1-1 1 Topography
Seoul is surrounded by Mt. Naksonai (111m) in the East, Mt. Insamul (328m) in the West, Mt. Namhansanseong (329m) in the South and Mt. Bukak (342m) in the North. The royal palaces of Joseon Dynasty and major facilities of Hanyang University are located in the basin. There are Mt. Bukhansan (827m) and Mt. Dobongsan (700m) in the North, Mt. Suraksan (639m) and Mt. Bulamsan (939m) in the northeast, and Mt. Gwanaksan (272m) and Mt. Chonggyesan (970m) in the South, bordering on Danyang-dong. The Han river flows from the east to the west between the mountains.

There are also tributary streams of Han river running between the mountains, such as Cheonggyecheon, Jungnangcheon, Bugwagwanchon, Anyangcheon, Tancheon and Yonggyecheon.
1-2 TEMPERATURE AND PRECIPITATION

As Seoul’s climate lies between subtropical climate of the Southern region and subarctic climate of the Northern region, it has four distinct seasons, and wide annual range of temperature. It also shows the continental climate of three cold days followed by four warm days.

According to 2005 horizontal temperature distribution by season observed in 10 Automatic Weather Stations (AWS) in Seoul, the temperature goes up in the downtown, and goes down in the outskirts. In particular, the temperature is remarkably high in western regions such as Yangjungno and Yangjeon, northern regions such as Maypo and Dongdaeman, and southern regions such as Seocho and Gangnam. This is attributable to the urban heat island effects, and is closely related with increasing high-rise buildings and paved roads as well as reduced green zones.

Figure 2. Monthly Mean Temperature & Precipitation, 2005

Thematic Maps of Seoul 2007 | 20
1-3. Wind

The wind direction in a city is closely related to the movement of pollutants, and the pollution density is likely to grow where wind hardly blows. The data of AWS in 2005 shows an annual wind speed of 3.1 m/s, and the wind speed is the highest in March and April, and the lowest in October.

The northwesterly wind is the most common type of wind, and the west wind, south-west wind, northwesterly wind and north-westerly wind are a prevailing wind in spring, summer, autumn and winter, respectively. The examination of 2005 seasonal wind shows a high rate of the northwesterly wind in autumn and winter.

Seasonal wind along the Han river is predominant, and the wind moves along Jungangcheon Stream and Tanchon Stream. The wind blowing along Jungangcheon Stream meets valley winds formed in Mt. Dobongsan, Mt. Achasan and Mt. Suraksan, showing some vortex phenomenon in Sanggye-dong.