

# Rubin Observatory

## AP Integration: Open Questions

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# Current AP precursor processing is hitting database limits.

For the last several years we have used a subset of the DECam HiTS dataset for regular testing, which functioned comfortably with a SQLite APDB.

We are now testing on larger datasets (HSC COSMOS, DECam & HSC Bulge data: millions of DIASources). SQLite is too slow and leads to pipeline failures due to database locks.

NCSA has been helpful in providing a Postgres DB, which we have used successfully for these datasets. But we need more users to have read & write access.

- handle this manually as a one-off? or “productize” the Postgres DB?

Fritz says DAX is looking to Cassandra for the APDB—do we stand that up?



# More generally, what is the path to integrate AP?

Milestone [DM-AP-16](#) (“Full integration of the Alert Production system within the operational environment”) is notionally due next October.

- This seems to refer to Science Pipelines, but to function it needs an APDB, Prompt Processing Enclave, Gen 3 executor (+ alert distribution system—[DM-AP-15](#), due now)
- Plus the precovery & forced photometry services

We have many of the component pieces—how and when do we work to integrate them? What connection is there to commissioning activities?