Maunakea Metrics

Jessica Dempsey

Exec

Data metrics

Operational metrics

Engineering metrics

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Engineering metrics

Voltages, temperatures, pressures (ie. please tell us if you break or are about to die)

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Data metrics

Operational metrics

Faults, weather, scheduling, calibration (what do your night logs report?)

Engineering metrics

Voltages, temperatures, pressures (ie. please tell us if you break or are about to die)

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Data metrics

Data quality assessment, reduction, products, archive use

Operational metrics

Faults, weather, scheduling, calibration (what do your night logs report?)

Engineering metrics

Voltages, temperatures, pressures (ie. please tell us if you break or are about to die)

Exec

What you need to show your Board to make them give you money

Data metrics

Data quality assessment, reduction, products, archive use

Operational metrics

Faults, weather, scheduling, calibration (what do your night logs report?)

Engineering metrics

Voltages, temperatures, pressures (ie. please tell us if you break or are about to die)

Executive metrics

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Yes, of course!

Executive metrics

Sure

Over-subscription

User satisfaction

Publications

Yes, of course!

Completion and efficiency

Executive metrics

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Over-subscription

Sometimes…

User satisfaction

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Executive metrics

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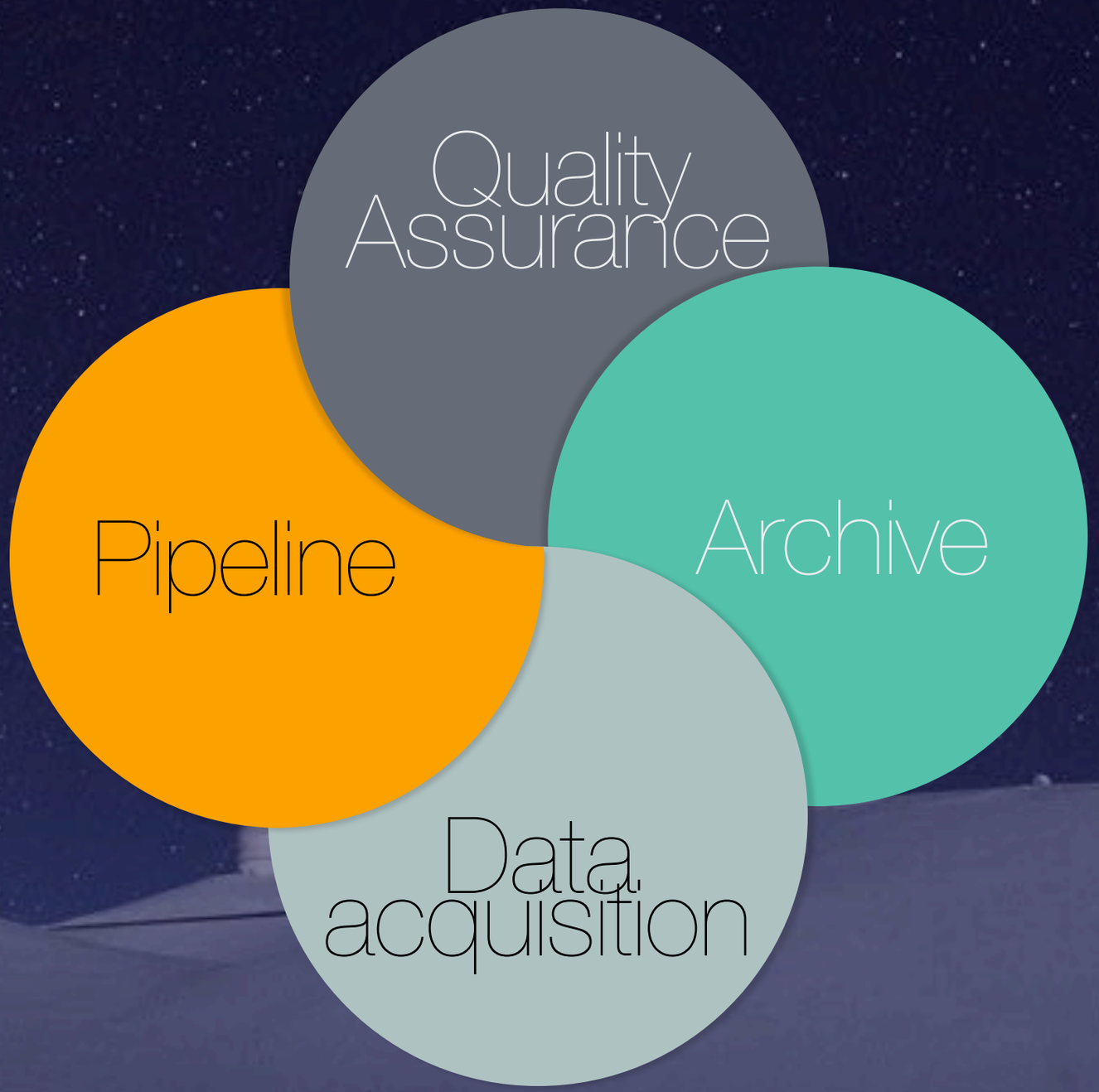
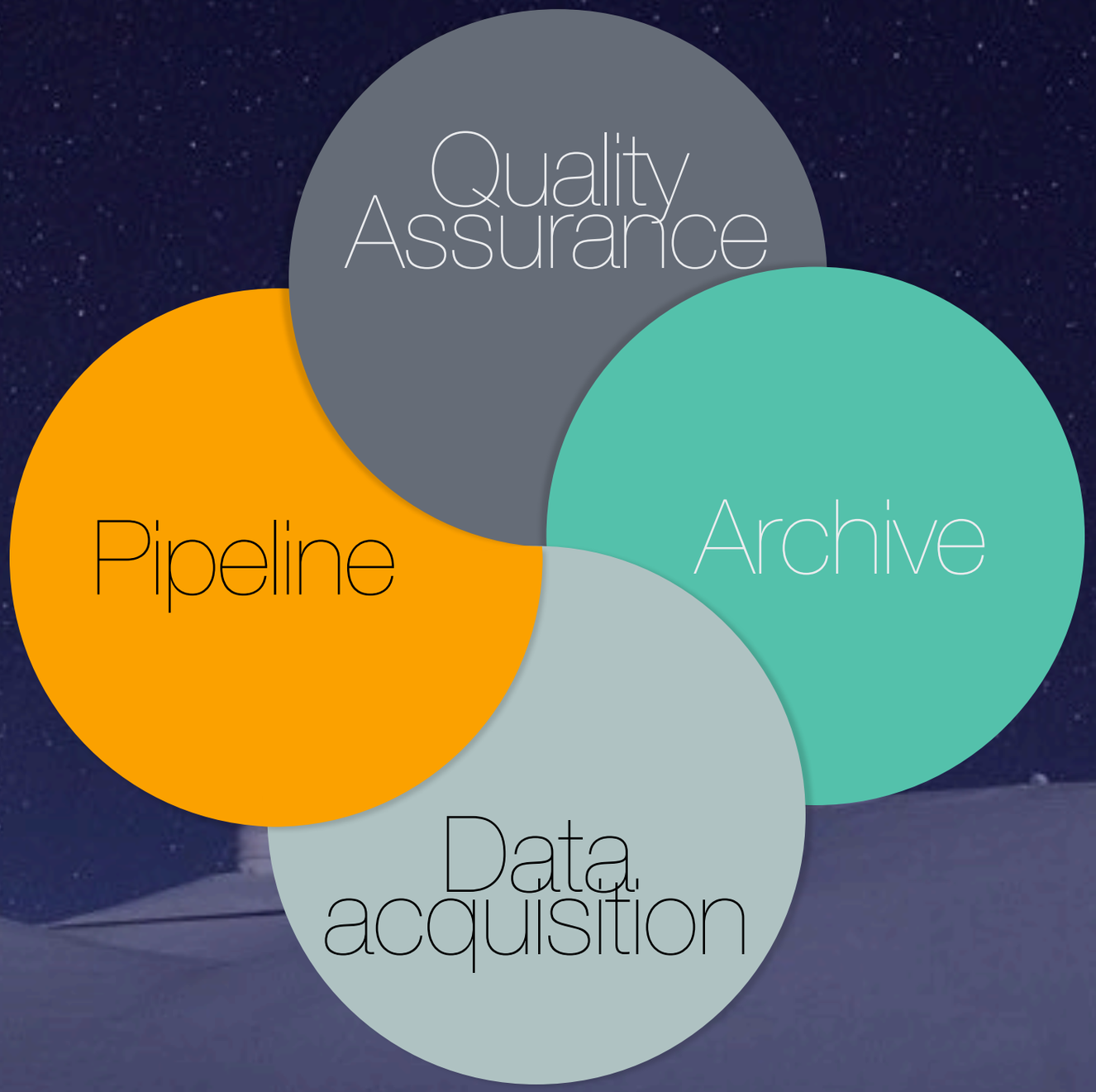
Completion and efficiency

Huh, what?

Data metrics



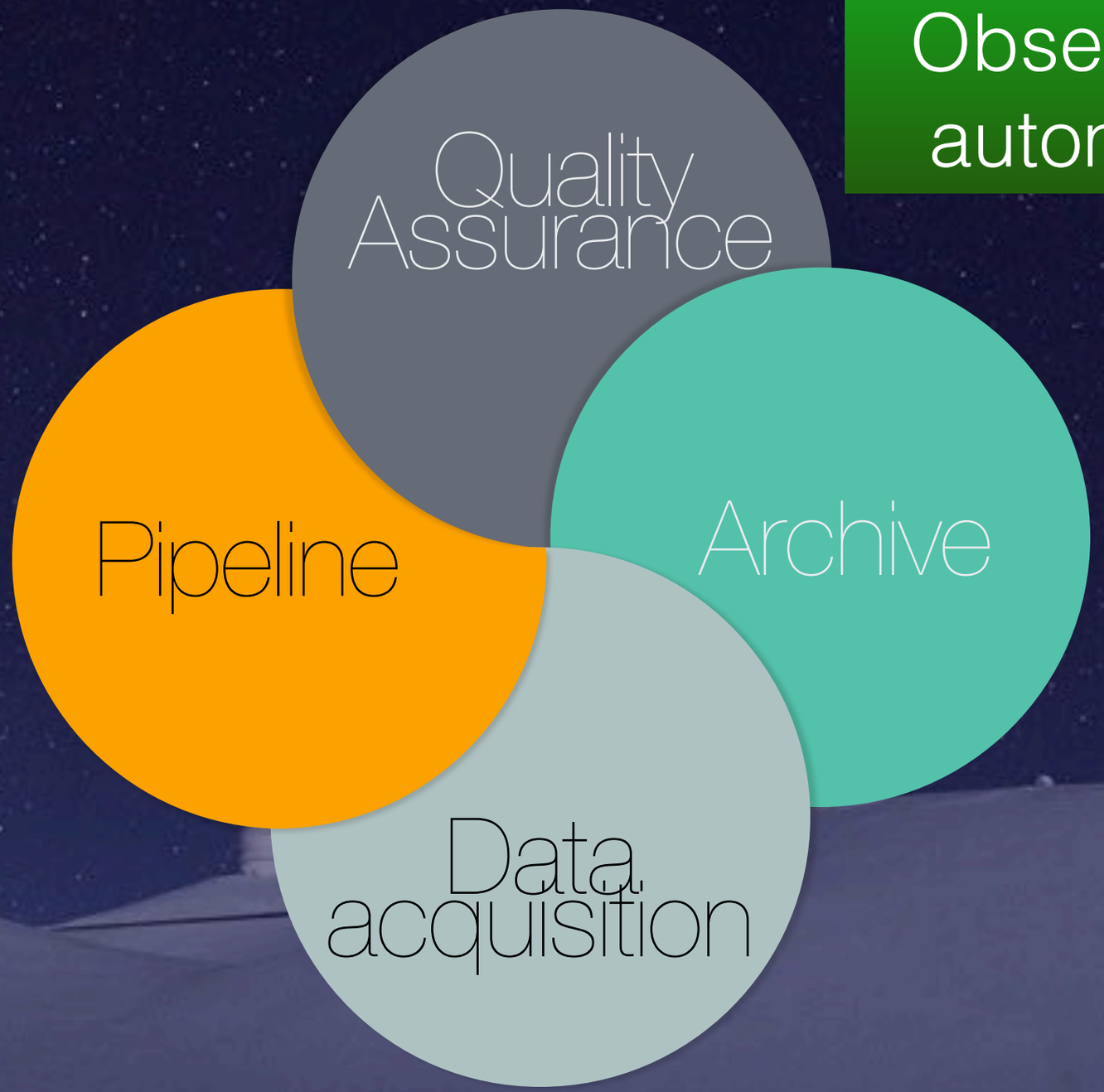
Data metrics



What fraction of papers?

Data metrics

Observer vs automation



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Observer vs automation

Strongly dependent on flex/classic

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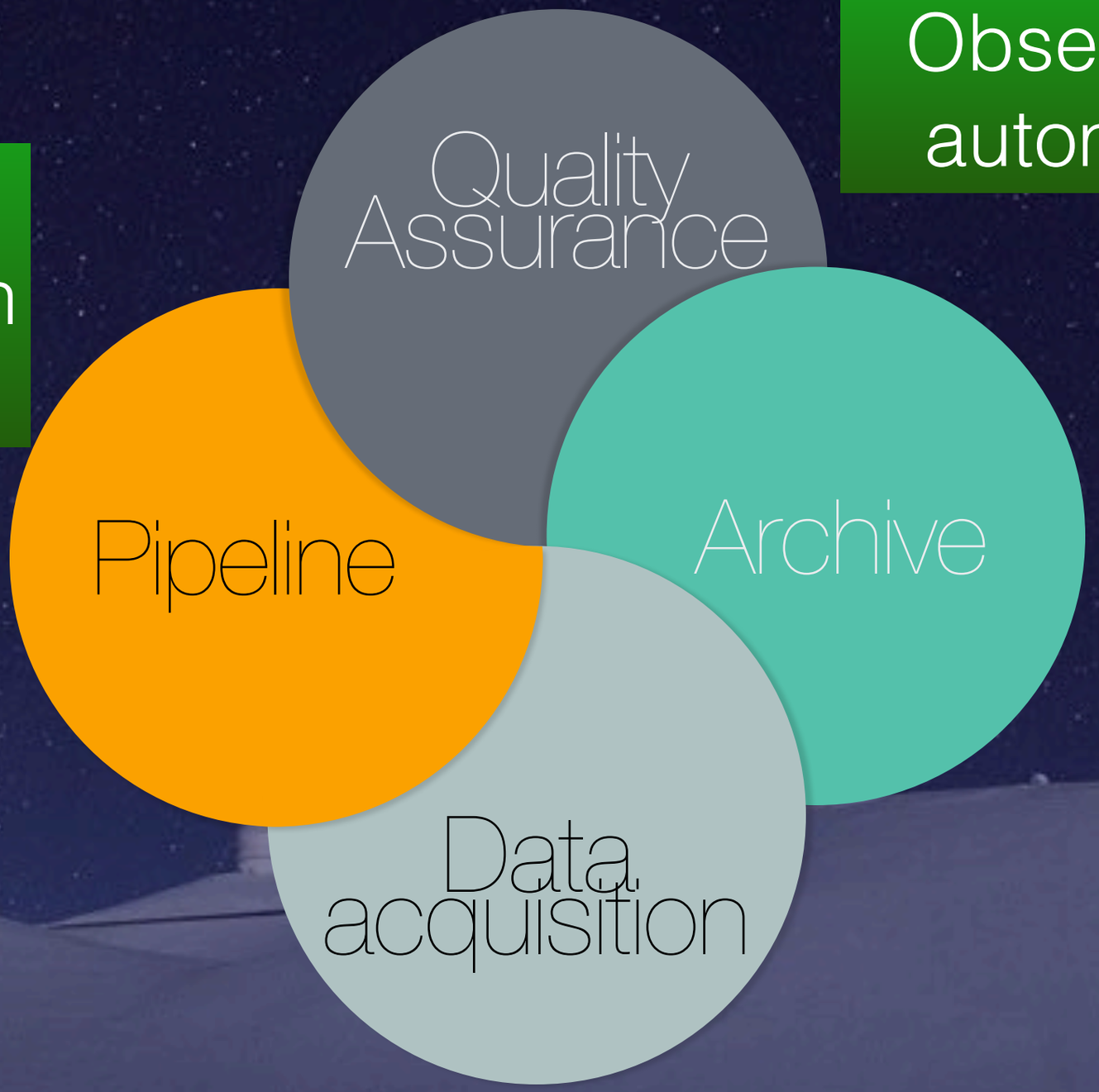

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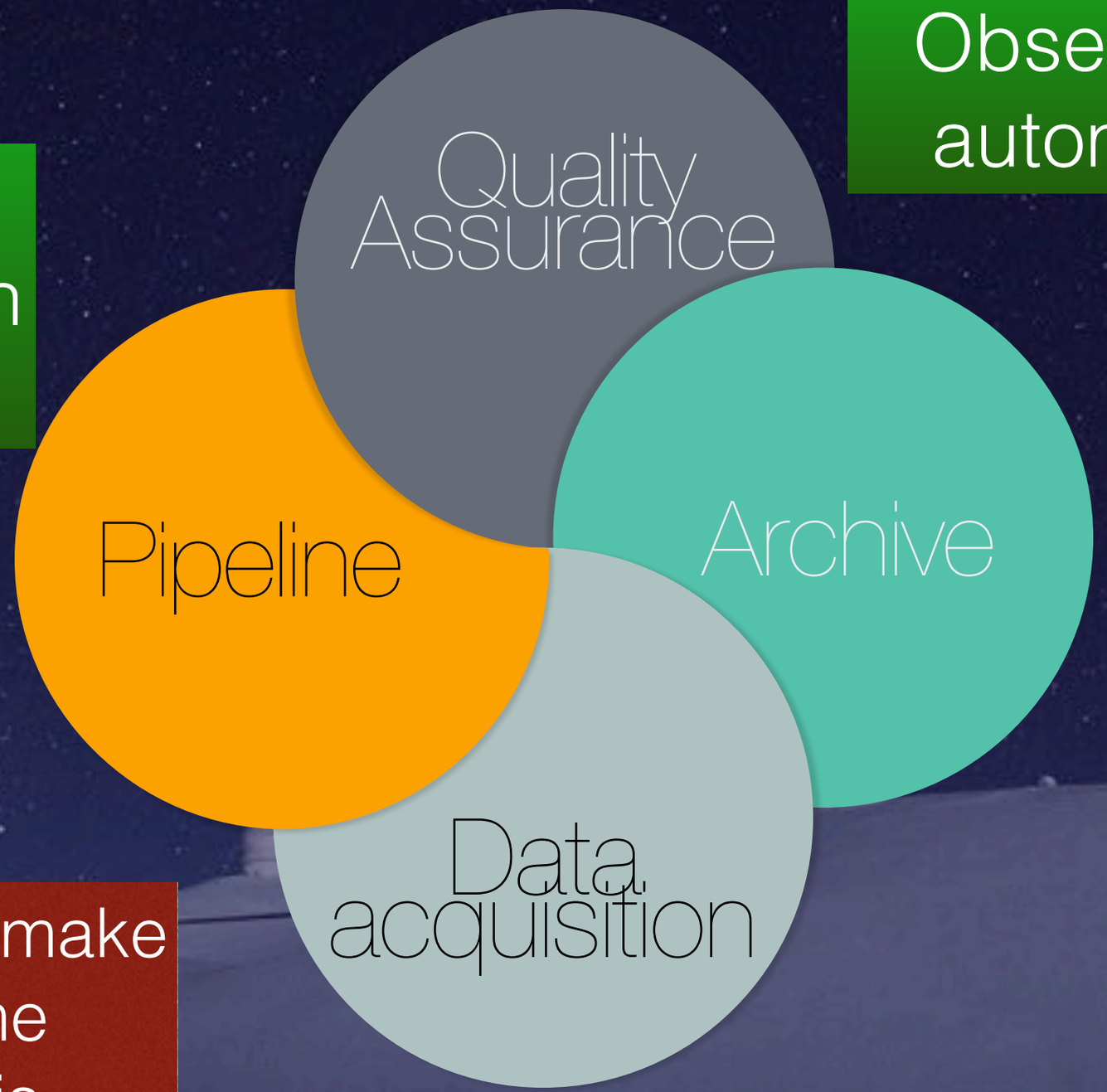
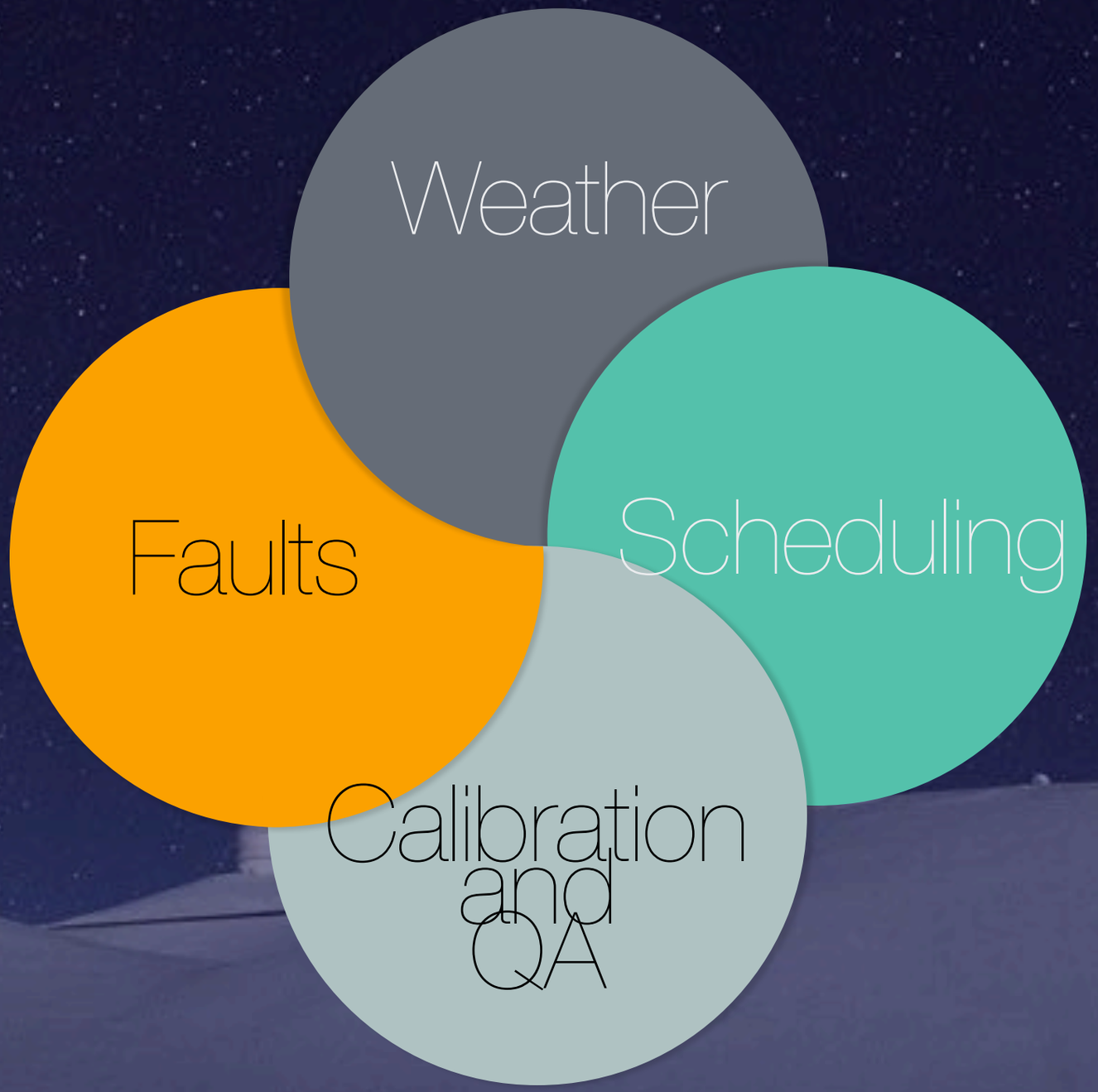


What fraction of papers?

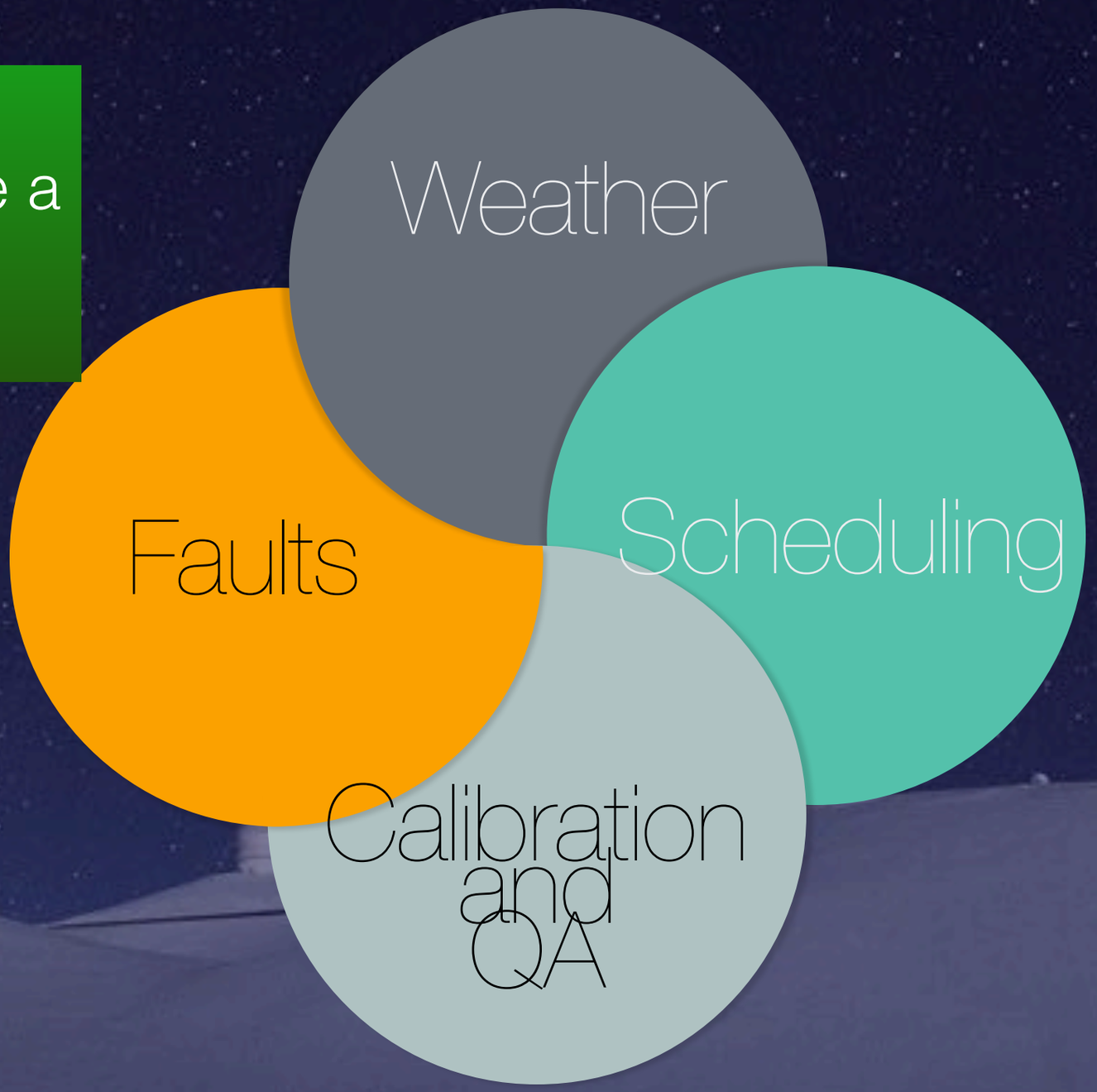
High rates make real-time analysis challenging

Operations metrics



Operations metrics

Only half the observatories use a database fault system



Operations metrics

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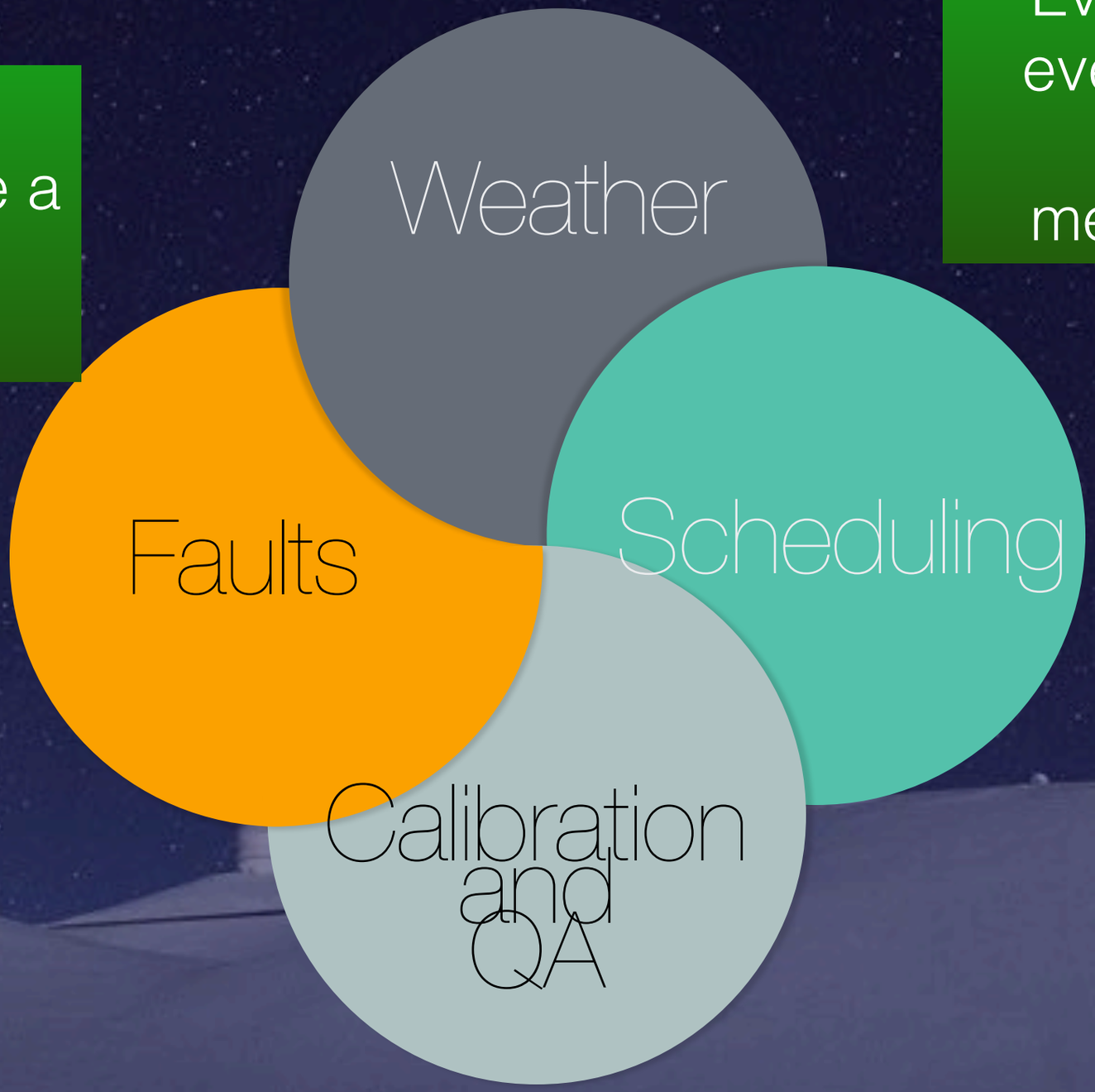
Everyone uses everyone else's weather measurements



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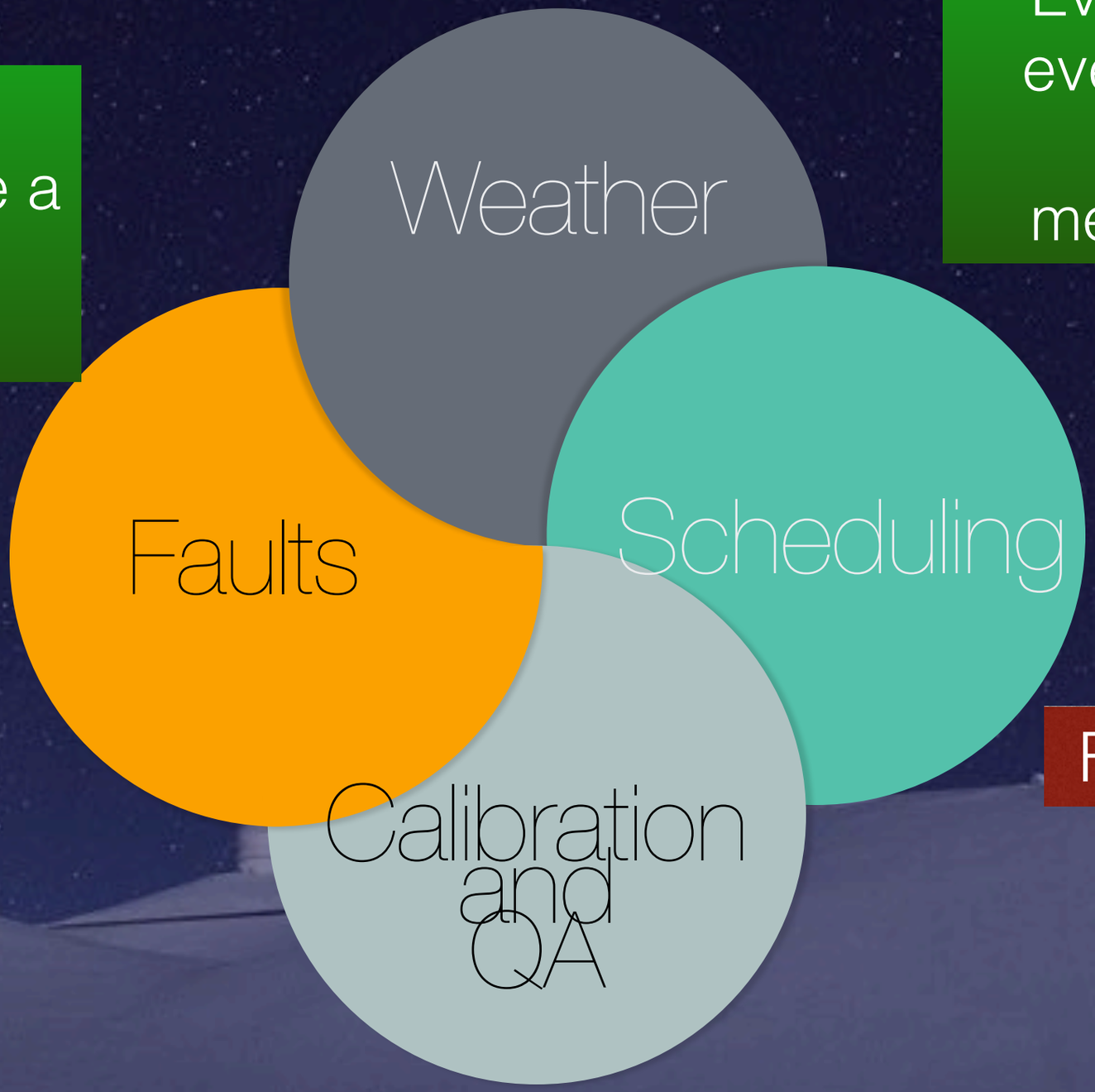

Flex or queue?

Operations metrics

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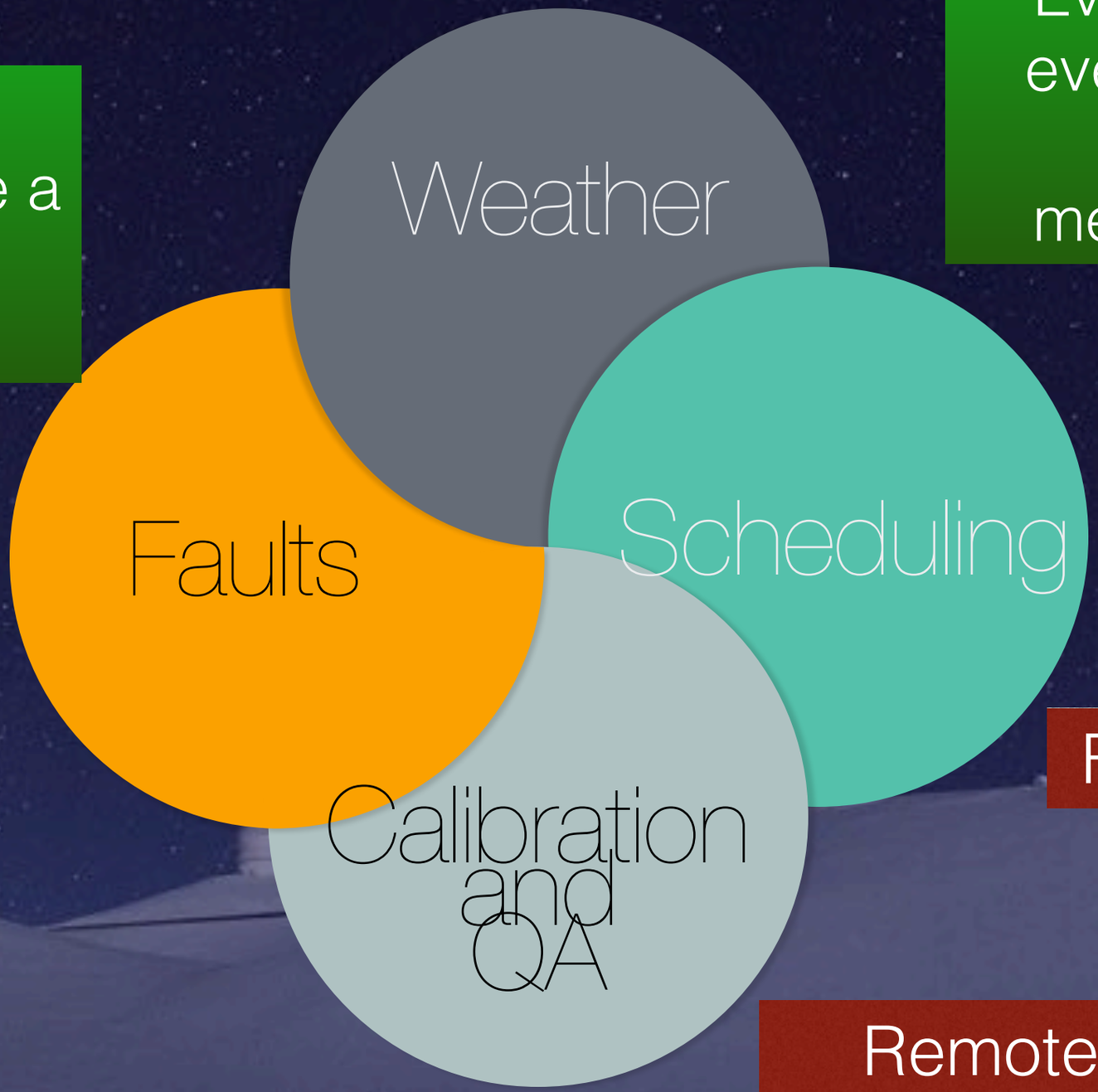
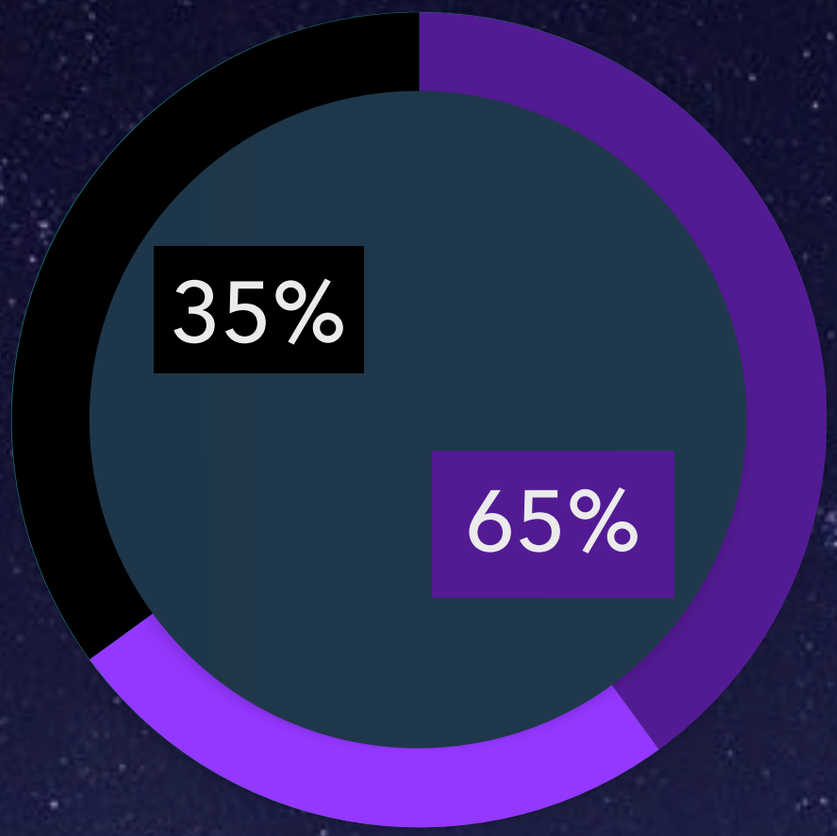
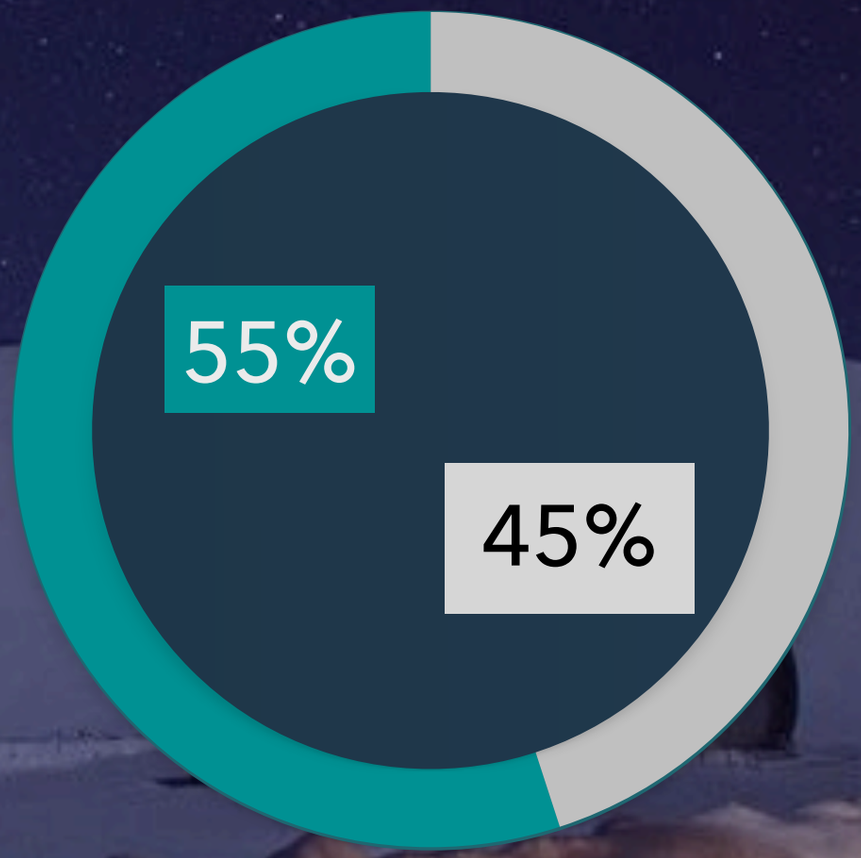


Flex or queue?

Remote or summit?



Remote operations - all observatories either are in full/ partial remote operations or planning on it



Nearly even split between flex (queue) observing and classical scheduling

Faults and efficiency

About half of MK telescopes report using a database (searchable) fault reporting system

Value return is not just in keeping fault rates low (<3%) but for training, historical tracking, redundancy

Highest time losses reported are in instrument downtime, dome/shutter failures… and software

400 scientists, engineers and technicians

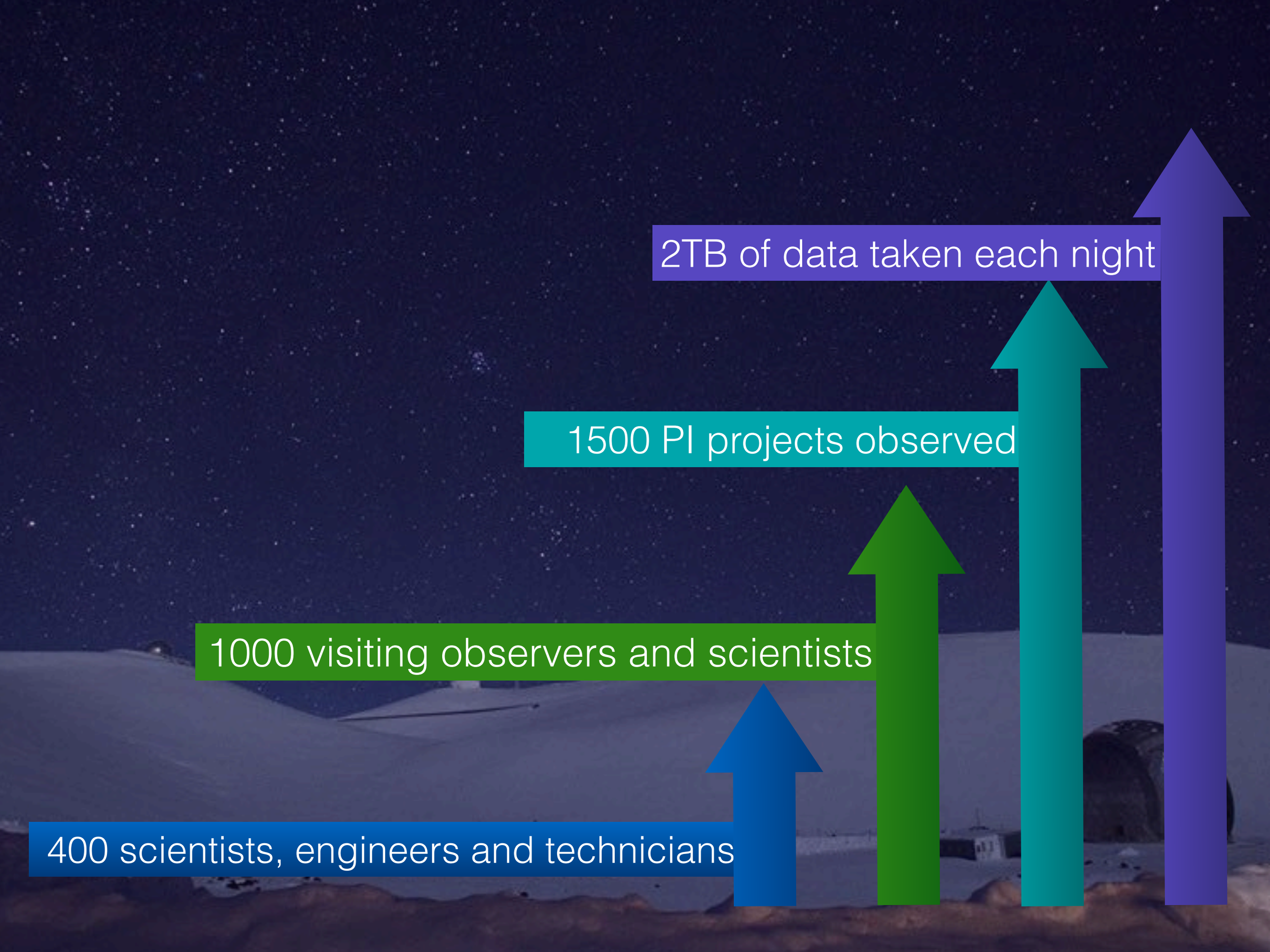
1000 visiting observers and scientists

400 scientists, engineers and technicians

1500 PI projects observed

1000 visiting observers and scientists

400 scientists, engineers and technicians


2TB of data taken each night
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