Demo session

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What will be shown?
Data preparation
Demo

Content (“What will be shown?”)

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- Two datasets, from the VISTA SV data:
  - NGC 253
  - Orion
- Delegation
- Collections & releases:
  - One collection, one release
  - Updating a collection by doing a new release
- Validation, data upload, closing a release, final (archived) state.
- Possible errors found during validation

Data preparation

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Data used:

- VISTA Science Verification data processed by the CASU pipeline (v1.0).

Needed to get appropriate keyword values:

- Do nothing
- Explicit assignment
- Copying from other keywords
- Computing from other keywords
- Tracing processing provenance

Keywords – No change needed

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Keyword	Source
TELESCOP	Original data
OBJECT	Original data
EQUINOX	Original data
RADECSYS	Original data
NJITTER	Original data
NOFFSET	Original data
CRVALi	CASU processing
CRPIXi	CASU processing
CTYPEi	CASU processing
CDi_j	CASU processing

Keywords – Assigning values explicitly

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Keyword	Value
ORIGIN	‘ESO-PARANAL’
M_EPOCH	F
FLUXCAL	‘ABSOLUTE’
PRODCATG	‘science.image’, ‘science.MEFimage’, ‘science.srctbl’
ASSON1	Name of corresponding weightmap for images
ASSOC1	‘ancillary.weightmap’
BUNIT	‘ADU’
IMATYPE	‘TILE’, ‘PAWPRINT’
ISAMP	T, F
PHOTSYS	‘2MASS’ (Should be ‘VEGA’)
EPS_REG	‘Orion’, ‘NGC 253’

Keywords – Copying from other keywords

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Keyword	Source
FILTER	HIERARCH ESO INS FILT1 NAME
PROG_ID	HIERARCH ESO PROG ID
OBSTECH	HIERARCH ESO DPR TECH
TL_RA	HIERARCH ESO OCS TARG ALPHAOBJ (Now HIERARCH ESO OCS SADT TILE RA)
TL_DEC	HIERARCH ESO OCS TARG DELTAOBJ (Now HIERARCH ESO OCS SADT TILE DEC)
TL_OFFAN	Knowledge of tile positions from OBs (Now HIERARCH ESO OCS SADT TILE OFFAN)
PROCSOFT	CASUVERS
PHOTZPER	MAGZRR

Keywords – Computing from other keywords

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Keyword	Computation
PHOTZP	MAGZPT+2.5*log10(EXPTIME)
CRDER1	STDCRMS/sqrt(2)
CRDER2	STDCRMS/sqrt(2)

$$(STDCRMS = \sqrt{CRDER1^2 + CRDER2^2})$$

Keywords requiring processing provenance knowledge

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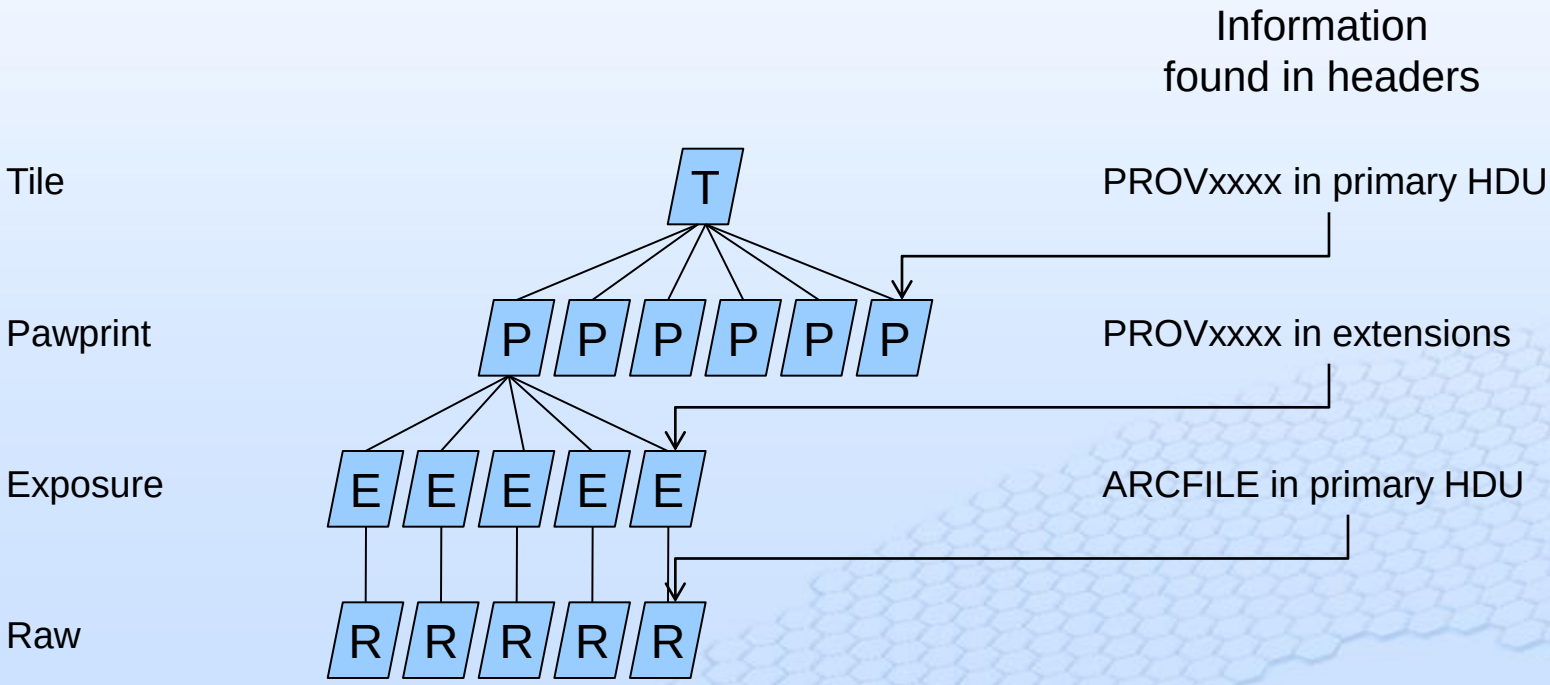
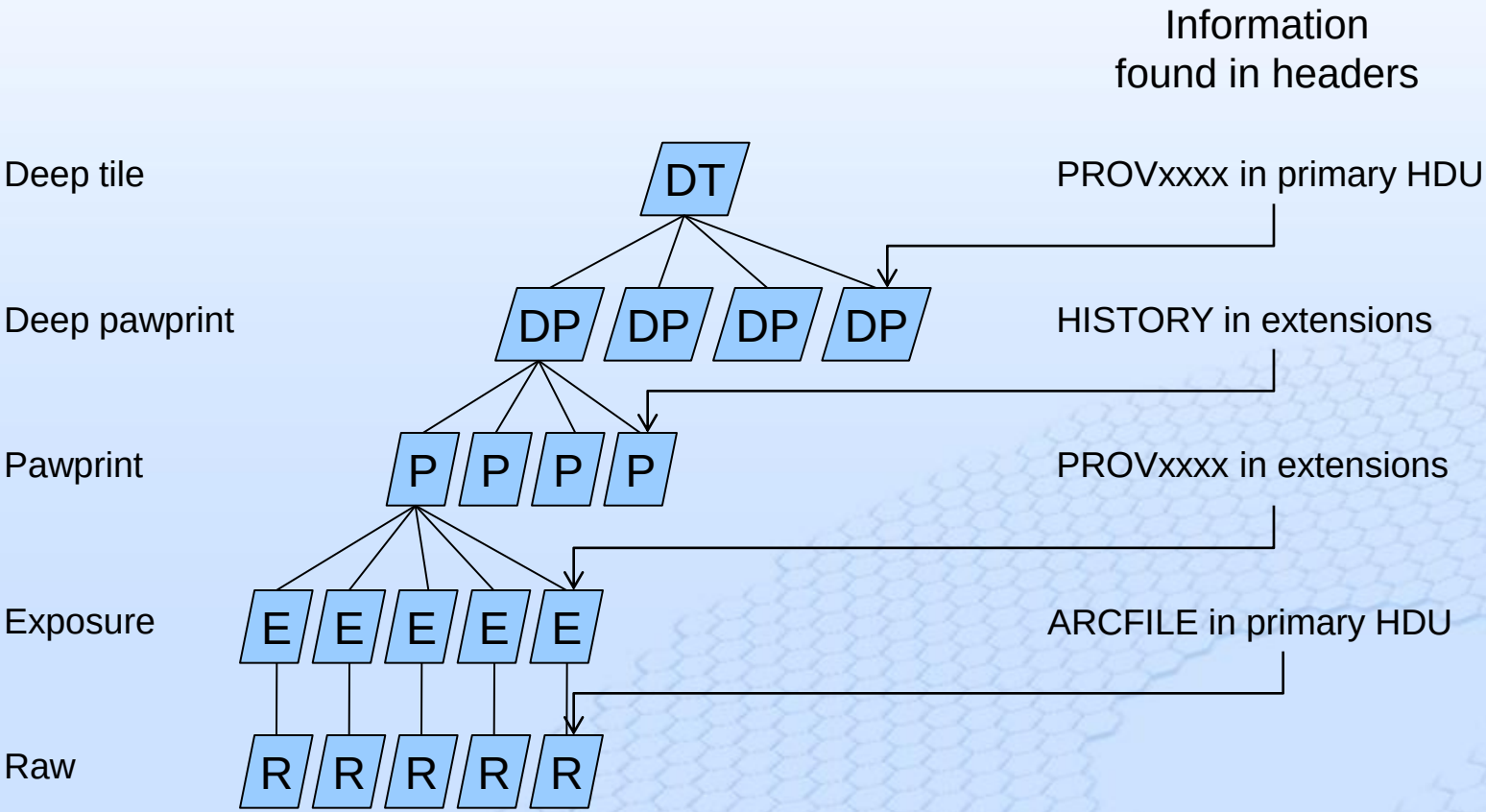
Keyword
EXPTIME
TEXPTIME
MJD-OBS
MJD-END
OBIDi
NCOMBINE
PROVi

Processing provenance 1/2



Processing provenance 2/2



Tricky keywords – General scheme

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Keyword	Value
EXPTIME	*No general scheme possible that fits all cases*
TEXPTIME	Sum of all DIT*NDIT values from the contributing exposures
MJD-OBS	MJD-OBS value of the first (in time) contributing exposure
MJD-END	MJD-OBS+DIT*NDIT/(24*3600) of the last (in time) contributing exposure
OBIDi	All distinct HIERARCH ESO OBS ID values from the contributing exposures
NCOMBINE	The number of contributing exposures
PROVi	The names of the data products directly used to create this data product

Tricky keywords – Exposure

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Keyword	Value
EXPTIME	DIT*NDIT
TEXPTIME	DIT*NDIT
MJD-OBS	MJD-OBS
MJD-END	MJD-OBS+DIT*NDIT/(24*3600)
OBIDi	HIERARCH ESO OBS ID
NCOMBINE	1
PROVi	ARCFILE

Tricky keywords – Pawprint

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Keyword	Value
EXPTIME	DIT*NDIT*NJITTER
TEXPTIME	DIT*NDIT*NJITTER
MJD-OBS	MJD-OBS value of the first (in time) contributing exposure
MJD-END	MJD-OBS+DIT*NDIT/(24*3600) of the last (in time) contributing exposure
OBIDi	All distinct HIERARCH ESO OBS ID values from the contributing exposures
NCOMBINE	NJITTER
PROVi	The names of the exposures combined to create this pawprint

Tricky keywords – Tile

Keyword	Value
EXPTIME	DIT*NDIT*NJITTER*2
TEXPTIME	DIT*NDIT*NJITTER*NOFFSETS
MJD-OBS	MJD-OBS value of the first (in time) contributing exposure
MJD-END	MJD-OBS+DIT*NDIT/(24*3600) of the last (in time) contributing exposure
OBIDi	All distinct HIERARCH ESO OBS ID values from the contributing exposures
NCOMBINE	NJITTER*NOFFSETS
PROVi	The names of the pawprints combined to create this tile

Tricky keywords – Deep pawprint

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Keyword	Value
EXPTIME	Sum of DIT*NDIT*NJITTER of the contributing pawprints
TEXPTIME	Sum of DIT*NDIT*NJITTER of the contributing pawprints
MJD-OBS	MJD-OBS value of the first (in time) contributing exposure
MJD-END	MJD-OBS+DIT*NDIT/(24*3600) of the last (in time) contributing exposure
OBIDi	All distinct HIERARCH ESO OBS ID values from the contributing exposures
NCOMBINE	The number of contributing exposures
PROVi	The names of the pawprints combined to create this deep pawprint

Tricky keywords – Deep tile

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Keyword	Value
EXPTIME	Twice the sum of DIT*NDIT*NJITTER of the contributing pawprints
TEXPTIME	Sum of DIT*NDIT*NJITTER of the contributing pawprints
MJD-OBS	MJD-OBS value of the first (in time) contributing exposure
MJD-END	MJD-OBS+DIT*NDIT/(24*3600) of the last (in time) contributing exposure
OBIDi	All distinct HIERARCH ESO OBS ID values from the contributing exposures
NCOMBINE	The number of contributing exposures
PROVi	The names of the deep pawprints combined to create this deep tile

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