SQuaRE
F17 forward look

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Large Synoptic Survey Telescope

Resources

Limited person–power in F17A

avail FTE
full
50-75%
25-50%
0-10%

F17A	F17B
AT	AT
AF	AF
JMP	JMP
JS	JS
JH	JH
MWV	MWV
SK	SK
FE	FE

F17

TECHNICAL GOALS

Primary deliverables (excluding ongoing services)

- SciPlatNB: TBD (see next slide)

- Documentation: JS to Pipelines for User Docs ramp-up

- Dev Infrastructure: Blue Ocean / CI revamp

  - Improve user experience 💩

  - Beat down release engineering load (stretch)

  - Move non-time-critical verification jobs to Nebula

- SQuaSH: Evaluate front end in light of SciPlatNB / SciPlatPortal

- Verification report alpha (characterisation)

- When we get activator/supertask MVP we will assess a practical first deliverable at the time

DMLT / DECISION / INTERFACE ISSUES

If we don't deal with these soon they will become blockers or lead to

duplicating work 😱

- SciPlatNB:

SCIPLATNB (SQR-018)
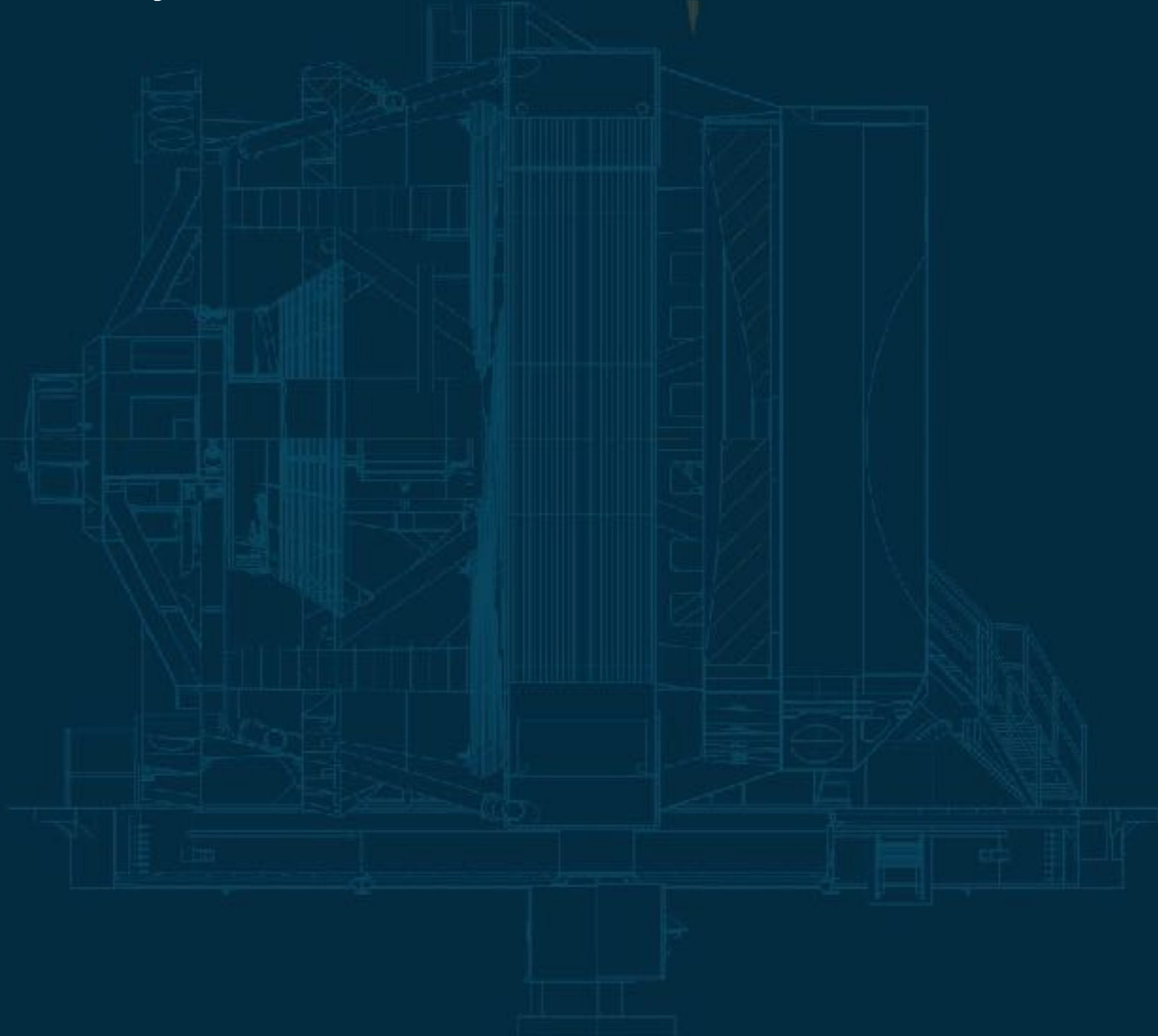
TIMEBOXED EXERCISE RESULTS IN USABLE α SERVICE

- jupyterlabdemo.lsst.codes (frequently redeployed with no notice) + dev sandboxes

- A Dockerfile for installing Hub+Lab components on CI-built LSST stack container and exposing the stack kernel to Jupyter.

- A Kubernetes configuration to deploy this service on the GKE cluster.

- JupyterHub spawning Jupyterlabs in individual user pods (for scaling)

- OAuth to this service via SQuaRE's Github "shim" authentication

- Persistent Unix uid/gid mapping for users using Github as a shim

- Small persistent storage via an NFS pod to allow alpha-testers to keep nbs

- Multiple choice of containers to users (eg. with different versions of the stack).

- Basic usability-friendly version-control workflow (want to upstream)

DMLT / DECISION / INTERFACE ISSUES

If we don't deal with these soon they will become blockers or lead to duplicating work 😱

- SciPlatNB:

  - Agree design at CoDR-level (architecture & deployment)

  - Work breakdown & T/CAM assignment

  - Timeline for beta (developer-oriented) service well before commissioning-ready service

- Shims:

  - Currently shim almost all internal interfaces (auth, databases, APIs, storage, infrastructure, logging service, workflow, deployment/configuration, provenance etc). We are not blocked, but we can't leave dropping all shims to the last minute.

  - DB was first on my list but ??

  - Is this a DM integration activity or a SQuaRE deploy activity