**Issue Summary**

* **AGS in SH 1994**
* **Sachsen Anhalt do not sum to 2014**

1. **Duplicate AGS in SH 1994**

* This seems to have happened in the digitalization. For instance, Marnerdeich (which was digitalized as Harnerdeich) should have Gemeindekennziffer == 51 073 based on raw PDFs but was digitized as 51 07**5**, which is the (correct) GKZ of Neuenkirchen. I went through and fixed the duplicated AGS by hand in the excel sheets, but here we should do some more robustness checks to make sure we spot at least a majority of the digitalization mistakes.
* Heldorf should be Meldorf and GKZ == 51 074, not 51 07**6**
* Odderade == 51 083, not 51 085
* Klappholz == 59 049, not 59 019
* Rabel == 59 154, not 59 159
* Hennstedt == 61 036, not 61 056
* I’ve gone through and checked the AGS in the digitized data where possible and found a few more mistakes than showed up in the duplicates file, but the fact that the digitization seems to have picked up a lot of incorrect digits makes me worried for the actual election data. We should talk about this.

1. **Bremen**

* We do indeed have Bremerhaven and Bremen Stadt, so I left those two in and removed Bremen Land from the data.

1. **RLP 2004**

* AGS fixed, as far as I can tell.

1. **Berlin**

* Removed Erststimmen

1. **Sachsen**

* Removed duplicates

**Other AGS issues**

* Bayern: fixed AGS for Städte; removed LK and Regions/State
* Sachsen-Anhalt:
  + AGS have changed in 2014, but pre-2014 election results included an identifier for AGS2014 and Gemeinde2014. So I summed election results to AGS2014, but we should note that elections weren’t actually held on that level in all cases.
* Mecklenburg-Vorpommern: AGS changed in 2011. Just flagging this.
* Sachsen: AGS changed a couple of times, as far as I can tell. Once between 94 and 99 and then again between 04 and 09.

**Other issues**

* NRW: election results are only for kreisangehörige Gemeinden; kreisfreie Städte are not in the data. I found the file for kreisfreie Städte and processed it in the main R file.