**Initial Data:**

1. Thyroid incidence and all cancers combined, 2001, by sex and age: 0, 1-4, 5-9… 85+
2. 2001 Census population: by sex, single age group, 85+
3. District shape file
4. Settlement shape file
5. Settlement dosage data by sex and age.

All these data sets have different # of units and different Ids

**Part 6. Spatial interpolation of settlement dosage data to get district mean doses and plus interpolation of population weighted doses at the age 15-19**

dose\_incidence\_shapefile.RData – final data file

**Part 7. Measuring spatial autocorrelation, Moran I, and Lisa plotting**

Check autocorrelation, Moran I plot, Lisa plot

**Part 9. Calculating district average thyroid doses in 1986 by six population percentiles (0, .10, .25, .50, .75, .90, 1)**

**Part10. Step bar plot for dosage data (1986 dosage15+ by six population percentiles)**

**Part11. Calculating unsmoothed district SIRs of thyroid cancer 15+ in 2001 by six population percentiles**

**Part12. Step bar plot for unsmoothed SIRs at the age 15+ in 2001 by six population percentiles**

**Part 14. Calculating Ukraine’s population weights and standardized incidence rates at the age 15+**