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<plan>
  <schema name="cardata">
    <int name="type" />
    <int name="time" />
    <int name="vid" />
    <double name="spd" />
    <int name="xway" />
    <int name="lane" />
    <int name="dir" />
    <int name="seg" />
    <int name="pos" />
    <int name="qid" />
    <int name="s_init" />
    <int name="s_end" />
    <int name="dow" />
    <int name="tod" />
    <int name="day" />
  </schema>

  <stream name="first-part">
    <scan name="cardata-scan">
      <schema name="cardata" />
      <file uri="cardatapoints.out.sorted" />
    </scan>

    <selection name="select-type-0">
      <equals attribute="type" value="0" />
    </selection>

    <multiplex name="multiplex-type-0" />
  </stream>

  <stream name="lav-calculation" previous="first-part">
    <window name="window-avgsv" type="value" trailing="true">
      <attribute name="time" />
      <size>60</size>
      <slide>60</slide>
    </window>

    <aggregate name="avgsv">
      <group>
        <attribute name="vid" />
        <attribute name="xway" />
        <attribute name="seg" />
        <attribute name="dir" />
      </group>
      <functions>
        <average attribute="spd" />
      </functions>
    </aggregate>

    <operator name="avgsv-segid" type="derive">
      <java attribute="segid">
        final int xway = (int) tuple.get(2);
        final int dir = (int) tuple.get(3);
        final int seg = (int) tuple.get(4);
        return xway &lt;&lt; 8 | dir &lt;&lt; 7 | seg;
      </java>
    </operator>

    <aggregate name="avgs">
      <group>
        <attribute name="xway" />
        <attribute name="dir" />
        <attribute name="seg" />
        <attribute name="segid" />
      </group>
      <functions>
        <average attribute="AVG(spd)" />
        <count attribute="vid" />
      </functions>
    </aggregate>
  </stream>
</plan>

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<window name="window-lav" type="value">
  <attribute name="time" />
  <size>300</size>
  <slide>60</slide>
</window>

<aggregate name="lav">
  <group>
    <attribute name="xway" />
    <attribute name="dir" />
    <attribute name="seg" />
    <attribute name="segid" />
    <attribute name="COUNT(vid)" />
  </group>
  <functions>
    <average attribute="AVG(AVG(spj))" />
  </functions>
</aggregate>

  <print type="stdout" showheader="yes" />
</stream>

<stream name="accident-detection" previous="first-part">
  <window name="window-cars" type="value">
    <attribute name="time" />
    <size>120</size>
    <slide>60</slide>
  </window>

  <aggregate name="aggregate-cars">
    <group>
      <attribute name="vid" />
    </group>
    <functions>
      <minimum attribute="pos" />
      <maximum attribute="pos" />
      <average attribute="pos" />
      <count attribute="pos" />
    </functions>
  </aggregate>

  <print type="devnull" />
</stream>
</plan>
```