

8.11.2→SQL→Commands

```
CREATE TABLE discoveries (
    id INT NOT NULL IDENTITY,
    idMushroom INT,
    dateDiscovery DATE,
    geoint GEOGRAPHY,
    x NUMERIC(4),
    y NUMERIC(4),
    CONSTRAINT pkDiscovery PRIMARY KEY(id),
    CONSTRAINT fkDiscovery FOREIGN KEY (idMushroom) REFERENCES mushrooms
);

INSERT INTO dbo.discoveries (idMushroom, dateDiscovery, geoint, x, y)
VALUES(1, CONVERT(DATE, '14.04.2018', 104), geography::STPointFromText('POINT(13.579347 46.743941)', 4326), 332, 122);
```

MSDN - Doc IS WRONG!!!

Longitude Latitude SRID

8.11.3→ADO.Net

```
public void AddDiscovery(Discovery d)
{
    SqlCommand cmd = new SqlCommand(INSERT_DISCOVERY, conn, trx);

    cmd.Parameters.Add("idMushroom", SqlDbType.Int).Value = d.MushroomFound.Id;
    cmd.Parameters.Add("dateDiscovery", SqlDbType.Date).Value = d.DateOfDiscovery;
    SqlParameter para = new System.Data.SqlClient.SqlParameter
    {
        ParameterName = "geoint",
        SqlDbType = System.Data.SqlDbType.Udt,
        UdtTypeName = "geography",
        Value = SqlGeography.Point(d.PositionOfDiscovery.Latitude, d.PositionOfDiscovery.Longitude, 4326) //!!!reverse order lat/long! compared with SQL-POINT!!!
        //SRID 4326...Definition of Earth-Ellipsoid of 1984, Greenwich, unit = Meter
    };
    cmd.Parameters.Add(para);
    cmd.Parameters.Add("x", SqlDbType.Int).Value = d.PositionOfDiscovery.ImgPoint_X;
    cmd.Parameters.Add("y", SqlDbType.Int).Value = d.PositionOfDiscovery.ImgPoint_Y;

    cmd.ExecuteNonQuery();
}
```