Proposed DC3b schema

This schema is based on DC3bDataProducts.

Somewhat relevant, although now obsolete doc: dbSchemaUpdateApr09.

Note that we will also have SourceForMovingObject (same schema as Source table) and DiaSourceForMovingObject (same schema as DiaSource table).

We need to discuss whether to have ForcedSourceForMovingObject or ForcedDiaSourceForMovingObject. (From Lynne: "*Yes, I definitely think so, since diaSources and Sources are only >5 sigma detections. For doing inverse lightcurve photometry, the user would also want to get measurements of the movingObjects where the detection was below 5 sigma (but above 3 sigma or something). The wrinkle here is that it is forced photometry on a position, where that position has some error. How exactly to implement doing this forced photometry on a position with an error I guess I would ask Robert Lupton to describe the best method. I guess this is however related to doing photometry after centroiding on the best location of the source/diaSource, so not so bad.*")

CalibSource

See ?http://dev.lsstcorp.org/schema/index.php?sVer=DC3b&t=CalibSource

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Source

See ?http://dev.lsstcorp.org/schema/index.php?sVer=DC3b&t=Source

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DiaSource

See ?http://dev.lsstcorp.org/schema/index.php?sVer=DC3b&t=DiaSource

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ForcedSource

See ?http://dev.lsstcorp.org/schema/index.php?sVer=DC3b&t=ForcedSource

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ForcedDiaSource

See ?http://dev.lsstcorp.org/schema/index.php?sVer=DC3b&t=ForcedDiaSource

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Object

Schema for Object table - see ?http://dev.lsstcorp.org/schema/index.php?sVer=DC3b&t=Object

- Some queries, eg dbQuery010? need amplitude of variability (per filter), which we don't have at the moment. Tim checking with transient collaboration.
- timescale - Tim is checking with Transient collaboration.

Exposure Related

See

- ?http://dev.lsstcorp.org/schema/index.php?t=Raw_Amp_Exposure
- ?http://dev.lsstcorp.org/schema/index.php?t=Raw_Fpa_Exposure
- ?http://dev.lsstcorp.org/schema/index.php?t=Science_Amp_Exposure
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- move all from Amp to Ccd and remove raw and science Amp_Exposures?
- merge Raw exposure with Science exposure?
- what kind of mappings do we need to keep? For example, what about exposure to visit (?http://dev.lsstcorp.org/schema/index.php?t=_Raw_Fpa_ExposureToVisit), or exposures used to build given template image (?http://dev.lsstcorp.org/schema/index.php?t=_Science_Fpa_ExposureToTemplateImage)
- add

```
  ExposureMetadata
      exposureId BIGINT,
      exposureType CHAR, -- or enum: rawAmp, postIsrAmp, postIsrCcd, scienceCcd, diffCcd, maybe m
      metadataKey VARCHAR(80) NOT NULL,
      metadataValue VARCHAR(255)

  ExecutionTrace
      pipelineName VARCHAR(20) NOT NULL,
      traceKey VARCHAR(80) NOT NULL,
      traceValue VARCHAR(255)
```

- Will need non-gray extinction, special polynomials, etc,

About naming conventions

- Make sure c++ adopts 'Sigma' naming conventions
- What about variance (should we use 'Vrs' as proposed by TCT?)
- moments (I think Robyn is ok with format *momentIxx*)
- Amp vs Seg vs Segment
- Rename CCD to Ccd
- What about units in names, eg taiRange vs timeRange