

```

In[3]:= vecF = VectorPlot[{31.41 - (6.895 * 10^(-10)) * x * y,
    70 * 31.41 + ((6.895 * 10^(-6)) * x * y) - y/130}, {x, 0, 7100}, {y, 0, 7 * 10^7},
StreamColorFunction -> "Rainbow", FrameLabel -> {"Satellites ", "Debris"}];
Manipulate[
Show[vecF,
ParametricPlot[
Evaluate[
First[{x[t], y[t]} /.
NDSolve[{x'[t] == 31.41 - (6.895 * 10^(-10)) * x[t] * y[t],
    y'[t] == 70 * 31.41 + ((6.895 * 10^(-6)) * x[t] * y[t]) - y[t]/130,
Thread[{x[0], y[0]} == point}], {x, y}, {t, 0, T}]], {t, 0,
T}, PlotStyle -> Red]], {{T, 500}, 1, 100}, {{point, {4650, 110400}},
Locator}, SaveDefinitions -> True]

```

Out[4]=

