

# 'OUTER JOIN' Class Notes

---

This join of parcels and fires drops out any parcel that didn't have a fire:

```
select p.parcelid, add1, add2, count(fdate) fires
      from parcels p, fires f
      where p.parcelid = f.parcelid
      group by p.parcelid, add1, add2;
```

This set of queries will save the results of the previous join in a table and then add in one row for every parcel in the parcel table that didn't have a fire:

```
create table t1holdf as
select p.parcelid, add1, add2, count(fdate) fires
      from parcels p, fires f
      where p.parcelid = f.parcelid
      group by p.parcelid, add1, add2;
```

```
insert into t1holdf
select parcelid, add1, add2, 0
      from parcels
      where parcelid NOT IN (select parcelid from fires);
```

Now, here's an 'outer join' SQL statement that redoes the original query in a way that adds in the rows for parcels without fires (just like the two-step create/insert statements above). (We've added an additional column--the sum of the estimated fire losses--so you see how NULLs are handled).

```
select p.parcelid, add1, add2, count(fdate) fires, sum(estloss)
      from parcels p, fires f
      where p.parcelid = f.parcelid (+)
      group by p.parcelid, add1, add2;
```