ORPG Product Data Flow - Build 12

Algorithm Task

Product Dependent Parameters

PDP

08 / 04
basevgrid
ELEVATION

Replay task

replay

CPC no / Task no
Name of task
Task type (timing)
[RPGC_task_init]

Task Types*
TASK_ELEVATION_BASED
TASK_VOLUME_BASED
TASK_TIME_BASED
TASK_RADIAL_BASED
TASK_EVENT_BASED

*** Defined in rpg_port.inc & rpg_port.h**

Old Definitions: ELEVATION_BASED VOLUME_BASED TIME_BASED RADIAL_BASED EVENT_BASED

Product Data Store (lb)

43 ALRTPROD (73)
VOLUME_DATA
(WH)
pri 255
alert paired

Buffer number Name of buffer (Prod code)
Data timing **[product_attr:type]**

Warehoused / priority 255 / alert paired

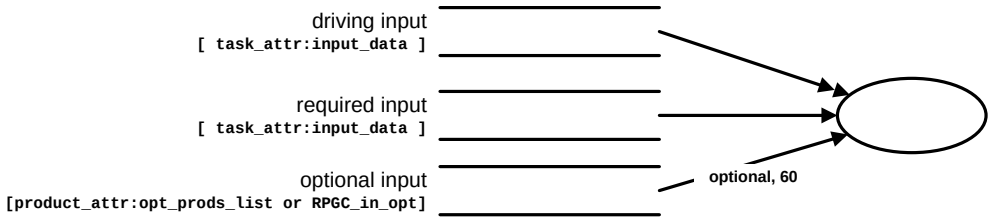
*** Defined in rpg_port.inc & rpg_port.h**

Data Types*
UNDEFINED_DATA
ELEVATION_DATA
VOLUME_DATA
RADIAL_DATA
DEMAND_DATA
REQUEST_DATA
TIME_DATA
EXTERNAL_DATA

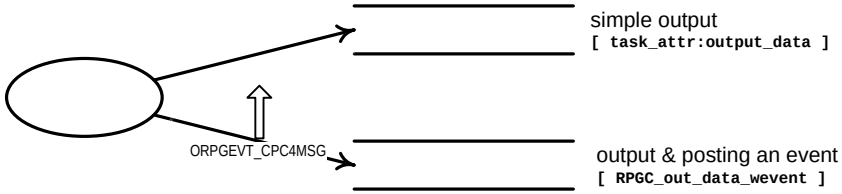
Non-Product Data (lb)

300002
DUAUSERSEL

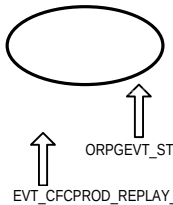
Data Input (WAIT_ALL form)



Data Output



Event Registration



task registered for both an “external” event and an “internal” event
[RPGC_reg_for_external_event]
[RPGC_reg_for_internal_event]

“External” events defined in orpgevt.inc and orpgevt.h

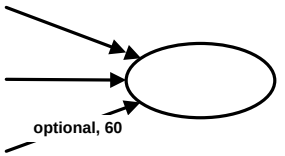
“Internal” events defined in rpg_port.inc and rpg_port.h

Timer Registration

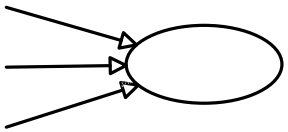
task registered for a named timer service
[RPGC_reg_timer]

Timer Services defined in a304.inc

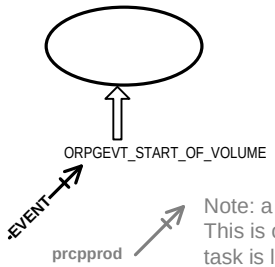
Representations of Data Driven and Event Driven Tasks



Data driven task with driving input (WAIT_ALL form) **[RPGC_wait_act]**
task executes with driving input available and a request for an output.
The algorithm blocks for a limited time when reading optional input.
(*Most algorithms are of this type*)
- must have task type other than **EVENT_BASED**
- may also be registered for events



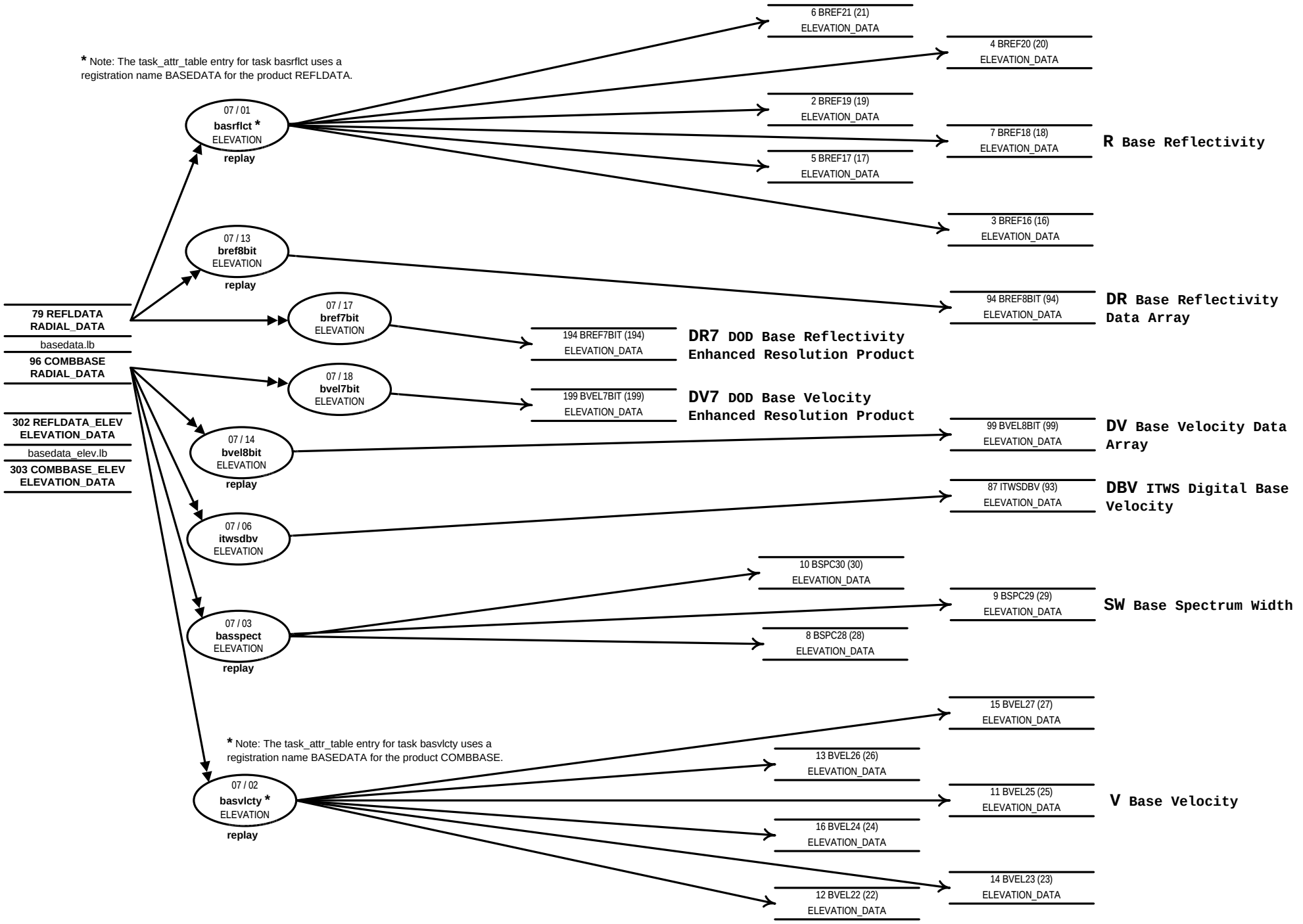
Data driven task with no driving input (WAIT_ANY form) **[RPGC_wait_for_any_data]**
task executes on availability of any one input. Algorithm responsible for determining input sequence (vol and elevation).
(*Several algorithms use this*)
- must have task type other than **EVENT_BASED**
- may also be registered for events



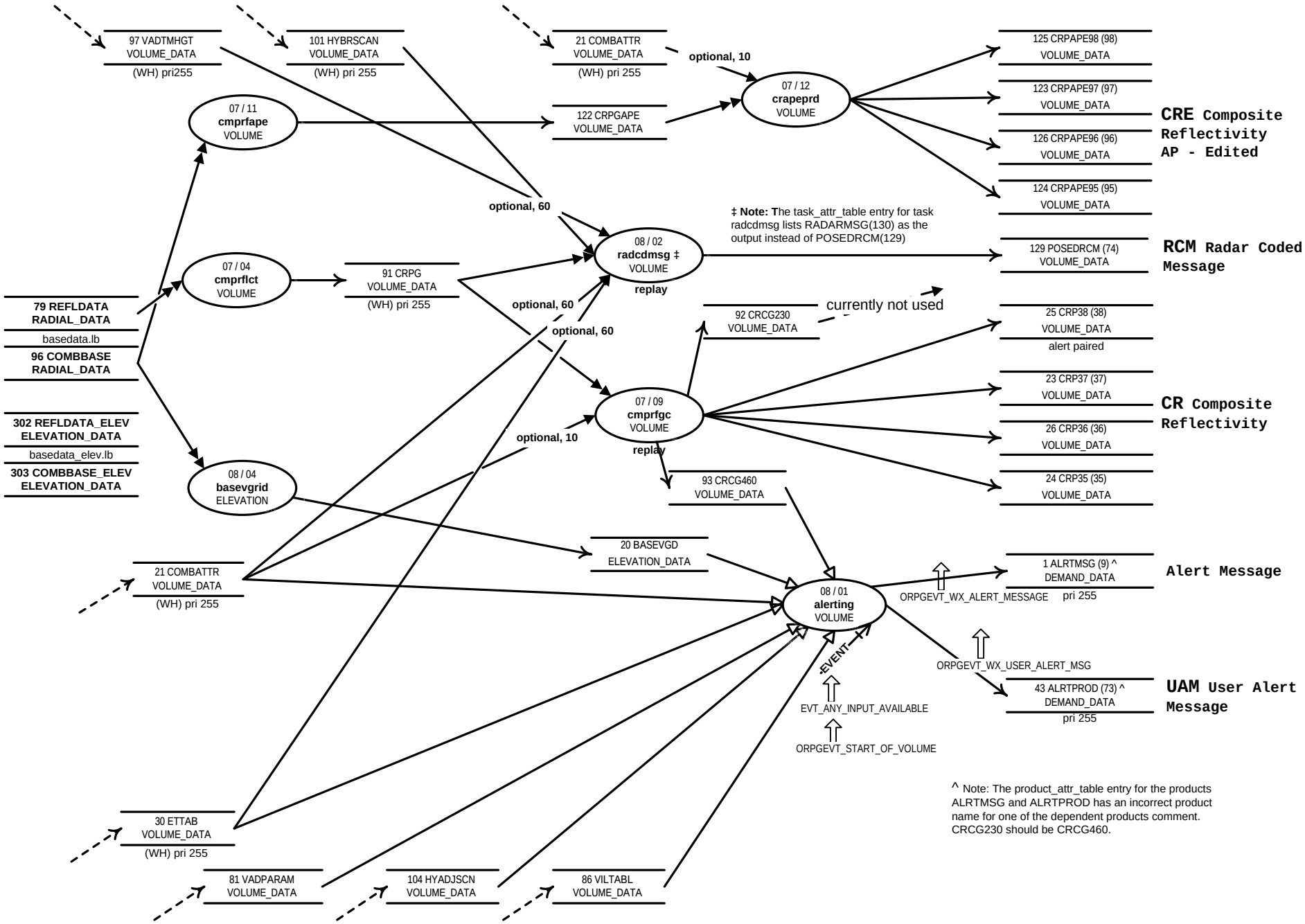
Event driven task **[RPGC_wait_for_event] [RPGC_task_init]**
task executes on receiving a registered event.
(*Generally used in algorithms having no product data inputs.*)
- task type **EVENT_BASED** if no product data inputs
- with non-driving inputs (WAIT_ANY form), task type appropriate for input data
- must be registered for at least one event

Note: a task may block until another task is active. [RPGC_wait_for_task]
This is only used by one data driven task that initially blocks until another algorithm task is launched. This feature is not generally useful and can be ignored.

Base Products - ORPG Build 12

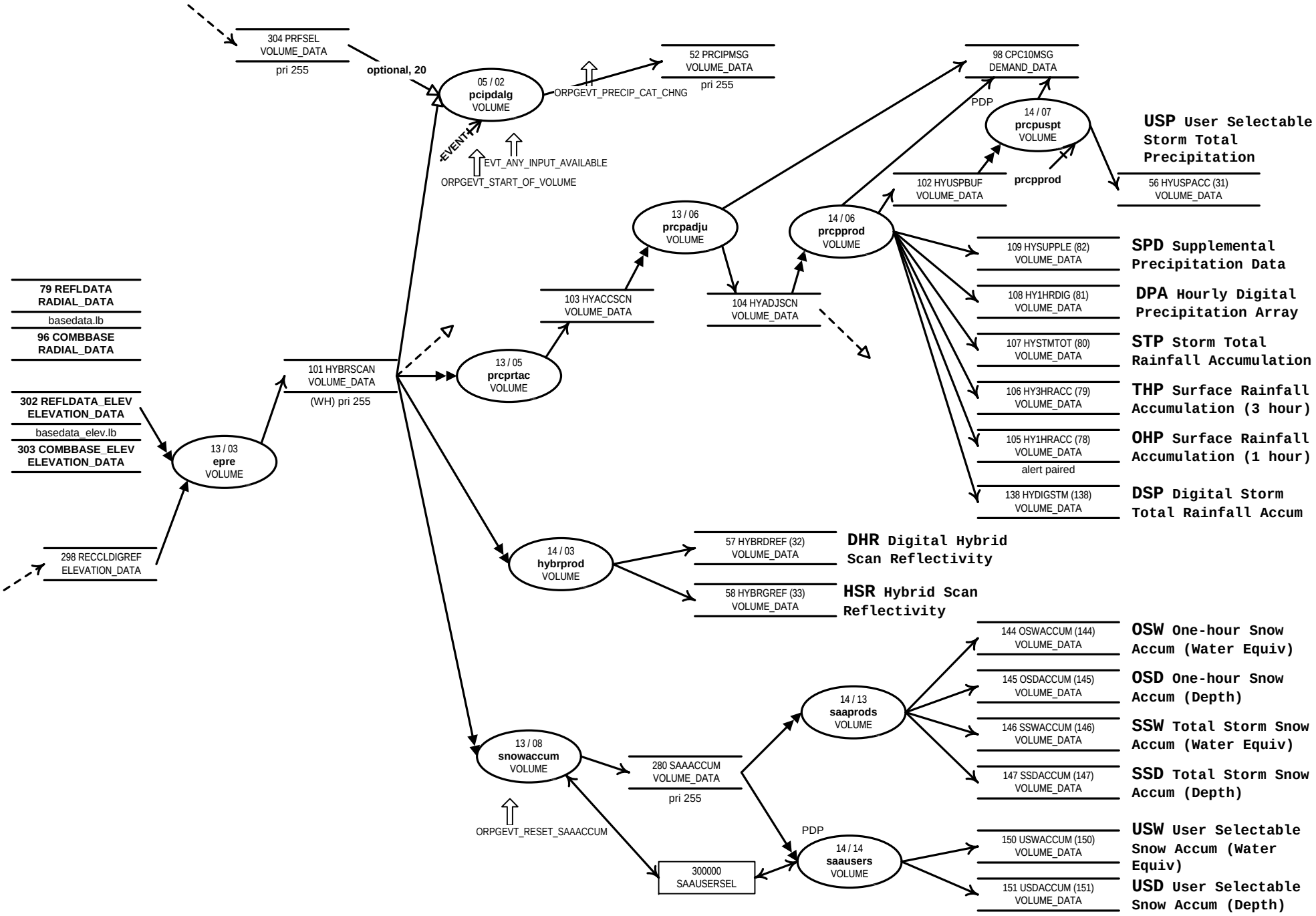


Alerting, Radar Coded Message, and Composite Reflectivity - ORPG Build 12

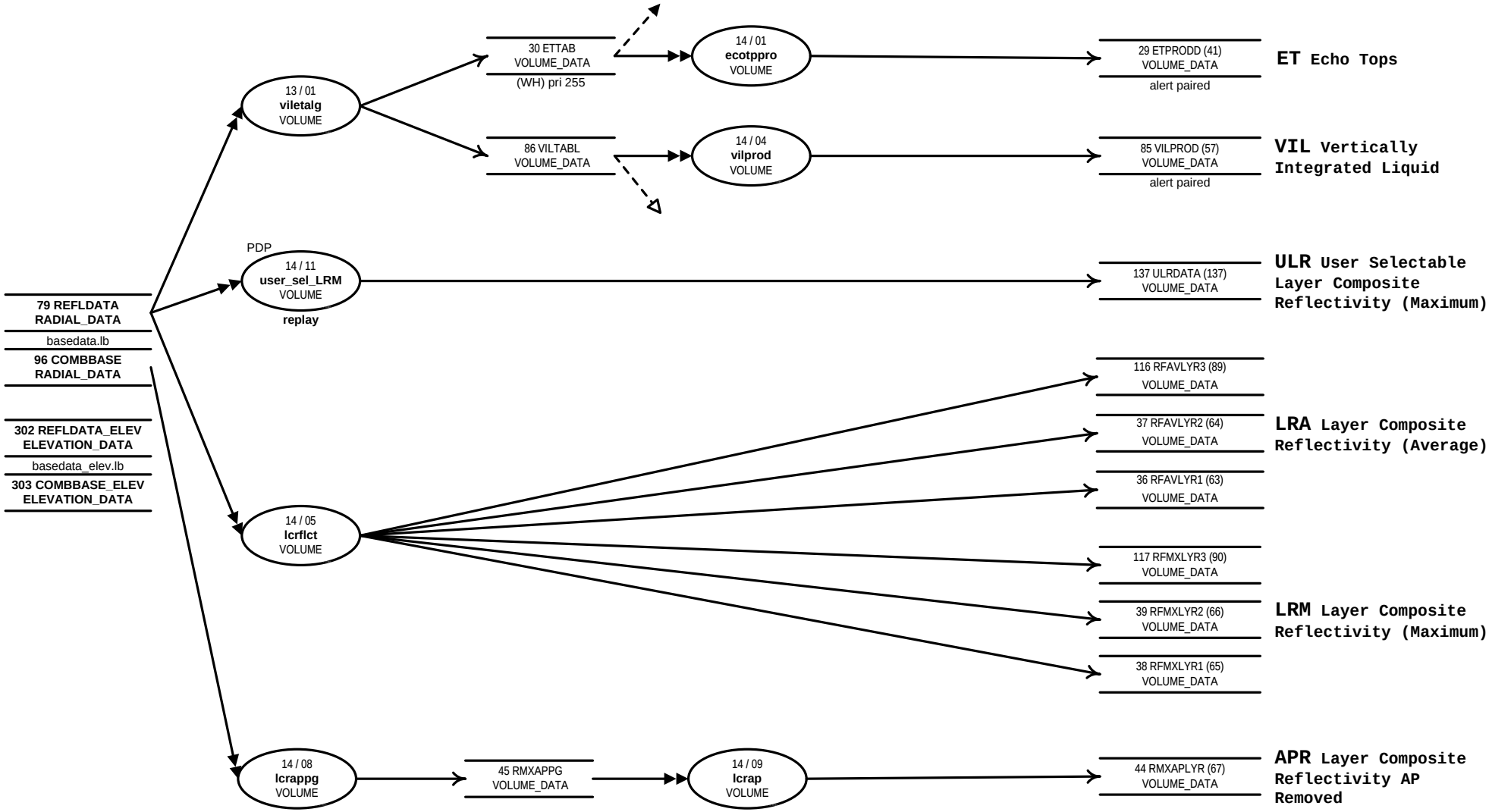


^ Note: The product_attr_table entry for the products ALRTMSG and ALRTPROD has an incorrect product name for one of the dependent products comment. CRCG230 should be CRCG460.

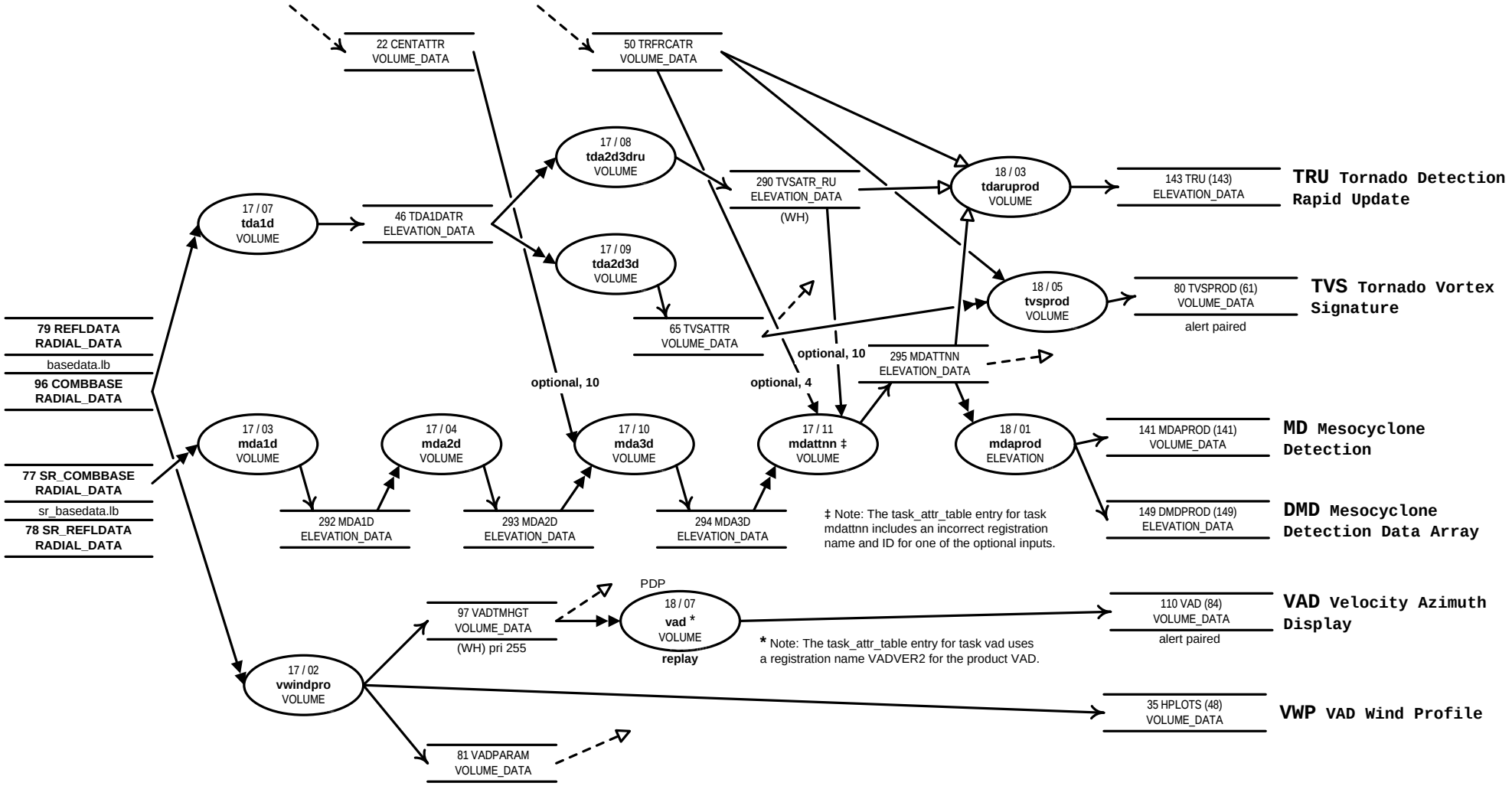
Precipitation and Snow Products derived from EPRE
ORPG Build 12



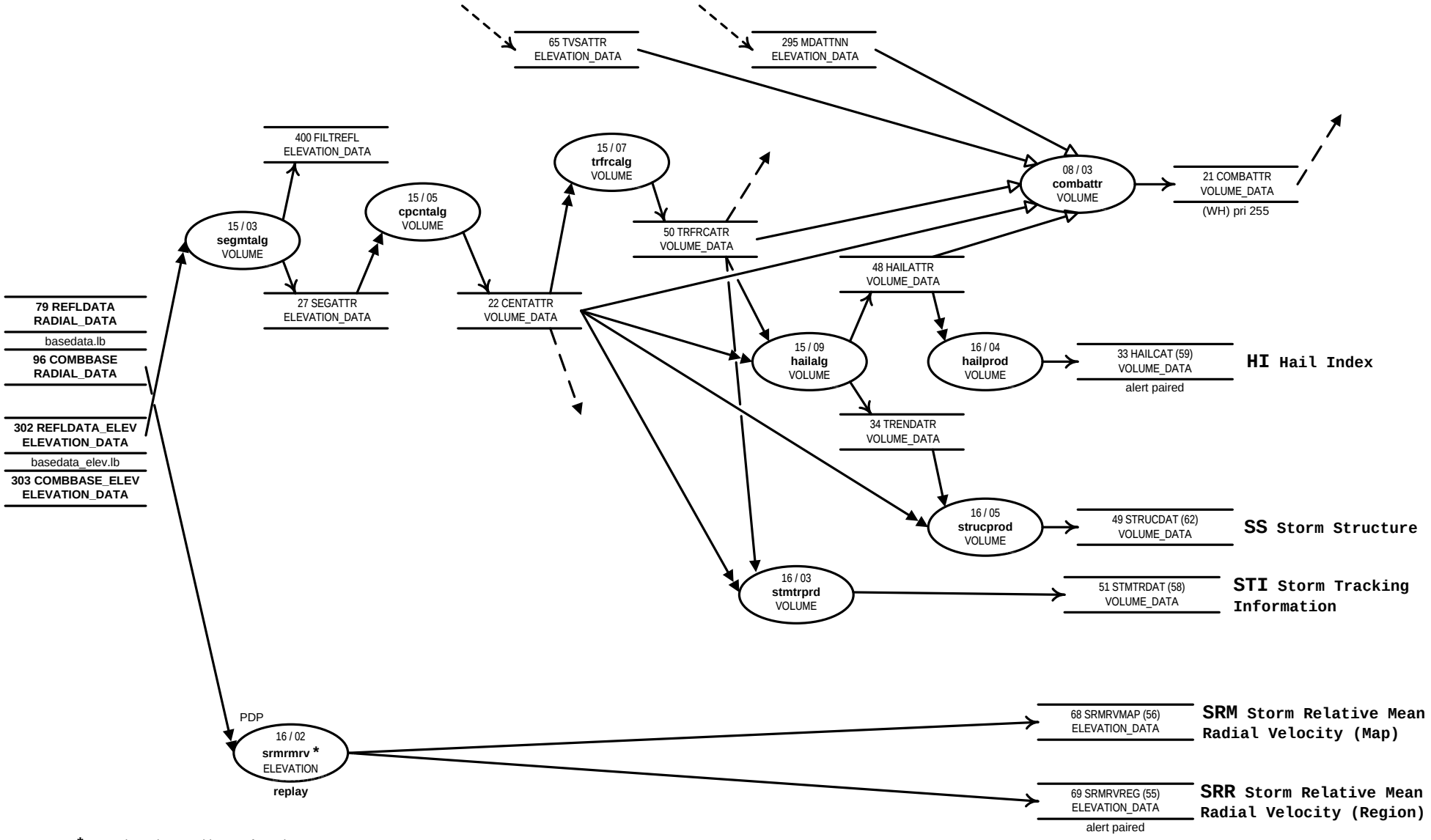
Precipitation Products not derived from EPRE
ORPG Build 12



Kinematic Products (Mesocyclone, Tornado, and VAD)
ORPG Build 12



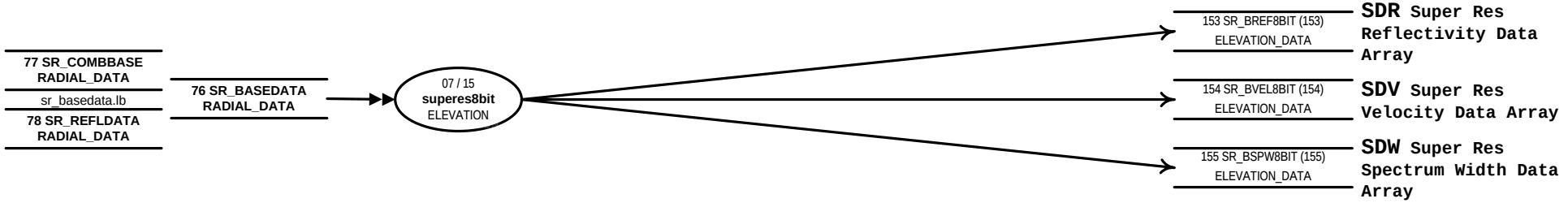
Storm Products and Hail Index
ORPG Build 12



* Note: The task_attr_table entry for task srmrmrv uses a registration name BASEDATA for the product COMBBASE.

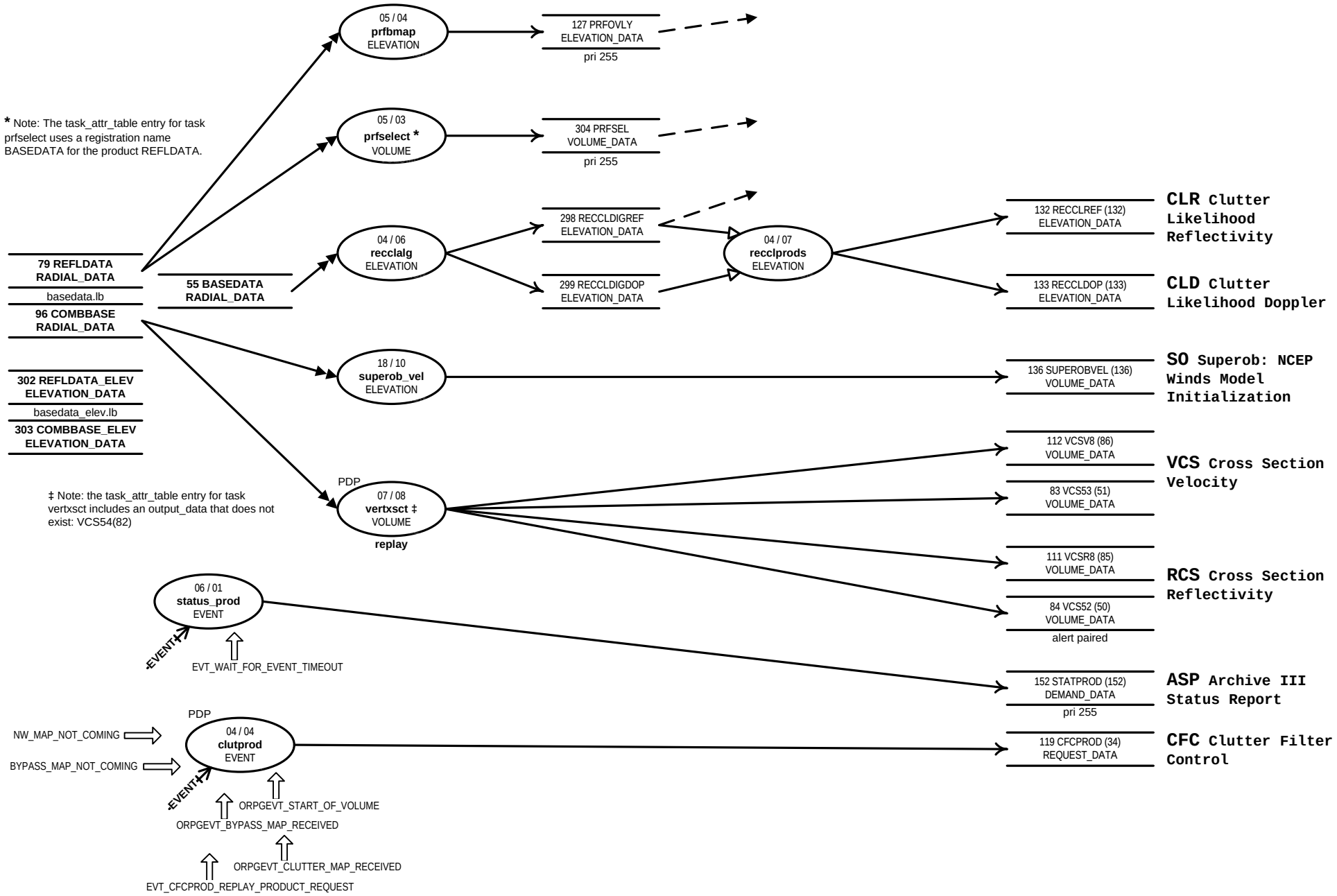
Super Resolution Products
ORPG Build 12

Products on this page have corresponding products using the original base data.

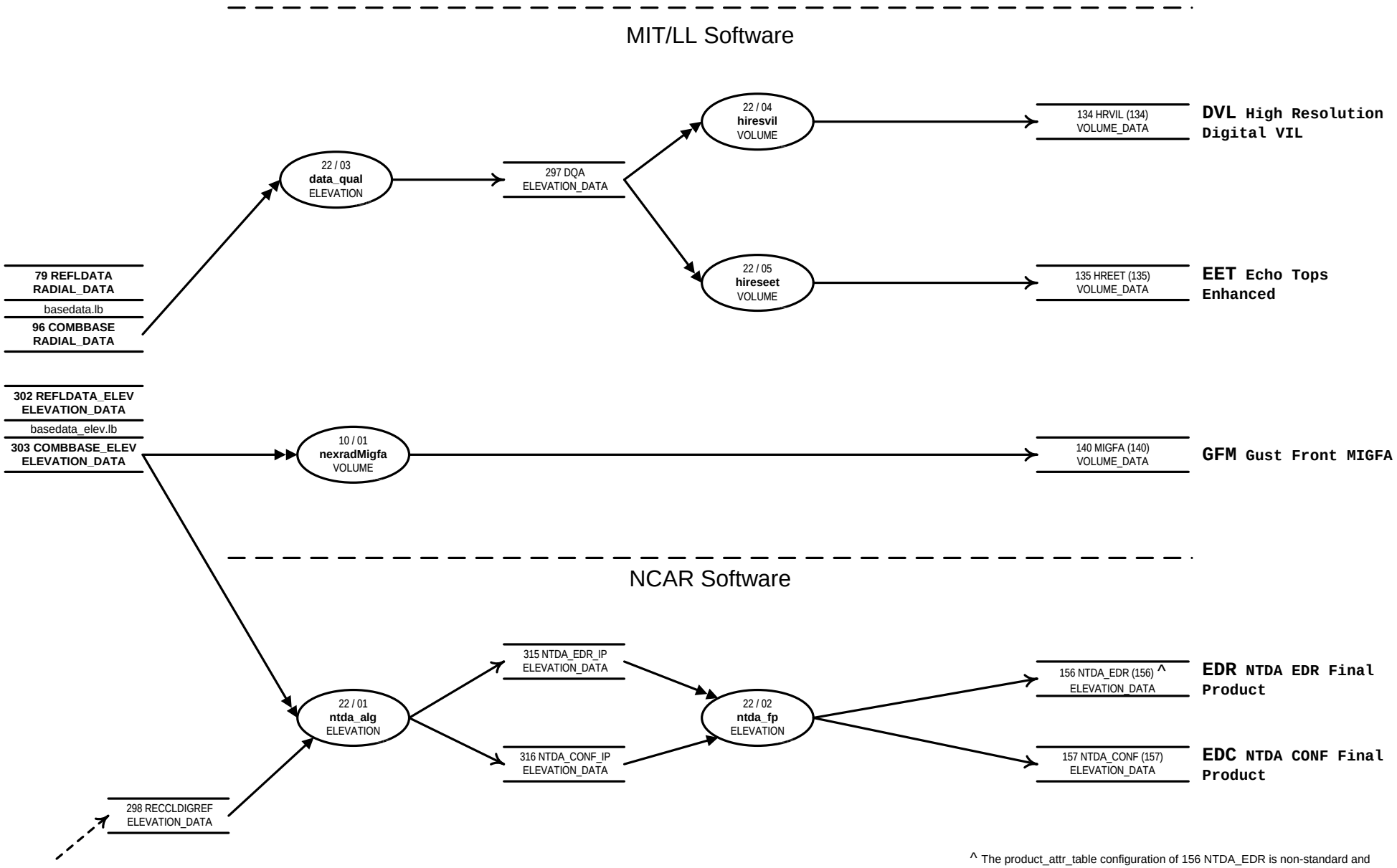


306 DUALPOL_COMBBASE
RADIAL_DATA
dp_basedata.lb
307 DUALPOL_REFLDATA
RADIAL_DATA

Other Data (Super Ob, Cross Section, Clutter, etc.)
ORPG Build 12

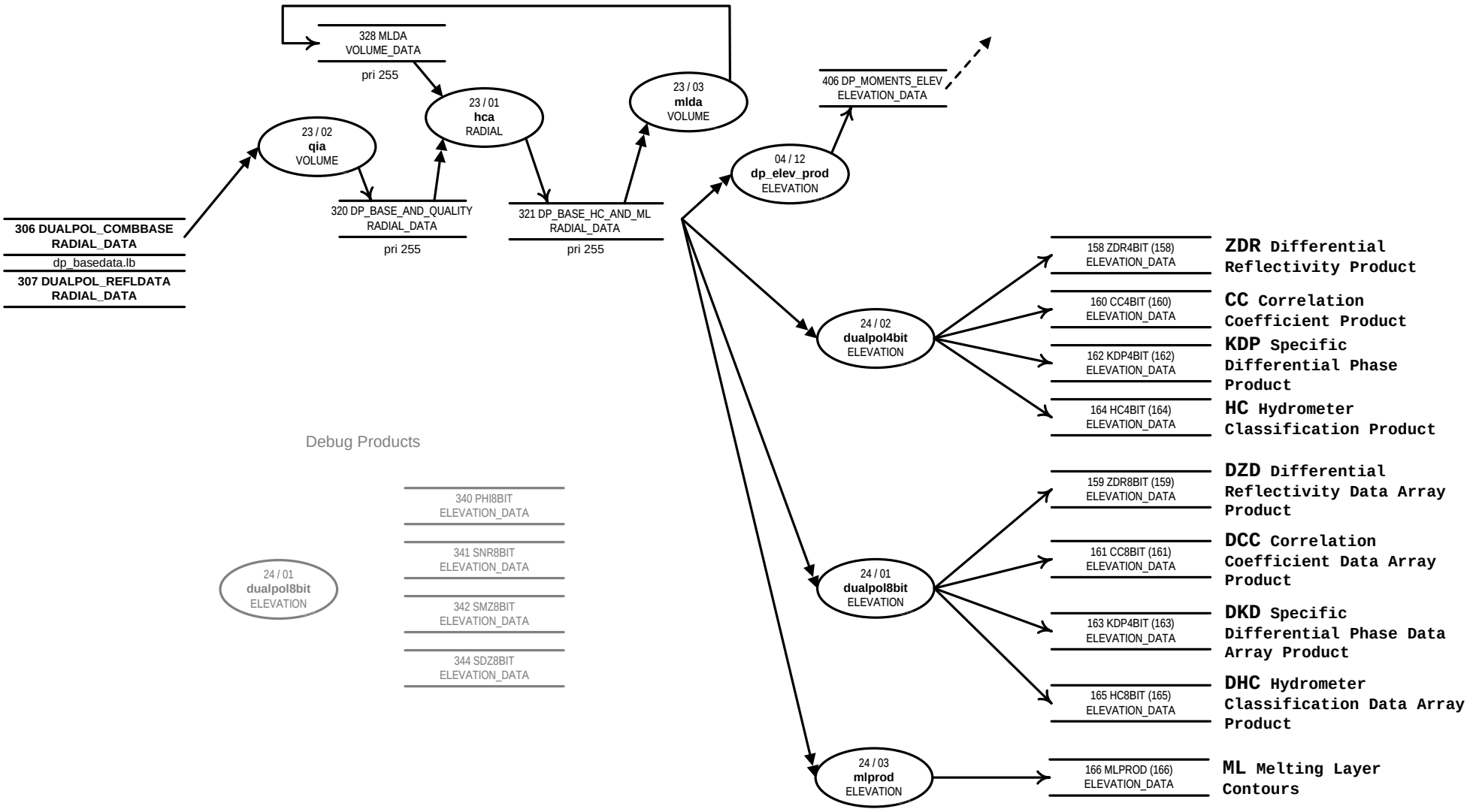


Proprietary Products - ORPG Build 12
(Removed from Public Edition of CODE)



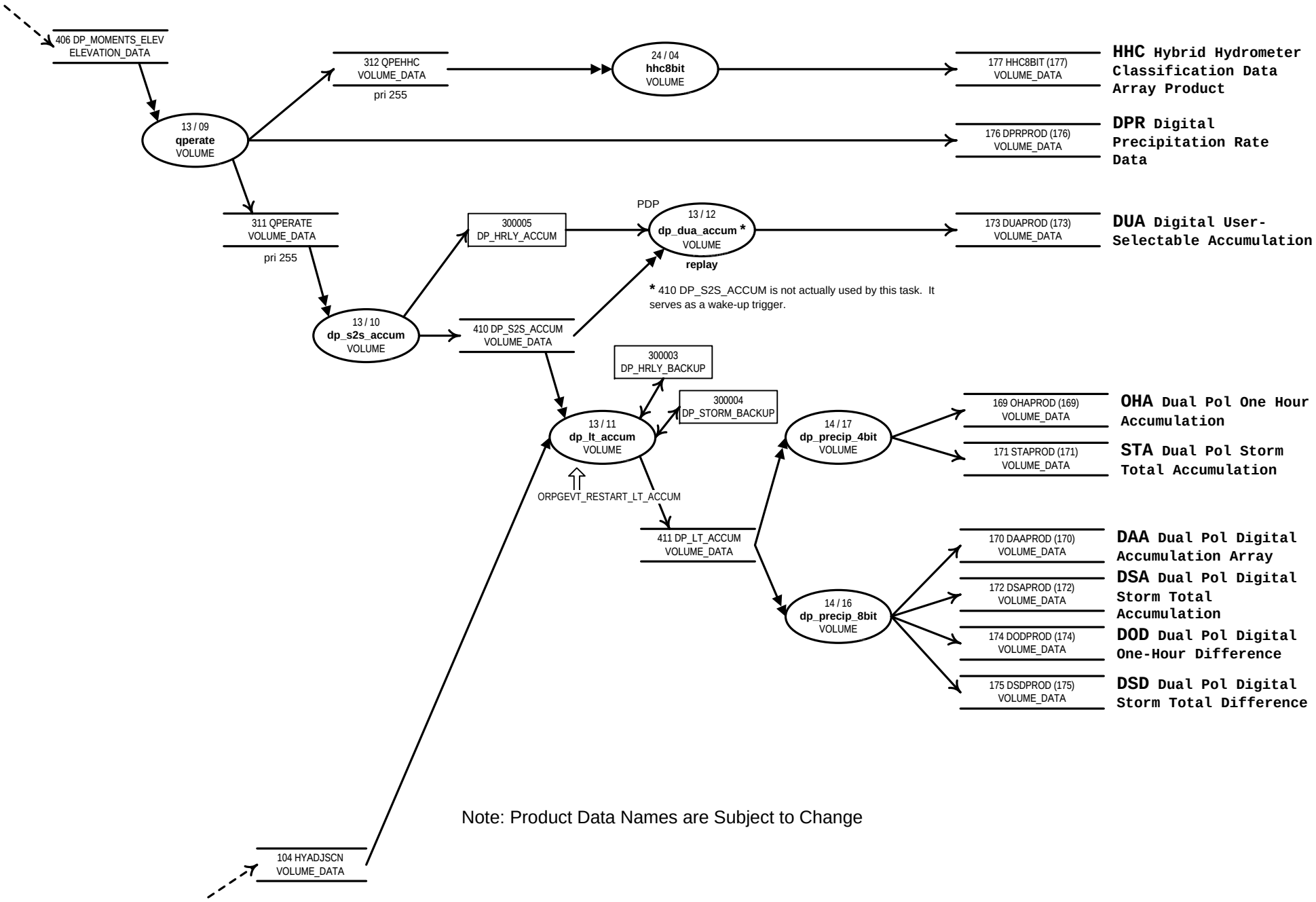
^ The product_attr_table configuration of 156 NTDA_EDR is non-standard and should not be used as an example.

Dual Pol Products Derived from HCA
ORPG Build 12



Note: Product Data Names are Subject to Change

Dual Pol Precip Products - ORPG Build 12
Derived from QPERATE and DP_BASEDATA_ELEV



Note: Product Data Names are Subject to Change