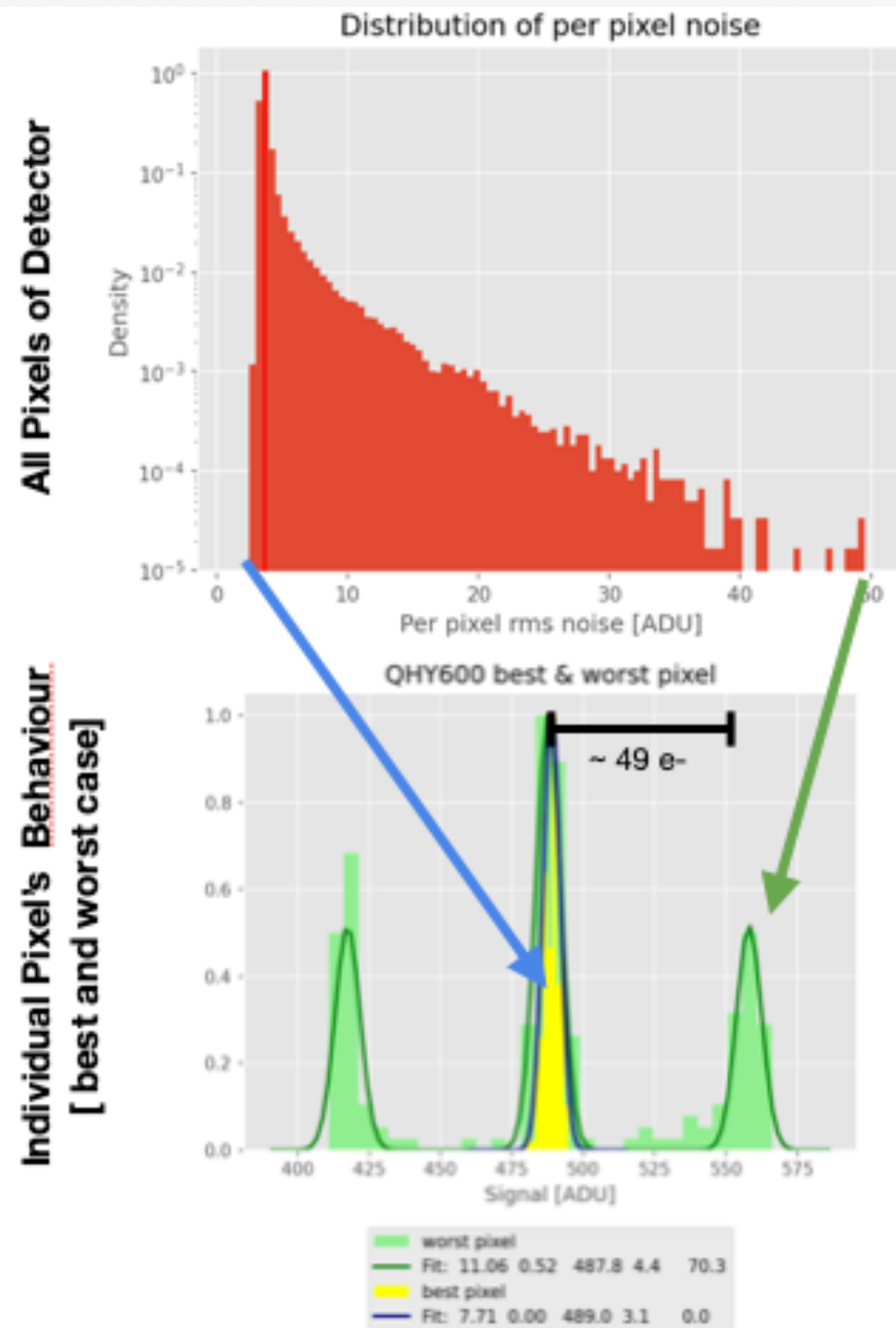


Propagating per-pixel CMOS Noise in Data Pipelines and Ideas for Future Modeling

Daniel Harbeck, Curtis McCully, Matthew Daily, Prerana Kottapalli • Las Cumbres Observatory, Goleta, CA

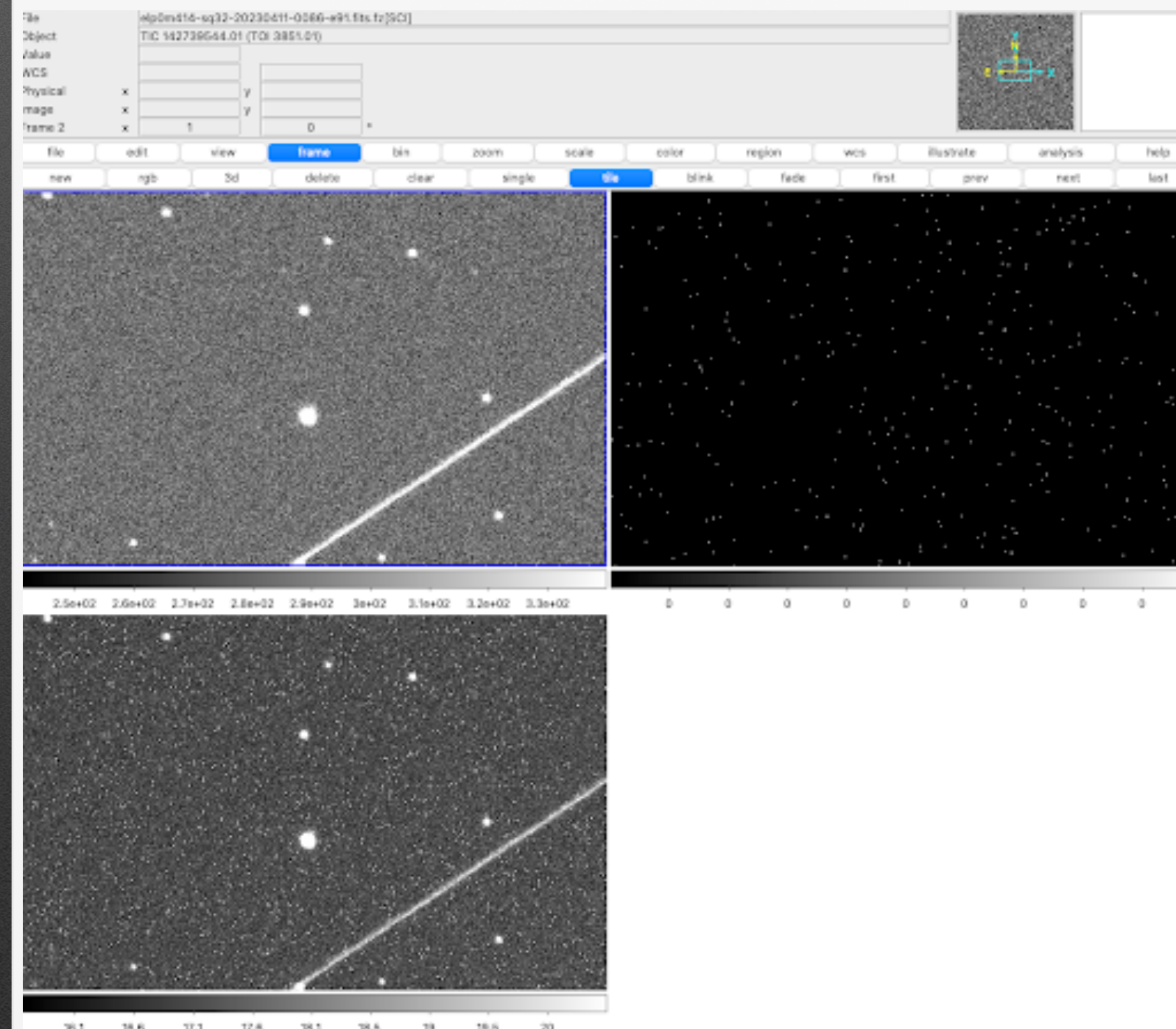
CMOS:

Per pixel noise, Random Telegraph Noise

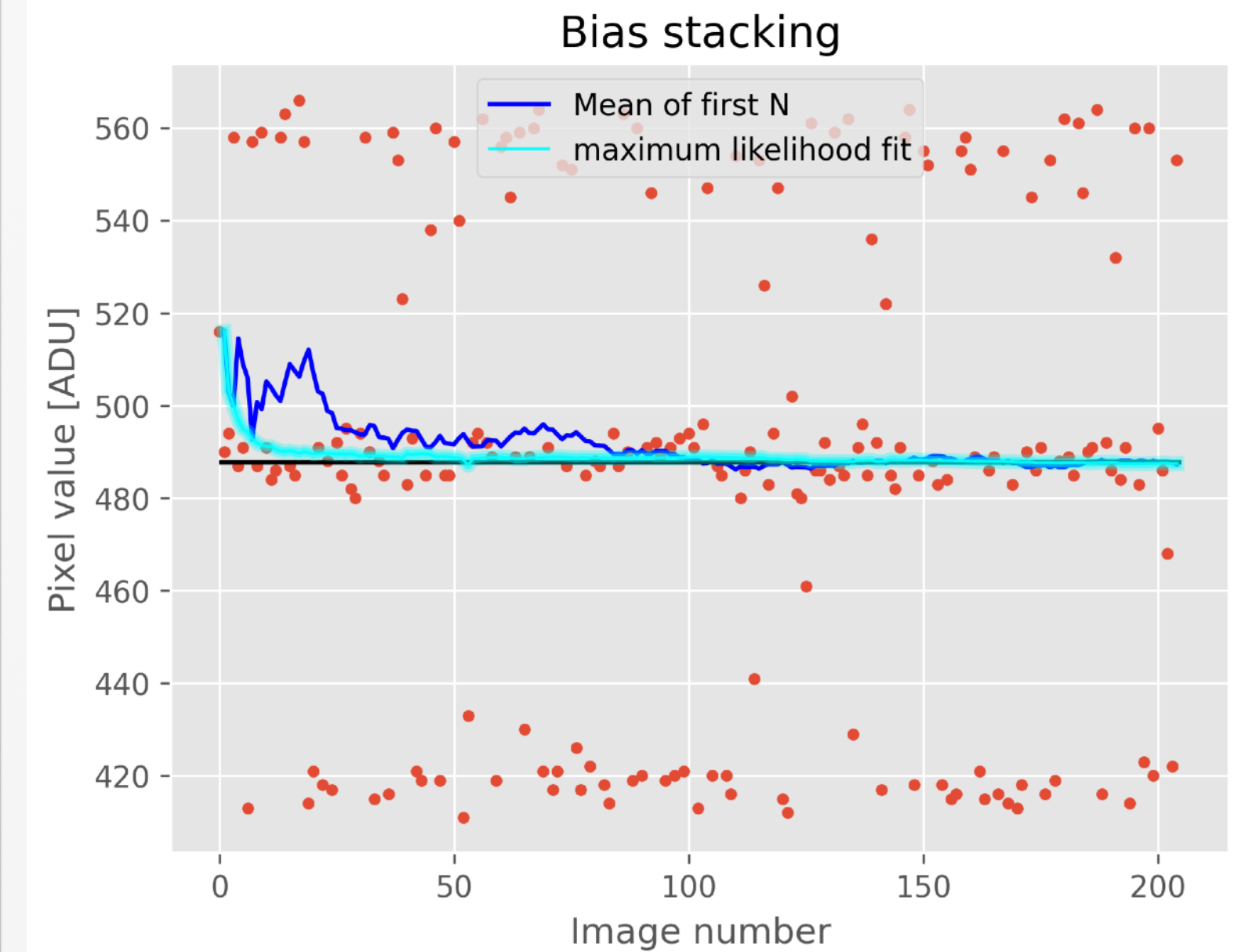


Data Pipeline Handling

- Per pixel noise propagation from bias to final image.
- In production now at Las Cumbres Observatory.



Advanced Modeling



With modeling of Random Telegraph Noise, bias stacking converges fast. Bad RTN pixels can be useful!