        <a href="https://github.com/robinkohrs"><i class="fab fa-github"></i>github.com</a>
      </address>
    </td>
  </tr>
</table>
```

LUFT, LÄRM UND LICHT

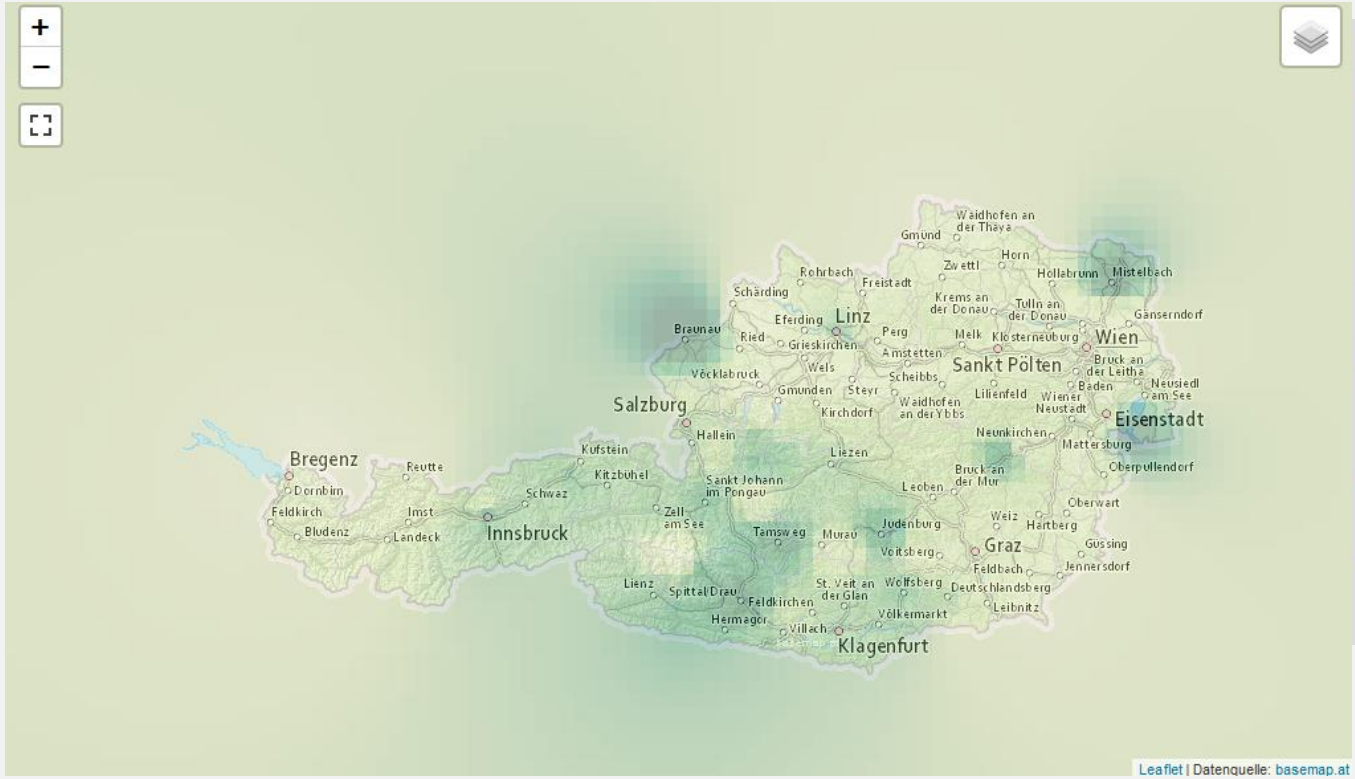
happyhackerwebmapping.github.io/

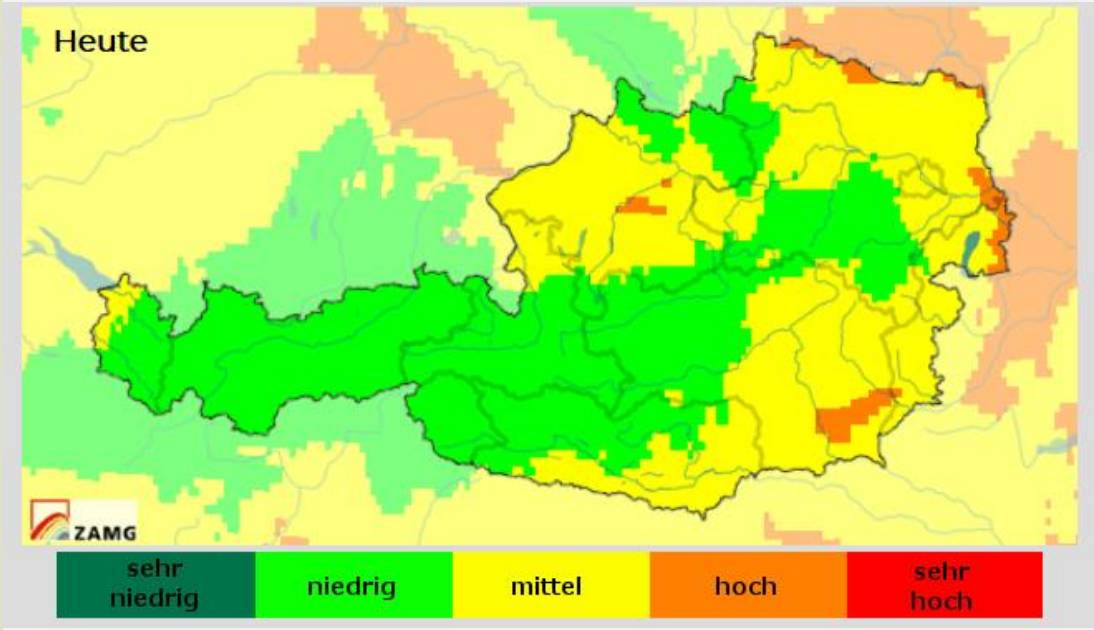
LUFT

```
// Jsonp abfragen
let jsonpResponse = function (data) {
    let ozonPoints = [];


    // console.log(data);
    for (let i in data) {
        // console.log(data[i].lat);
        let lat = data[i].lat;
        let lng = data[i].lon;
        let ozon1h = data[i].ozon1h;
        let ozon8h = data[i].ozon8h;
        let ozon1hmax = data[i].ozon1hMax;
        let name = data[i].name;
        let timestamp = data[i].timestamp_utc;


        //Thu, 13 Jun 2019 23:00:00 GMT
        //Zeitzone entfernen
        let date = timestamp.substring(0, timestamp.length-12);
        //Uhrzeit auslesen
        let time = timestamp.substring(timestamp.length-12, timestamp.length-4);



        // Marker


        let ozonMarker = L.marker([lat, lng], {}).addTo(karte)
```

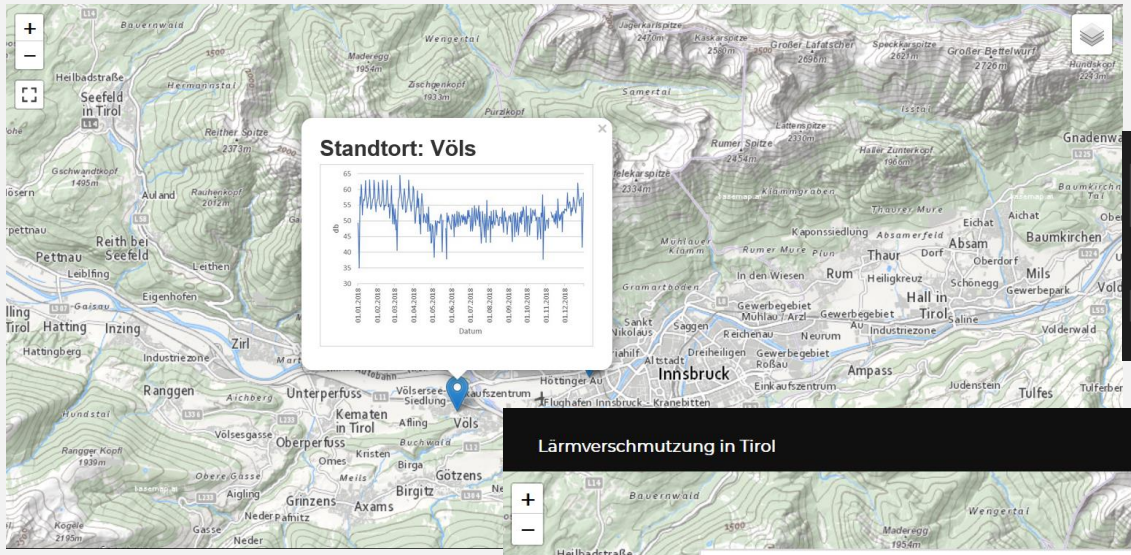
```
        let ozonMarker = L.marker([lat, lng], {}).addTo(karte)

        ozonMarker.bindPopup(`
        <h4 class = "marker" >Name: ${name}</h4>

        <p class = "marker" >
        <strong>Datum:</strong> ${date}<br>
        <strong>Uhrzeit:</strong> ${time}<br>
        <strong>Ozon 1h max:</strong> ${ozon1hmax}<br>
        <strong>Ozon 1h:</strong> ${ozon1h}<br>
        <strong>Ozon 8h:</strong> ${ozon8h}</p>
        `).addTo(markergruppe);

        markergruppe.addTo(karte)


        // Heatmap

        ozonPoints.push([lat, lng, parseFloat(ozon1h/300)]);

        //console.log(ozonPoints)



}
L.heatLayer(ozonPoints, // lat, lng, intensity

{
    radius: 50,
    minOpacity: 0.2,
    blur: 15,
```

LUFT

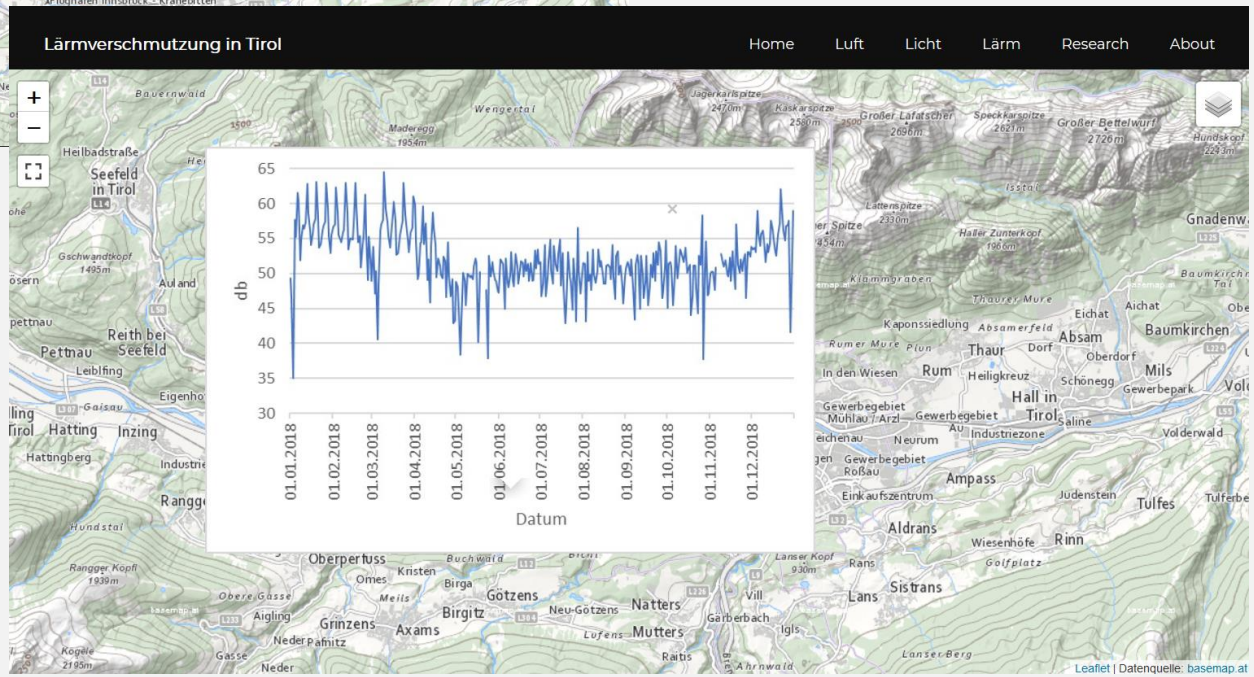

Waidhofen an der Thaya
Gmünd
Zwettl
Horn
Hollabrunn
Mistelbach
Rohrbach
Freistadt
Schärding
Krems an der Donau
Tulln an der Donau
Ganserndorf
Eferding
Linz
Braunau
Ried
Perg
Melk
Klosterneuburg
Wien
Grieskirchen
Amstetten
Sankt Pölten
Bruck an der Leitha
Vöcklabruck
Wels
Scheibbs
Baden
Neusiedl am See
Gmunden
Steyr
Lilienfeld
Wiener Neustadt
Salzburg
Kirchdorf
Waidhofen an der Ybbs
Eisenstadt
Hallein
Neunkirchen
Mattersburg
Kufstein
Liezen
Bregenz
Reutte
Kitzbühel
Bruck an der Mur
Oberpullendorf
Dornbirn
Sankt Johann im Pongau
Leoben
Schwaz
Oberwart
Feldkirch
Imst
Zell am See
Weiz
Hartberg
Innsbruck
Bludenz
Landeck
Tamsweg
Murau
Judenburg
Graz
Güssing
Voitsberg
Feldbach
Jennersdorf
Lienz
Spittal/Drau
St. Veit an der Glan
Wolfsberg
Deutschlandsberg
Feldkirchen
Leibnitz
Völkermarkt
Hermagor
Villach
Klagenfurt
Leaflet | Datenquelle: basemap.at


Heute
ZAMG
sehr niedrig
niedrig
mittel
hoch
sehr hoch

LÄRM




```
.zoom {
    background-image: "images/laerm/allerheiligen.jpg""images/laerm/ursulinen.jpg""images/laerm/voels.jpg";
    transition: transform .2s;
}
.zoom:hover {
    transform: scale(2);
}
```



LÄRM

Monatsberichte

monatlich erstellt vom Land Tirol

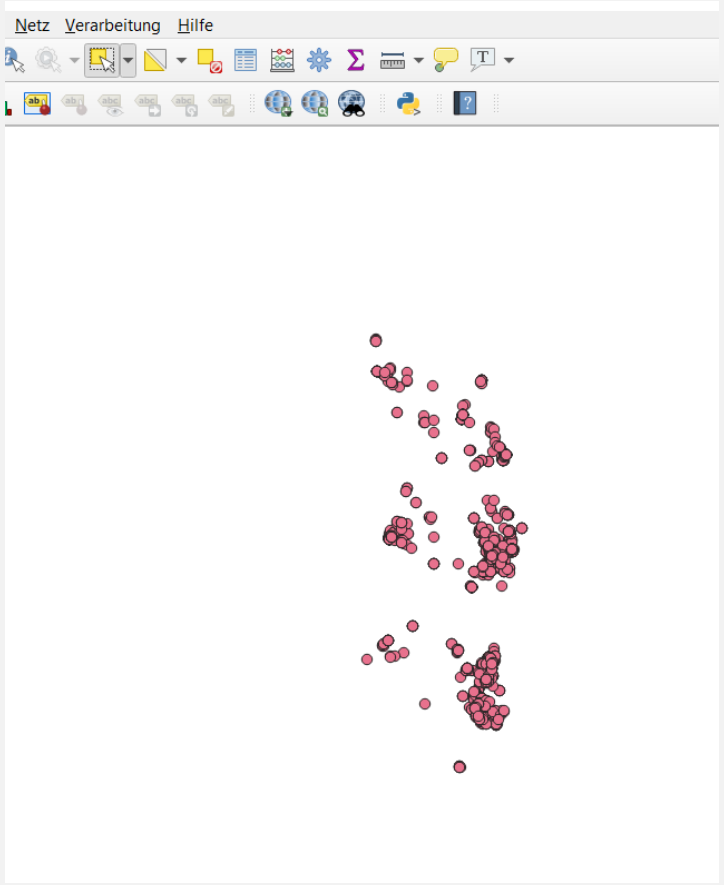
Jänner 2019 | Februar 2019 | März 2019 | April 2019 | Mai 2019

```
<h4>Monatsberichte </h4>
<p>monatlich erstellt vom <a href="https://www.tirol.gv.at/arbeit-wirtschaft/esa/laerm/fluglaerm/">Land Tirol</a></p>
<div class="box1"><img src="icons/pdf.png"><a href="pdfs/Monatsbericht_Jaenner_2019.pdf">Jänner 2019</a></div>
<div class="box2"><img src="icons/pdf.png"><a href="pdfs/Monatsbericht_Feber_2019.pdf">Februar 2019</a></div>
<div class="box3"><img src="icons/pdf.png"><a href="pdfs/Monatsbericht_Maerz_2019.pdf">März 2019</a></div>
<div class="box4"><img src="icons/pdf.png"><a href="pdfs/Monatsbericht_April_2019.pdf">April 2019</a></div>
<div class="box5"><img src="icons/pdf.png"><a href="pdfs/Monatsbericht_Mai_2019.pdf">Mai 2019</a></div>
```

```
.box1, .box2, .box3, .box4, .box5  {
    float: left;
    width: 20%;
    height: 18%;
    margin-right: auto;
    padding: 20px;
    background: rgb(200, 200, 200);
    border-style: solid;
    border-color:  gainsboro;
    border-width: 10px;
}
```

LICHT

```
// create the GeoJSON layer
let citiesatNight = L.geoJSON(GLOBEATNIGHT, myLayerOptions)
let sqm = L.geoJSON(SQM, mysqmLayerOptions)


function createCustomIcon(feature, latlng) {
    let myIcon = L.icon({
        iconUrl: 'icons/milkyway_icon.png',
        iconSize: [25, 25],
        shadowSize: [35, 20],
        iconAnchor: [12, 12],
        shadowAnchor: [12, 6],
        popupAnchor: [0, 0]
    })
    let marker = L.marker(latlng, {
        icon: myIcon
    })
    marker.bindPopup(`<h3> Cloud Cover: </h3>${feature.properties.CloudCover}<br>
    <h3>Limiting Mag </h3> ${feature.properties.LimitingMag} `)
    //console.log(feature.geometry.coordinates)
    return marker
}


function createCustomIcon2(feature, latlng) {
    let myIcon2 = L.icon({
        iconUrl: 'icons/star.png',
        iconSize: [25, 25],
        shadowSize: [35, 20],
        iconAnchor: [12, 12],
        shadowAnchor: [12, 6],
        popupAnchor: [0, 0]
    })
    let marker2 = L.marker(latlng, {
        icon: myIcon2
    })
    marker2.bindPopup(`<h5> UT_datetime: </h5>${feature.properties.UT_datetime}<br>
    <h5>Brightness </h5> ${feature.properties.Brightness} <h5> Conditions </h5> ${feature.properties.Conditions} `)
```



https://www.globeatnight.org/webapp/

- http://unihedron.com/projects/darksky/sqmback.jpg