Notes Area Update

***Before the data is loaded***

***Scales are declared***

var x = d3.scaleTime().range([0, width]),

x2 = d3.scaleTime().range([0, width]),

y = d3.scaleLinear().range([height, 0]),

y2 = d3.scaleLinear().range([height2, 0]);

***Axis are declared***

var xAxis = d3.axisBottom(x),

xAxis2 = d3.axisBottom(x2),

yAxis = d3.axisLeft(y);

***Area is defined***

var area = d3.area()

.curve(d3.curveMonotoneX)

.x(function(d) { return x(d.date); })

.y0(height)

.y1(function(d) { return y(d.price); });

***After the data is loaded (once only)***

***The domains for the scales are defined***

x.domain(d3.extent(data, function(d) { return d.date; }));

y.domain([0, d3.max(data, function(d) { return d.price; })]);

x2.domain(x.domain());

y2.domain(y.domain());

***The initial area graph is calculated [focus is a <g> element underneath <svg> ]***

focus.append("path")

.datum(data)

.attr("class", "area")

.attr("d", area);

***The initial x axis is implemented***

focus.append("g")

.attr("class", "**axis axis--x**")

.attr("transform", "translate(0," + height + ")")

.call(xAxis);

***On the brush event***

// s is an array of brush pixel start and pixel end

var s = d3.event.selection || x2.range();

// result of s.map(x2.invert, x2) are two dates (lower date and upper date)

x.domain(s.map(x2.invert, x2));

// the <path class = “area”>

focus.select(".area").attr("d", area);

// the class was previously defined

focus.select(".axis--x").call(xAxis);