

Data in the Israeli Pollution Repository

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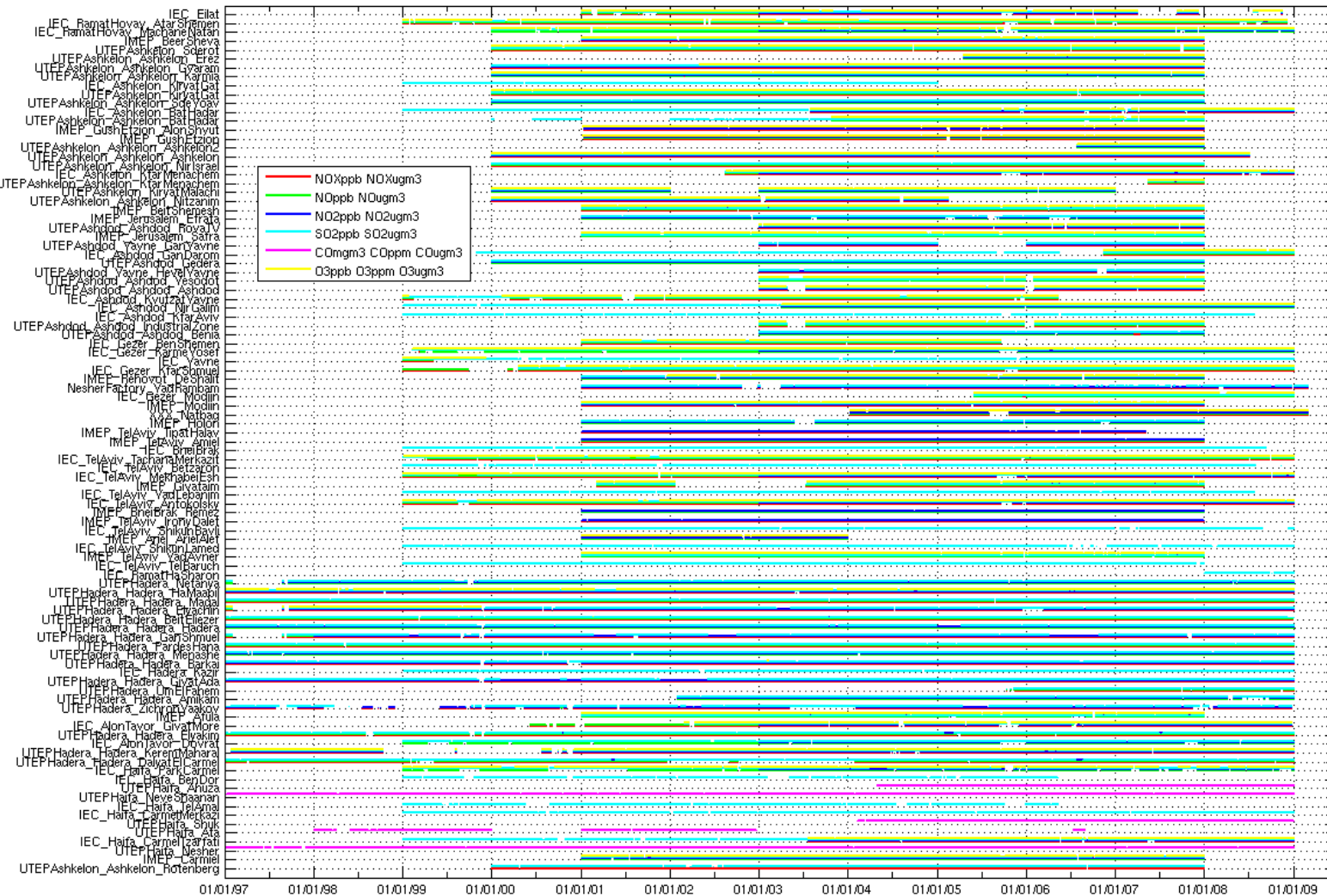
- heterogeneous textual data from several authorities
 - Ministry of the Environment,
 - Electric company,
 - three different Unions of Towns,
 - Ben Gurion Airport
- measurements from 114 stations, within the years 1997-2009:
 - meteorological: T, wind speed, barometric pressure, solar radiation, humidity, precipitation;
 - common inorganic pollutants: CO, NO_x, SO₂, O₃;
 - particulate: PM2.5, PM10
 - for a minority of stations: organic contaminants
- most data available as half-hour averages
- unvalidated, sometimes lacunary data

Nonuniform geographic coverage:

- stations mainly in the coastal plain
- stations near major cities
- stations near major power plants

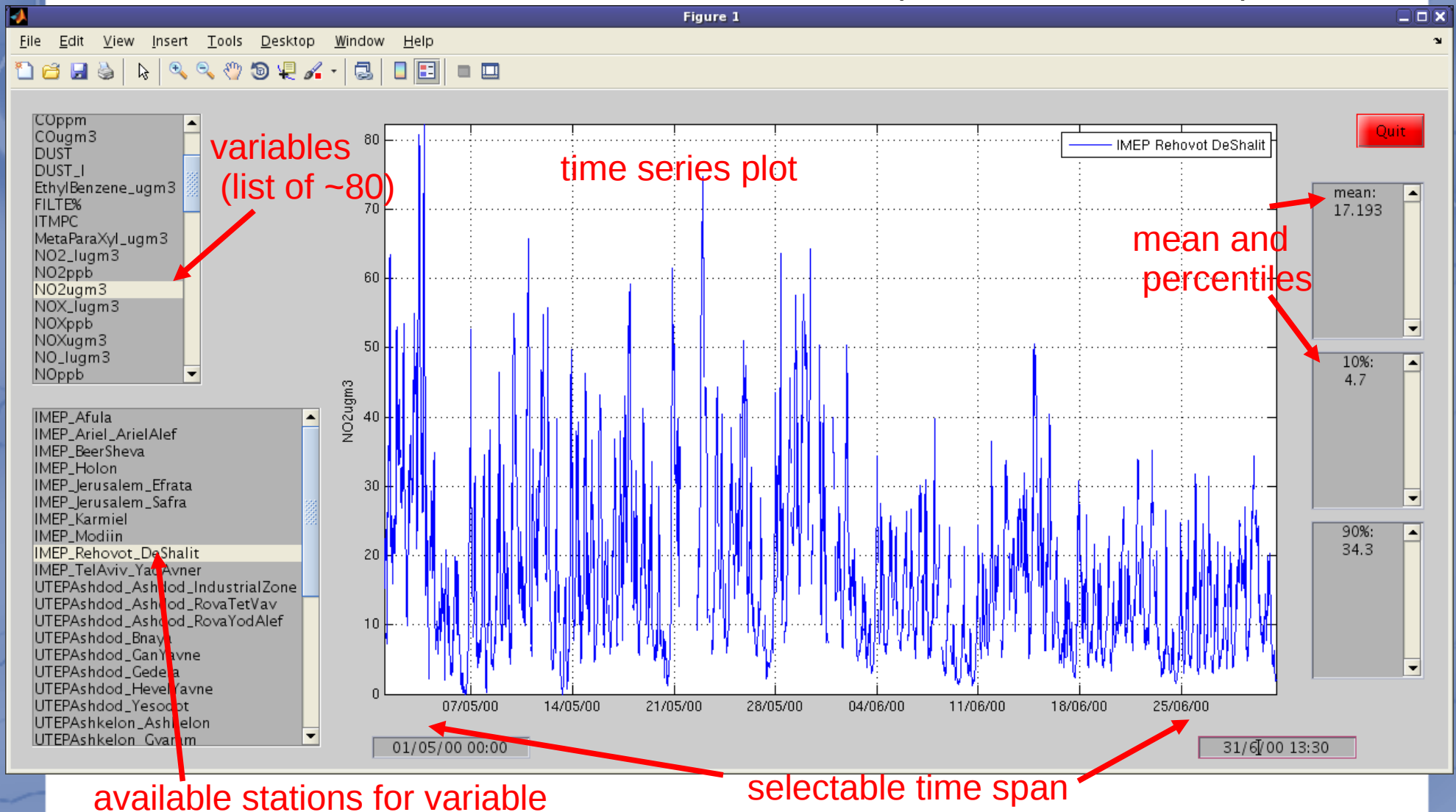


nonuniform temporal coverage (maintenance breaks, stations working on different time spans)

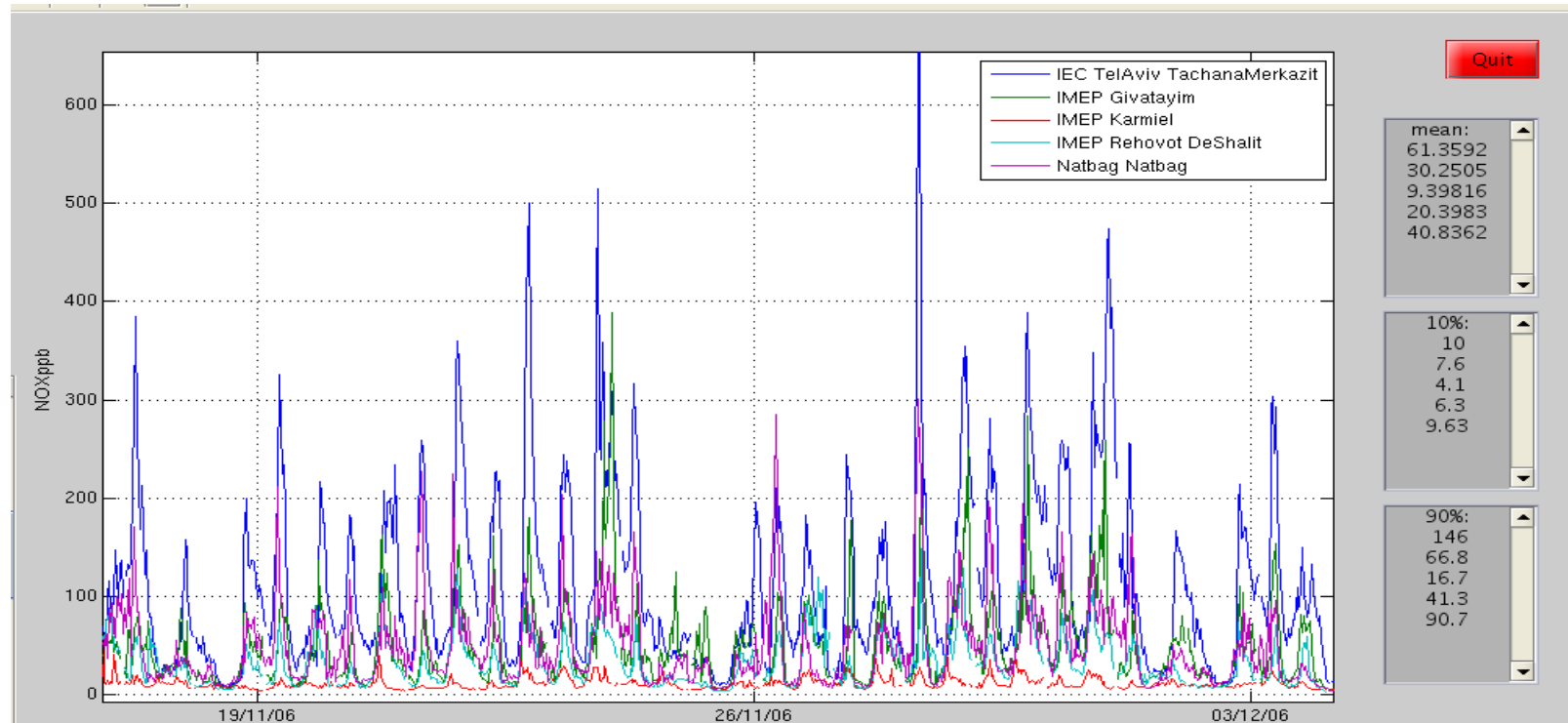


Work done so far:

- common programming framework for incorporating all data
- Matlab procedures for exploring, mining and preliminary verifications
- Matlab infrastructure for data validation and computation of statistical quantifiers

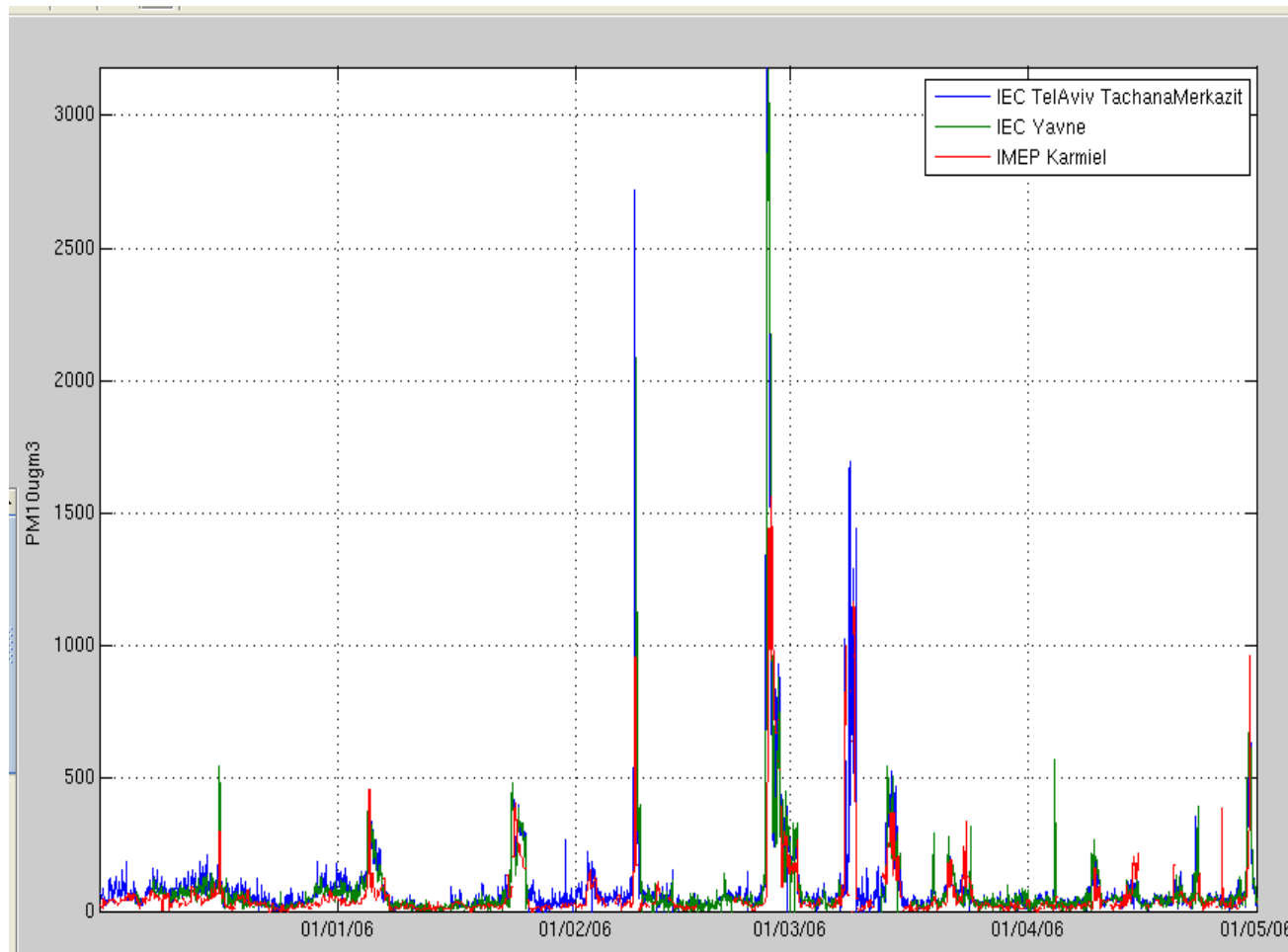


Example: diurnal cycles of NO_x, different locations



Saturdays

Example: dust events are well correlated across country



6 months time span

Example: yearly cycle of ozone

