ContinuousManeuverByDuration 4.1

```java
public class ContinuousManeuverByDuration {

    public static void main(String[] args) throws PatriusException {

        // Patrius Dataset initialization (needed for example to get the UTC
time)
        PatriusDataset.addResourcesFromPatriusDataset() ;

        // Recovery of the UTC time scale using a "factory" (not to duplicate
such unique object)
        final TimeScale TUC = TimeScalesFactory.getUTC();

        // Creating a mass model with a main part and with a tank
        final AssemblyBuilder builder = new AssemblyBuilder();

        // Main part (dry mass)
        final double dryMass = 1000.;
        builder.addMainPart("MAIN");
        builder.addProperty(new MassProperty(dryMass), "MAIN");

        // Tank part (ergols mass)
        final double ergolsMass = 100.;
        final TankProperty tank = new TankProperty(ergolsMass);
        builder.addPart("TANK", "MAIN", Transform.IDENTITY);
        builder.addProperty(tank, "TANK");

        // Engine part
        final double isp = 300.;
        final double thrust = 400.;
        final PropulsiveProperty prop = new PropulsiveProperty(thrust, isp);
        builder.addPart("PROP", "MAIN", Transform.IDENTITY);
        builder.addProperty(prop, "PROP");

        final Assembly assembly = builder.returnAssembly();
        final MassProvider mm = new MassModel(assembly);

//SPECIFIC
        // Duration of the maneuver to get a 20 m/s boost
        final AbsoluteDate startDate = new AbsoluteDate("2010-01-
01T12:00:00.000", TUC);
        final double G0 = 9.80665;
        final double duration = G0*isp*mm.getTotalMass()*(1. -
FastMath.exp(-20/(G0*isp)))/thrust;
        // Direction of the thrust in the X vehicle axis
```

```java
        final Vector3D direction = new Vector3D(1., 0., 0.);
        // Creation of the continuous thrust maneuver
        final ContinuousThrustManeuver man = new
ContinuousThrustManeuver(startDate, duration, prop, direction, mm, tank,
LOFType.TNW);
//SPECIFIC

        System.out.println("End of the thrust: "+man.getEndDate());
        System.out.println("Duration of the thrust: "+duration+" s");
        System.out.println("Duration of the thrust:
"+man.getEndDate().durationFrom(startDate)+" s");
        // The getFrame() method is returning "null" as a LOF frame is not
define as a frame.
        // Nevertheless, an attitude law will not be mandatory when
propagating the orbit.
        System.out.println("Maneuver frame: "+man.getFrame());

    }

}
```

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* Dernière modification de cette page le 18 décembre 2018 à 10:24.