

# Water Data Analysis

# Water Data

## Customer

- Total 25,310 customers
- Living in 1,053 streets
- 2,424 postcodes

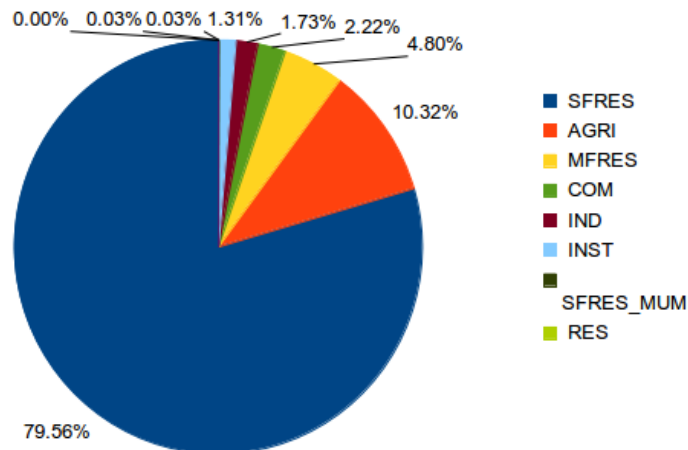
## Meter Reading Time-series Fact

- Time-series: Sept 1, 2012~Aug. 31, 2013
- 215,172,496 hourly data points (roughly 10GB)

## Customer Group

### 9 customer groups

CustomerGroup	Group Size
SFRES	20,136
AGRI	2,612
MFRES	1,215
COM	561
IND	438
INST	332
SFRES_MUM	8
RES	7
INSTITUTIONAL	1
	25,310

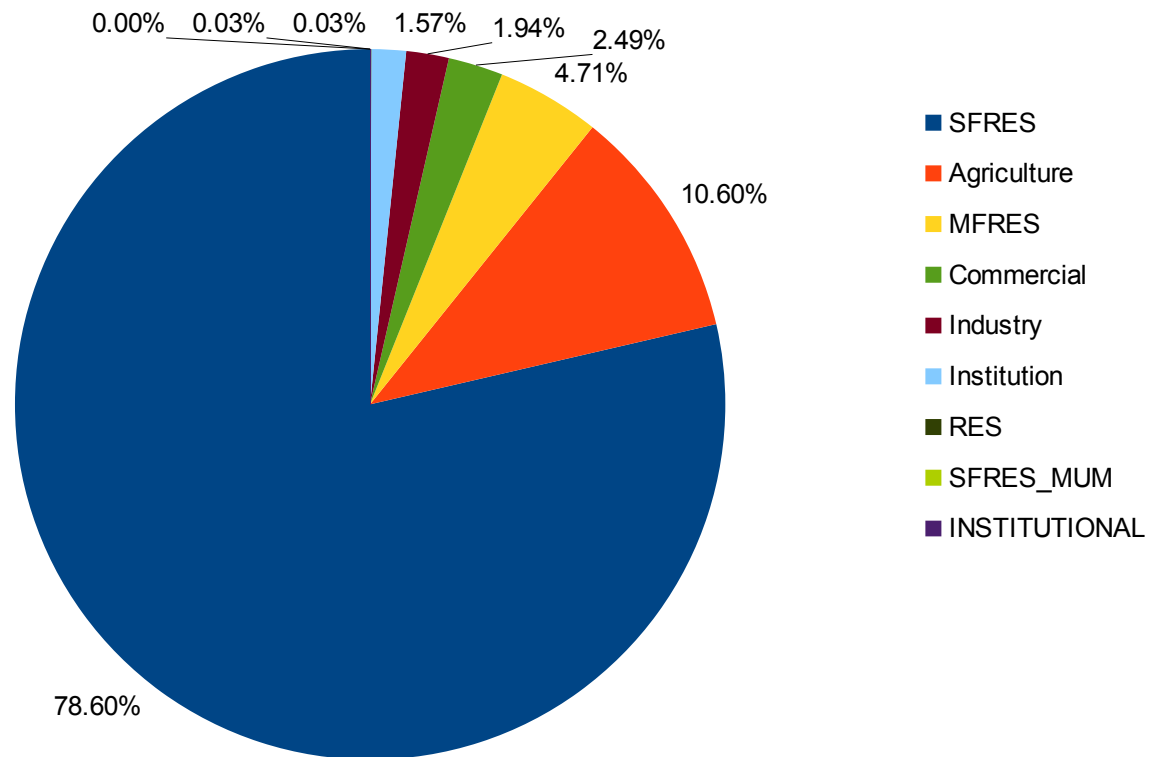


## Meter

- 25,858 meters
- Install location (latitude, longitude)

# Water Data

- 215,172,496 time-series data points distribution on Customer Groups



# Weather Data

- The hourly resolution weather data from Environment Canada (<https://weather.gc.ca>)

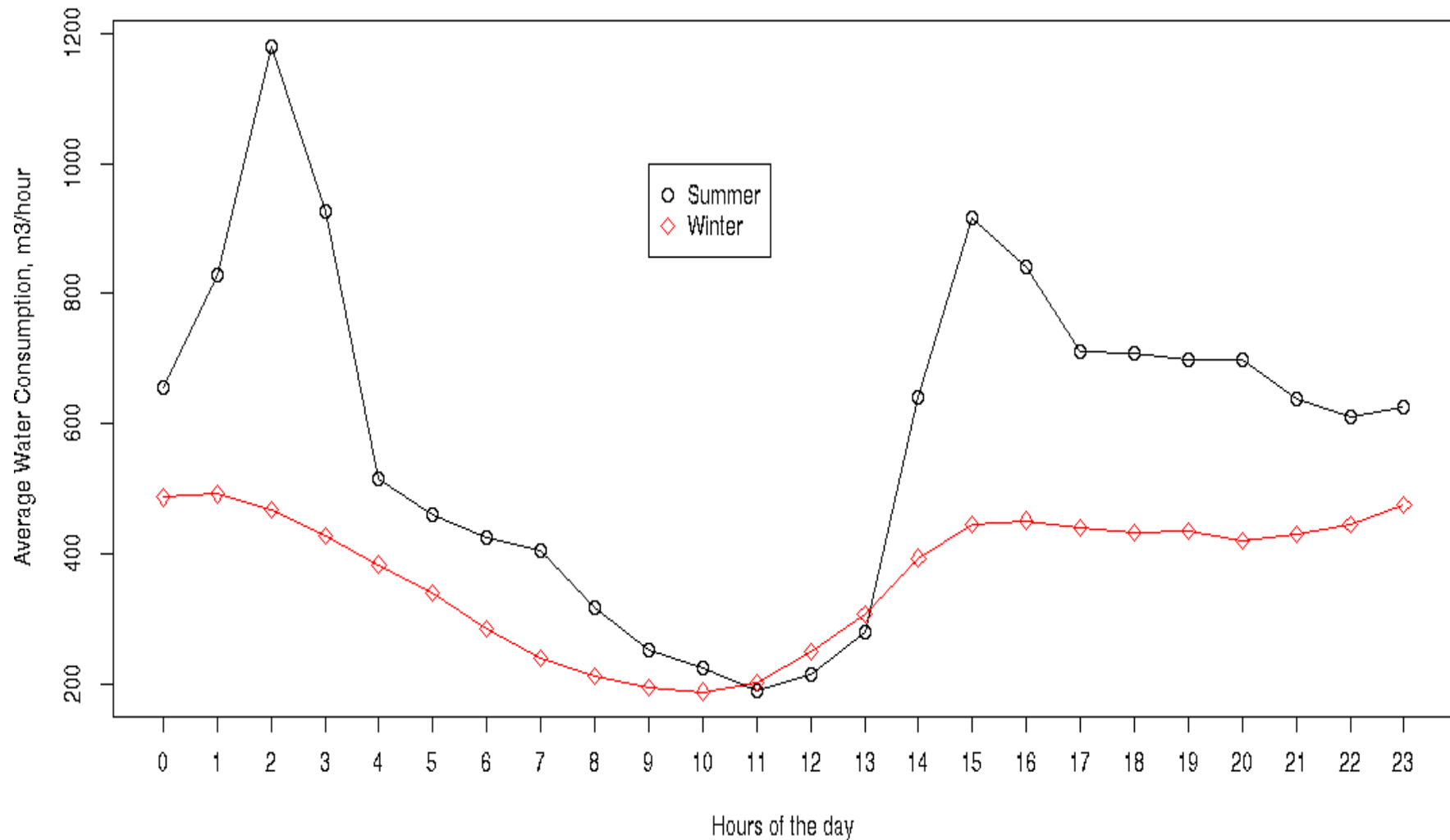
Readtime	Temperature	DewPointTemperature	RelativeHumidity	WindDirection	WindSpeed	Weather
2012-09-01 00:00:00	9.7	7.5	86	33	4	NA
2012-09-01 01:00:00	9.6	8.1	90	35	4	Mainly Clear
2012-09-01 02:00:00	9.7	7.8	88	1	5	NA
2012-09-01 03:00:00	8.4	7	91	30	5	NA
2012-09-01 04:00:00	8.9	7.2	89	32	5	Clear
2012-09-01 05:00:00	8	6.3	89		0	NA
2012-09-01 06:00:00	7.7	6.5	92		0	NA
2012-09-01 07:00:00	10.2	8	86		0	Mainly Clear

# Explore Water Time-series Data

- Demo

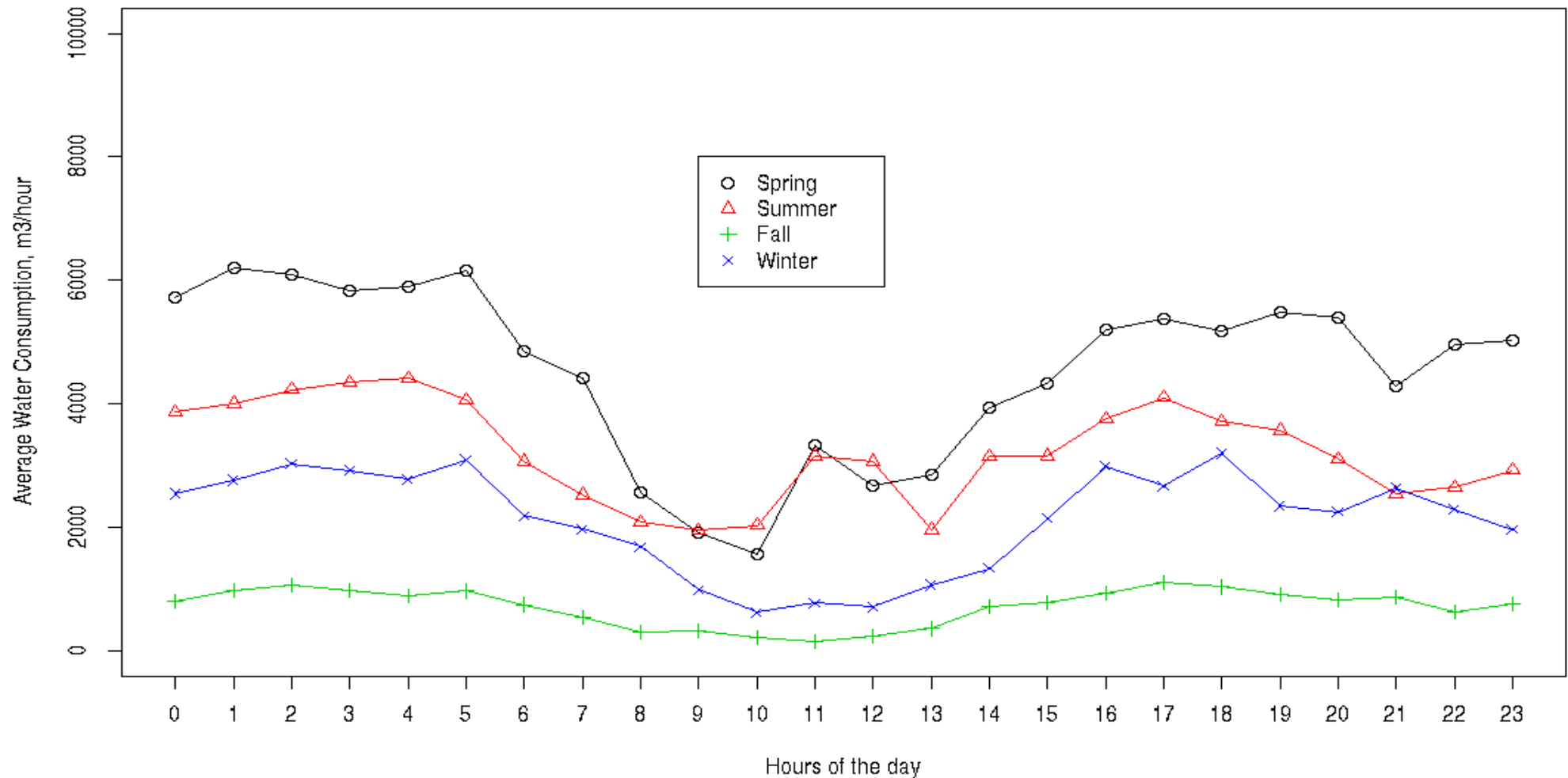
# The average daily water consumption of Agriculture

Agriculture Water Consumption of the day



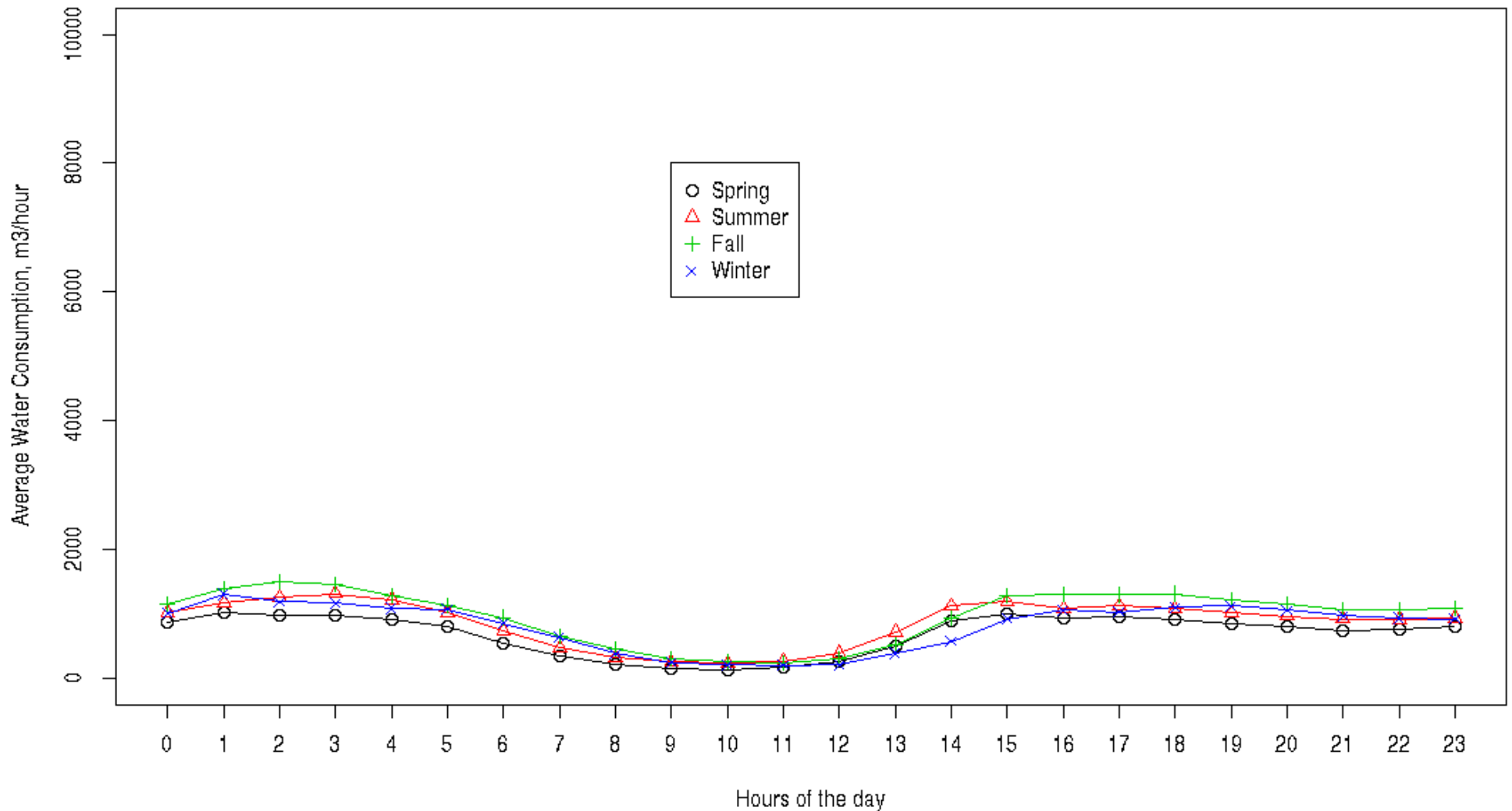
# The average daily water consumption of MFRES

MFRES Water Consumption of the day



# The average daily water consumption of SFRES

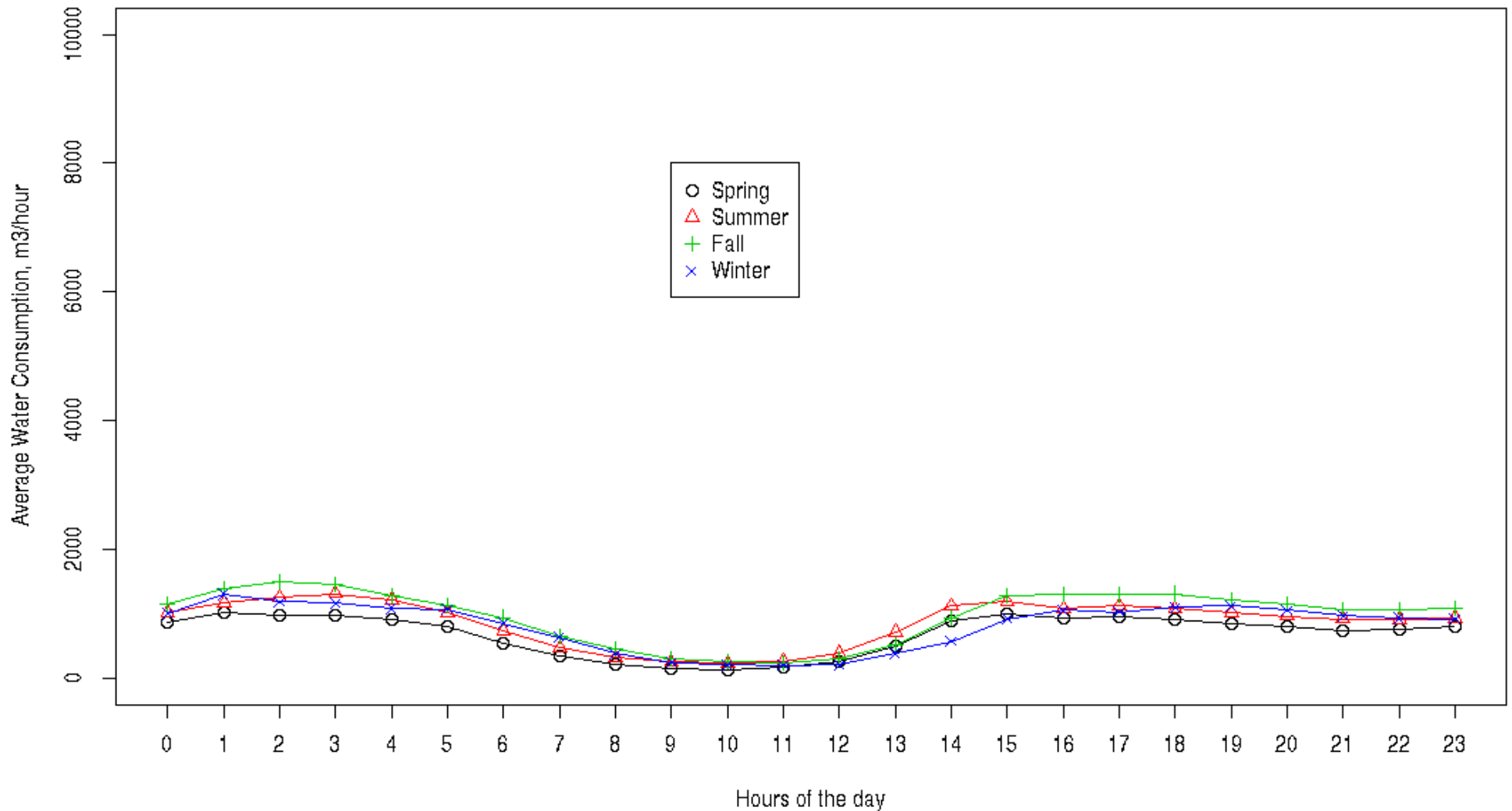
SFRES Water Consumption of the day





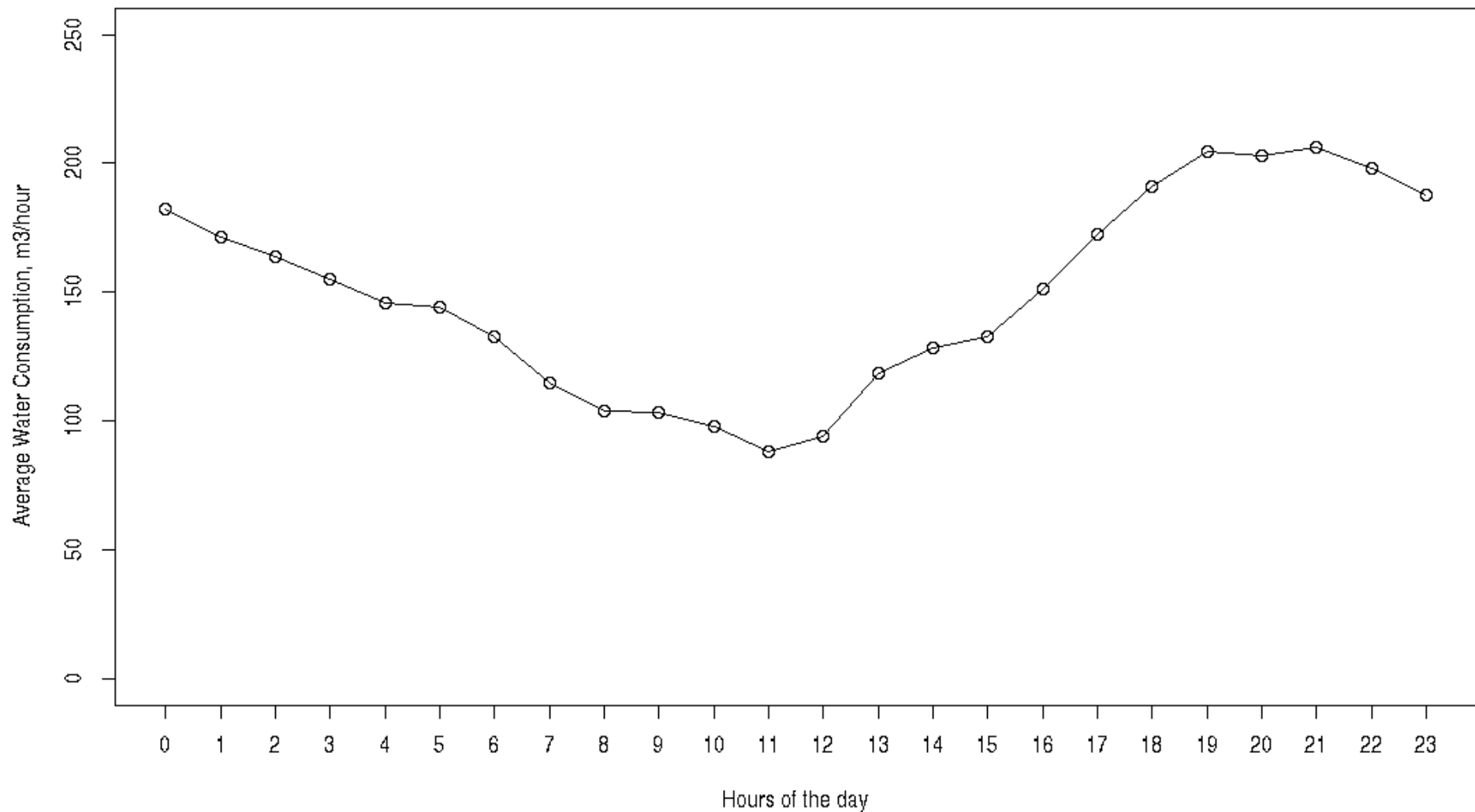
# The average daily water consumption of SFRES

SFRES Water Consumption of the day



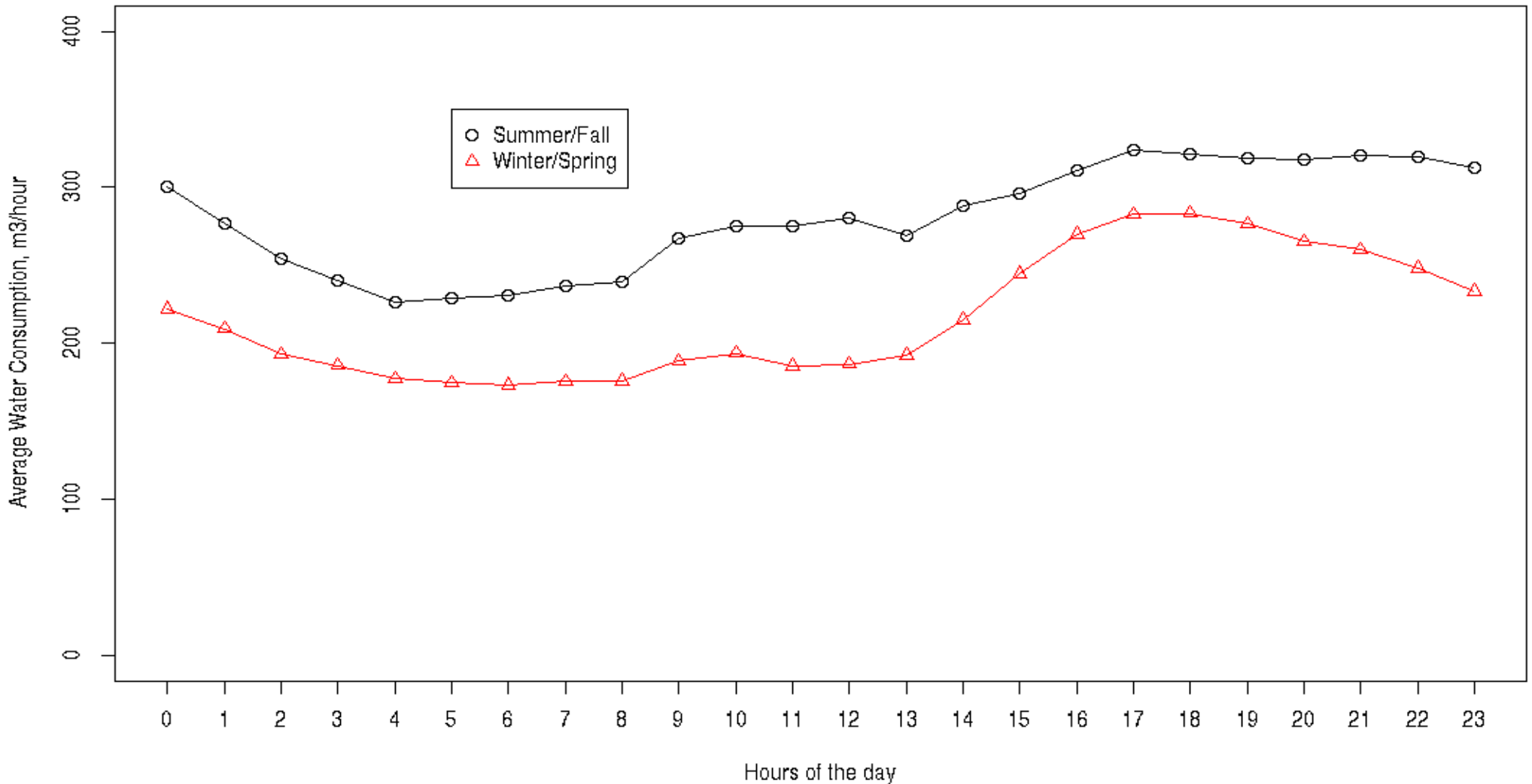
# The average daily water consumption of COM

COM Water Consumption of the day



# The average daily water consumption of IND

IND Water Consumption of the day



# The average daily water consumption of INST

INST Water Consumption of the day

