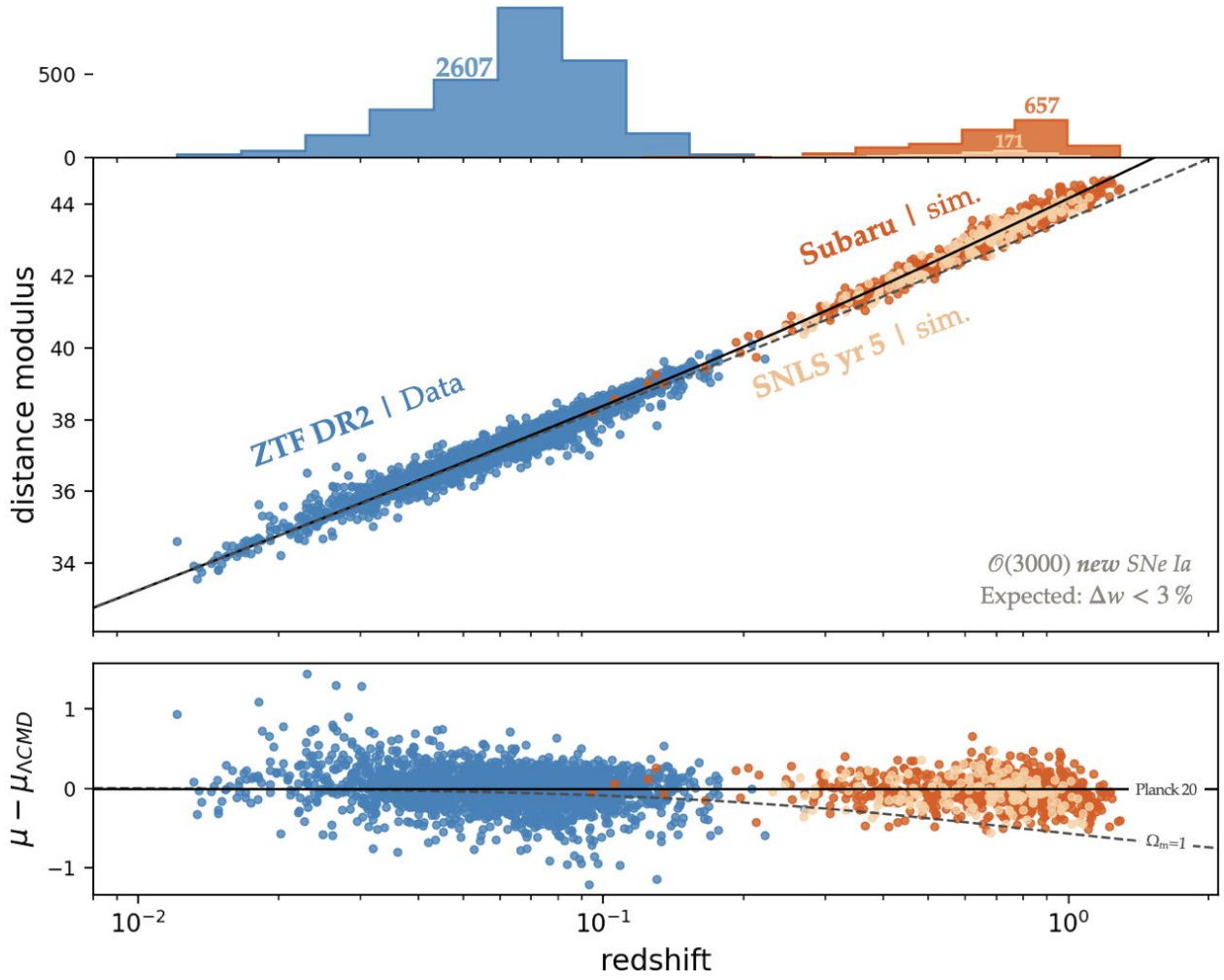
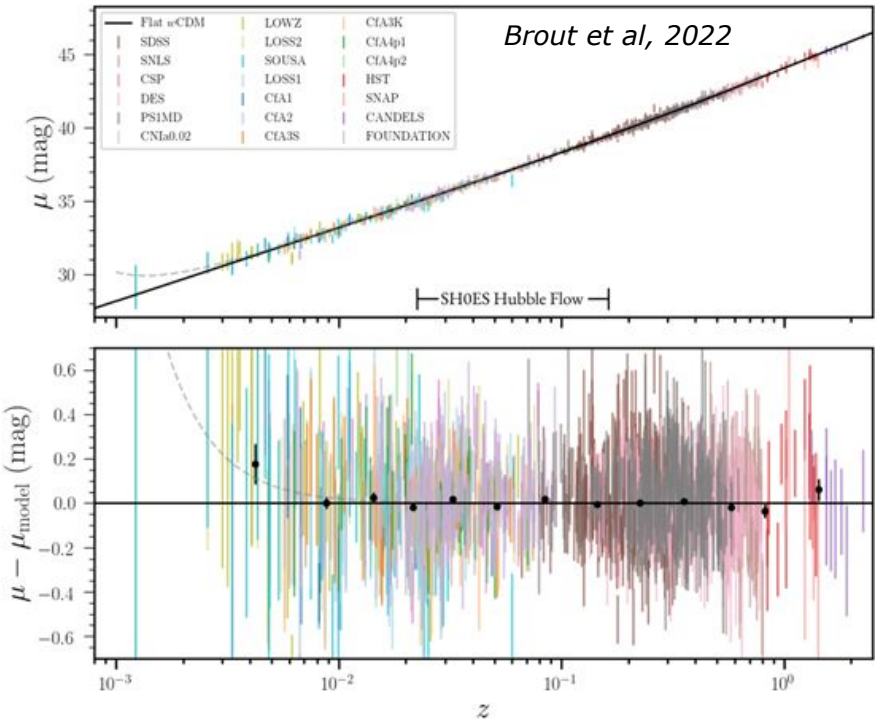
Towards DR2.5 : overview

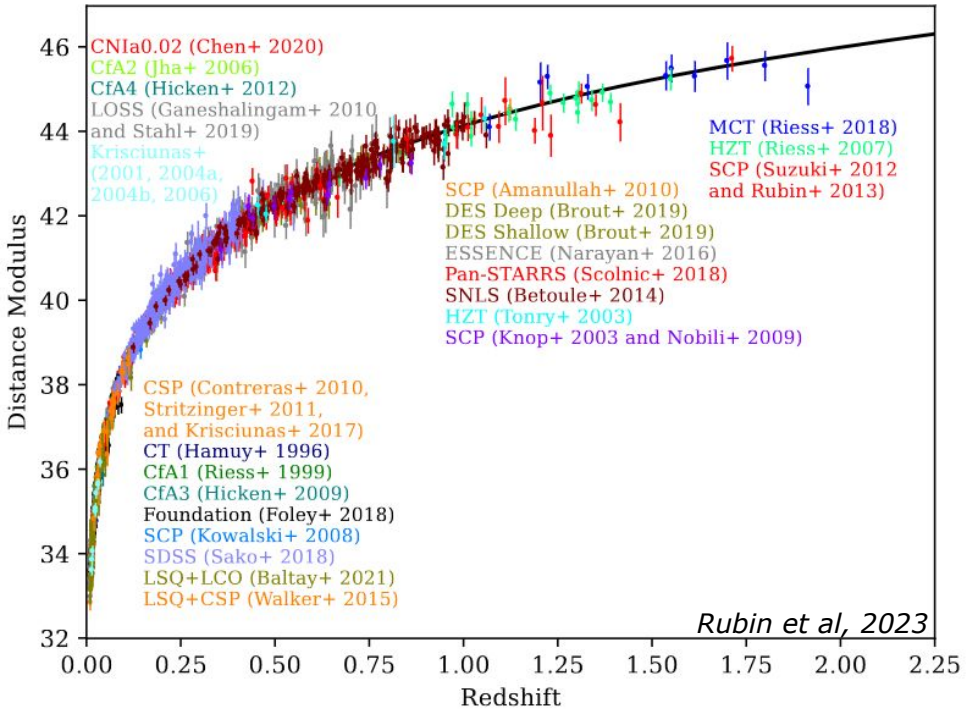
Goal(s) of DR2.5



- If we can build this diagram, we can also
  - measure fs8
  - measure H0 (as soon as we have the calibrators)

Recent Hubble diagrams:Pantheon+ & Union3





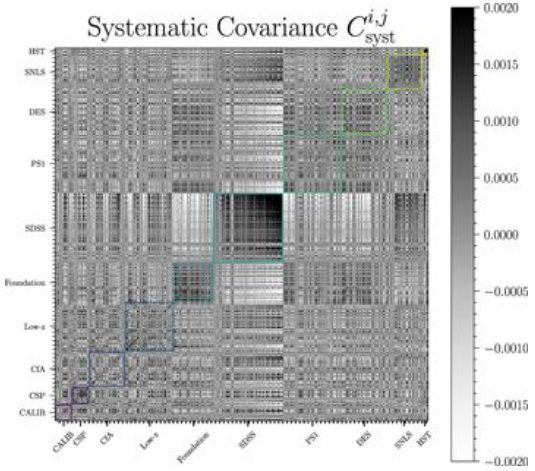


Table 1. Bandpass shifts for each filter bring the synthesized color terms in line w observed color terms. For the Bessell & M phy (2012) filters, we take the shifts fr Bohlin & Landolt (2015); for the Smith et (2002) filters, we compute our own shifts usi stars in common with CALSPEC.

Filter	Shift (Å)
Bessell & Murphy (2012) U	-8
Bessell & Murphy (2012) B	-20
Bessell & Murphy (2012) V	-20
Bessell & Murphy (2012) R	-31
Bessell & Murphy (2012) I	-27
Smith et al. (2002) u	7
Smith et al. (2002) g	19
Smith et al. (2002) r	7
Smith et al. (2002) i	30
Smith et al. (2002) z	−12
LOSS K1 B	−13
LOSS K2 B	−28
LOSS K3 B	−22
LOSS K4 B	−21
LOSS N1 B	−22

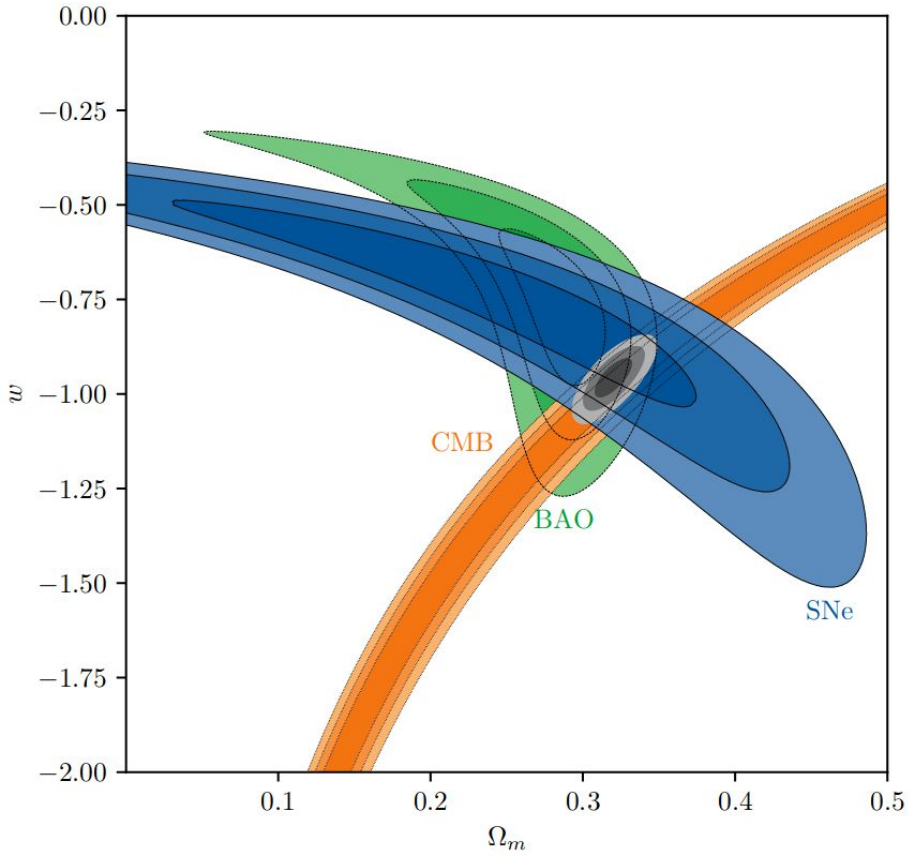
Table 1 *continued*

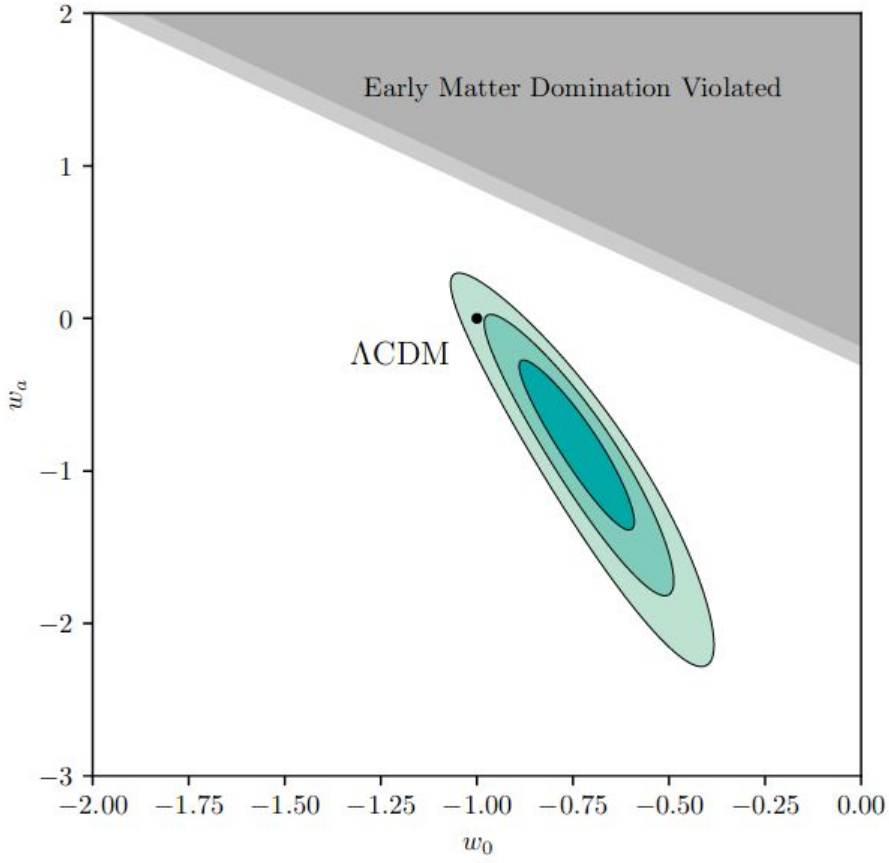
Table 1 *(continued)*

Filter	Shift (Å)
LOSS N2 B	73
LOSS K1 V	−18
LOSS K2 V	−17
LOSS K3 V	−18
LOSS K4 V	−18
LOSS N1 V	−18
LOSS N2 V	−17
LOSS K1 R	−46
LOSS K2 R	−49
LOSS K3 R	−49
LOSS K4 R	−44
LOSS N1 R	−47
LOSS N2 R	−51
LOSS K1 I	−180
LOSS K2 I	−58
LOSS K3 I	−56
LOSS K4 I	−55
LOSS N1 I	−133
LOSS N2 I	−133
LCO B	−23
LCO V	124
LCO g	−65
LCO r	−9
LCO i	62
CfA1 FLWO B thick	12
CfA1 FLWO B thin	11
CfA1 FLWO V thick	−35
CfA1 FLWO V thin	−9
CfA1 FLWO R thick	−73
CfA1 FLWO R thin	−63
CfA1 FLWO I thick	27
CfA1 FLWO I thin	−61
CfA2 4Sh1 Harris U	38
CfA2 4Sh1 SAO U	5
CfA2 4Sh3 Harris U	38
CfA2 4Sh3 SAO U	5
CfA2 AC Harris U	43
CfA2 AC SAO U	24
CfA2 4Sh1 Harris B	23
CfA2 4Sh1 SAO B	11
CfA2 4Sh3 Harris B	23
CfA2 4Sh3 SAO B	11
CfA2 AC Harris B	−8
CfA2 AC SAO B	−14
CfA2 4Sh1 Harris V	−13
CfA2 4Sh1 SAO V	−14
CfA2 4Sh3 Harris V	−13
CfA2 4Sh3 SAO V	−14
CfA2 AC Harris V	−30
CfA2 AC SAO V	−19
CfA2 4Sh1 Harris R	−57
CfA2 4Sh1 SAO R	−42
CfA2 4Sh3 Harris R	−57
CfA2 4Sh3 SAO R	−42
CfA2 AC Harris R	−62
CfA2 AC SAO R	−39
CfA2 4Sh1 Harris I	−88
CfA2 4Sh1 SAO I	−157
CfA2 4Sh3 Harris I	−88
CfA2 4Sh3 SAO I	−157
CfA2 AC Harris I	−228
CfA2 AC SAO I	−157
CfA3/4 4Sh Harris B	51
CfA3/4 KC $B1$	2
CfA3/4 MC B	3
CfA3/4 KC $B1$	−9
CfA3/4 KC $B2$	−64
CfA3/4 4Sh Harris V	4
CfA3/4 KC $V1$	4
CfA3/4 MC V	−26
CfA3/4 KC $V1$	−3
CfA3/4 KC $V2$	−3
CfA3/4 4Sh Harris R	−27
CfA3/4 4Sh Harris I	−92
CfA3/4 KC $r1$	24
CfA3/4 MC r	17
CfA3/4 KC $r1$	30
CfA3/4 KC $r2$	−11
CfA3/4 KC $i1$	−30
CfA3/4 MC i	−33
CfA3/4 KC $i1$	−28
CfA3/4 KC $i2$	−28

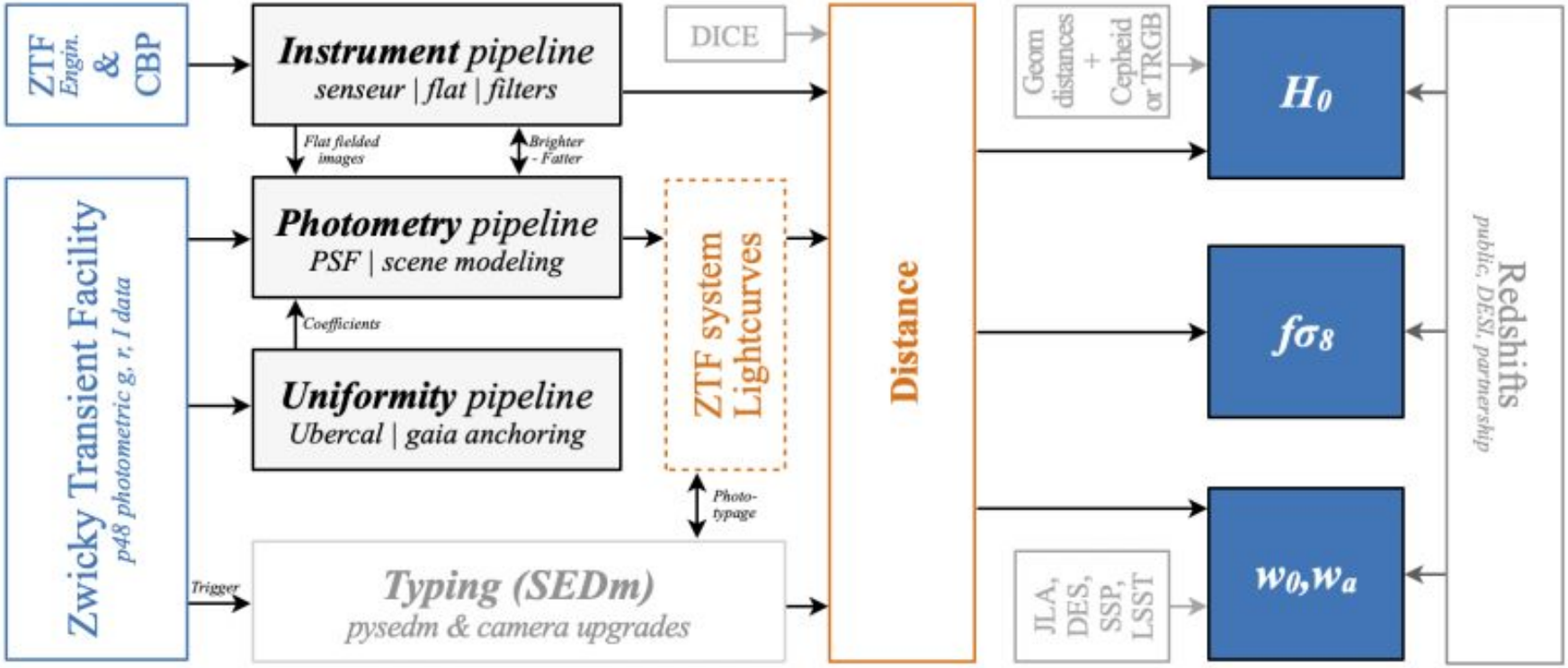
Union 3

https://arxiv.org/abs/2311.12098

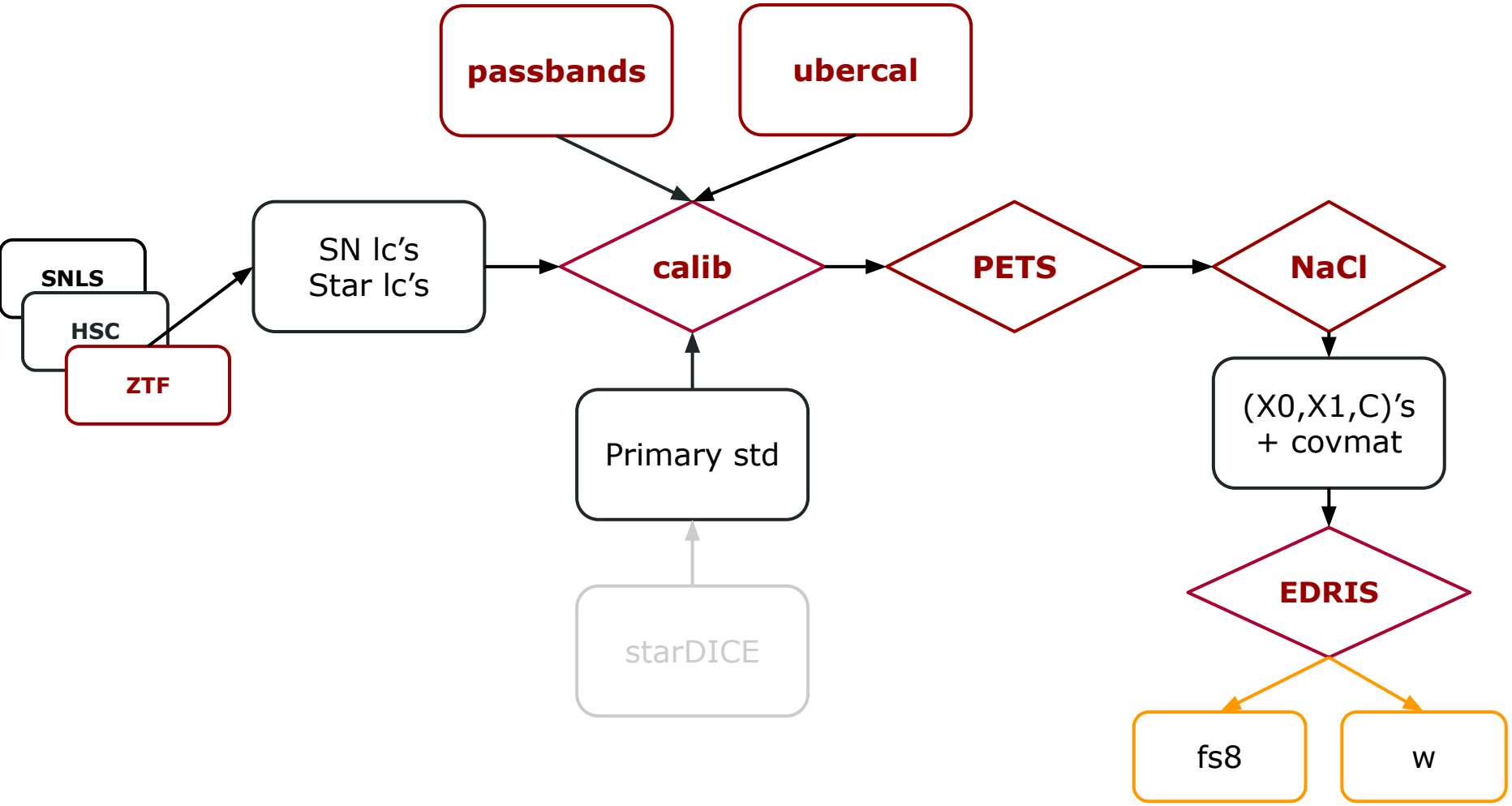




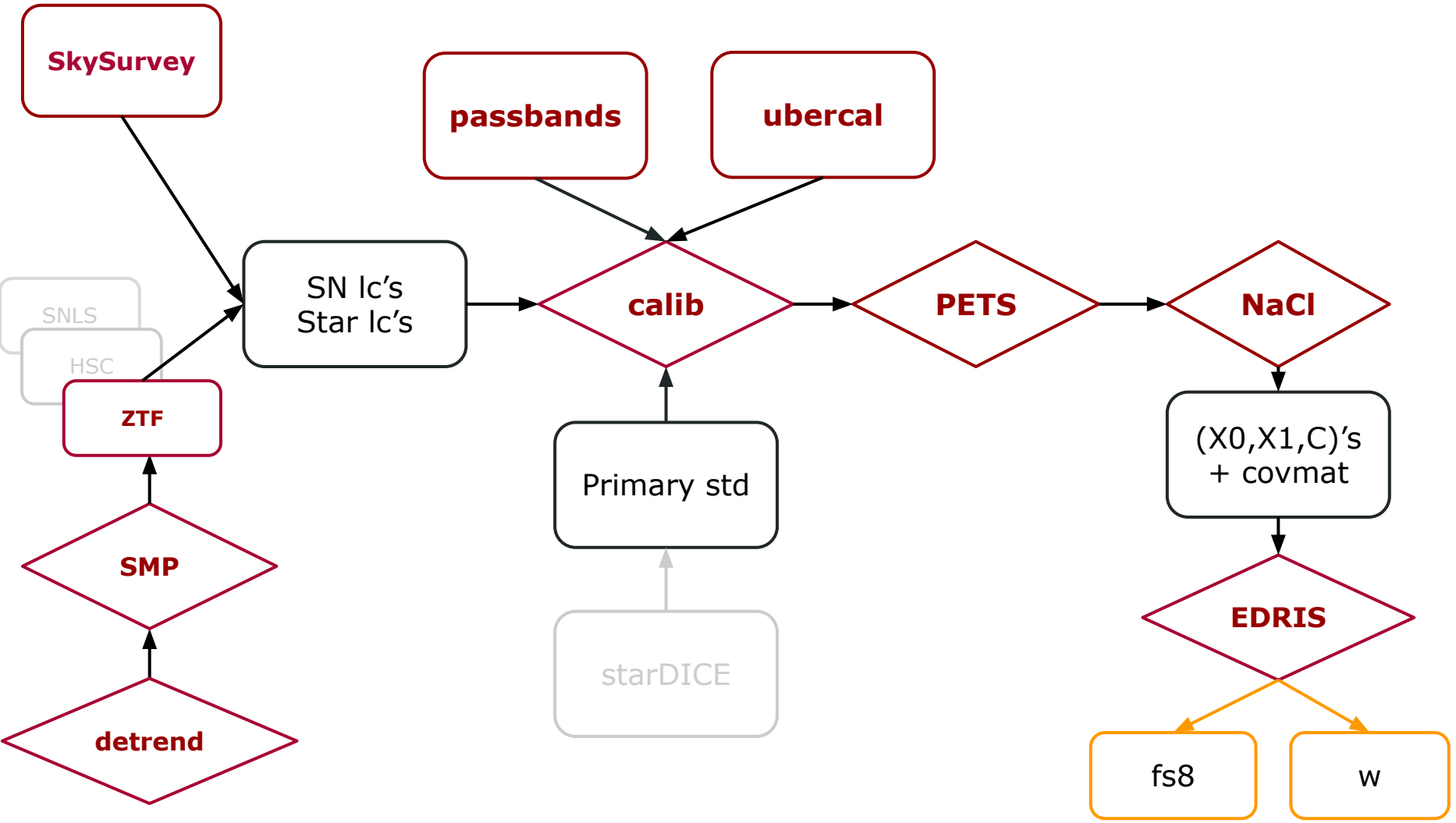
How do we get there ? The ANR plan



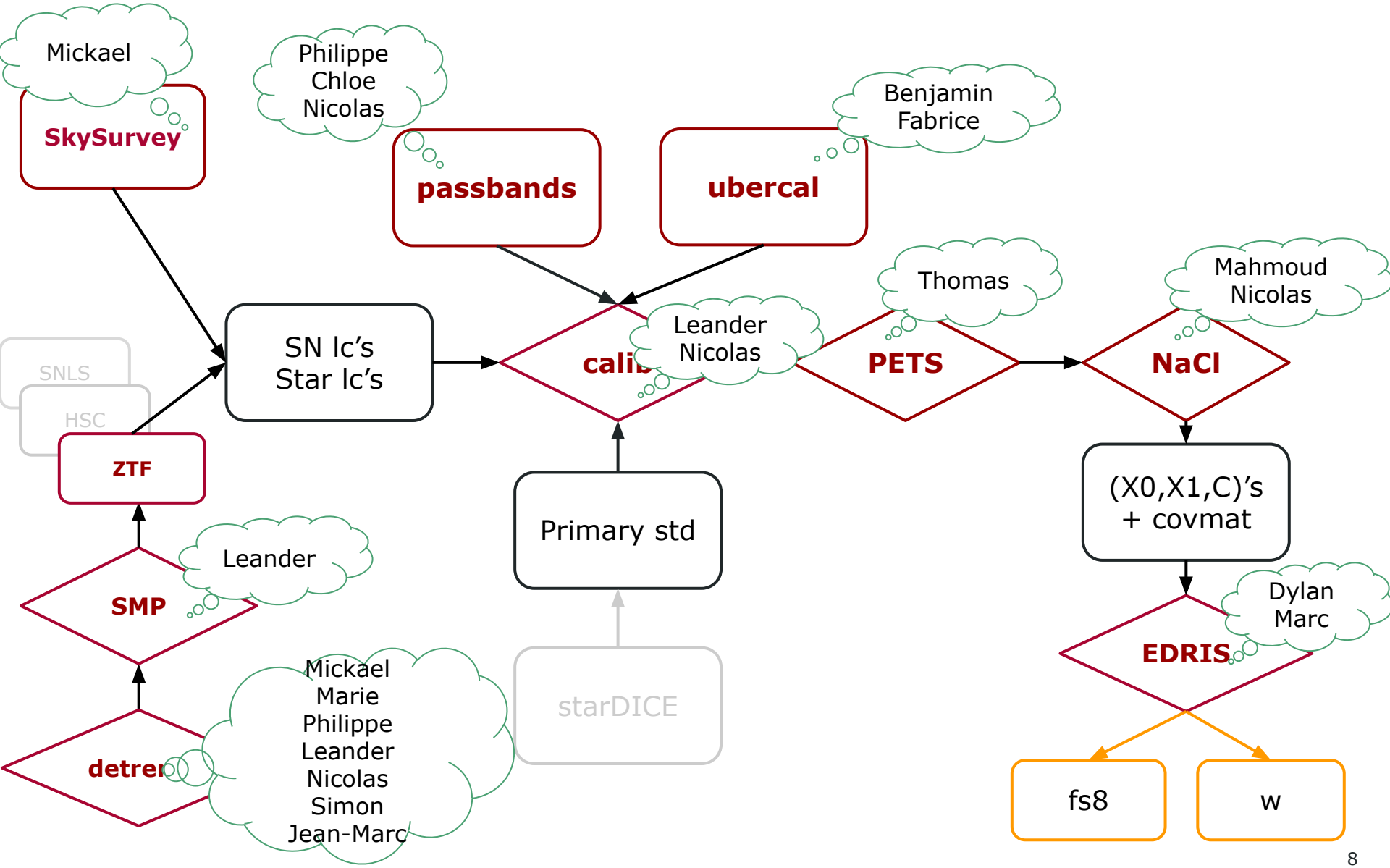
How do we get there ? The Lemaitre pipeline



Lemaitre pipeline



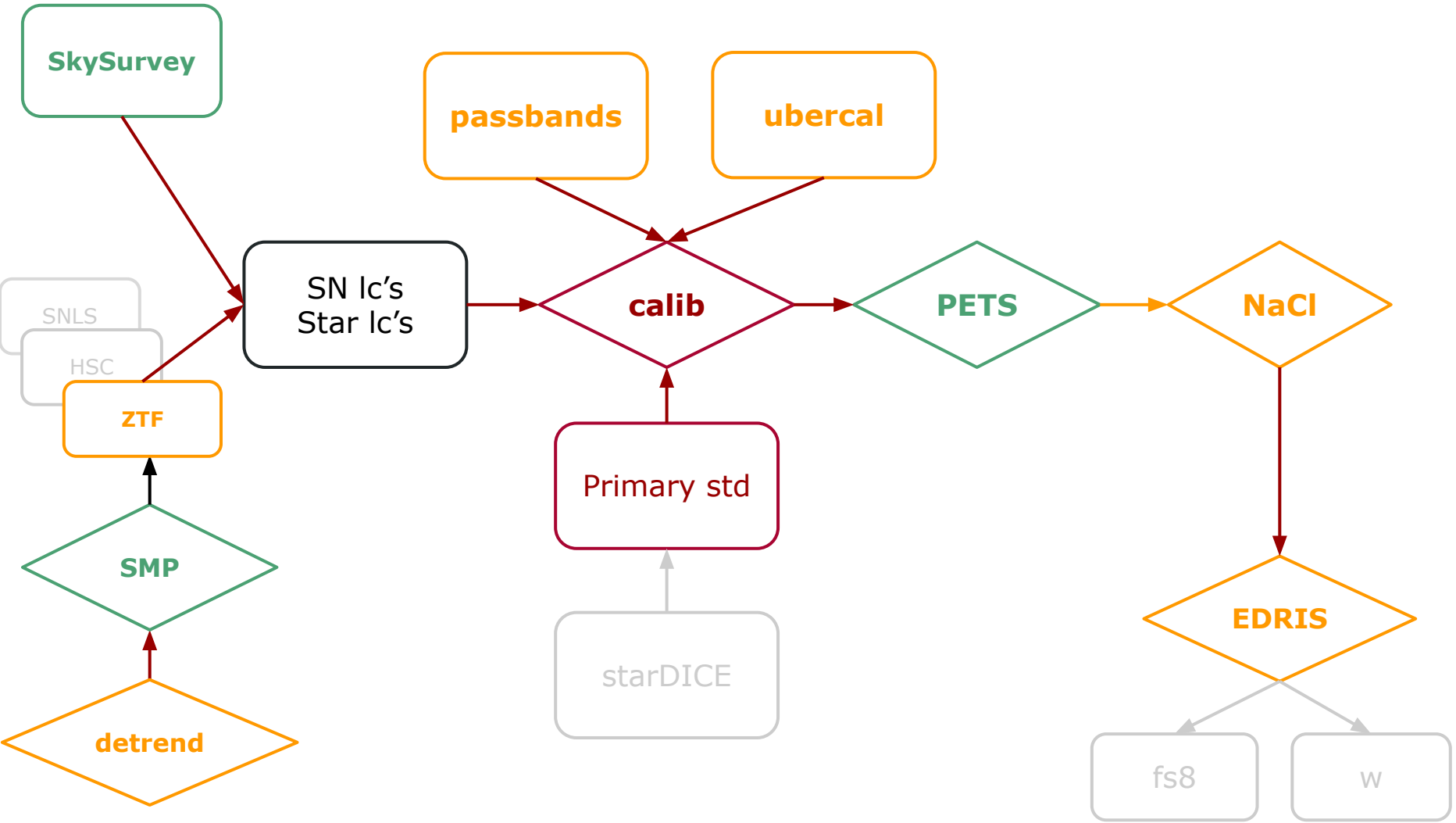
How do we get there ?



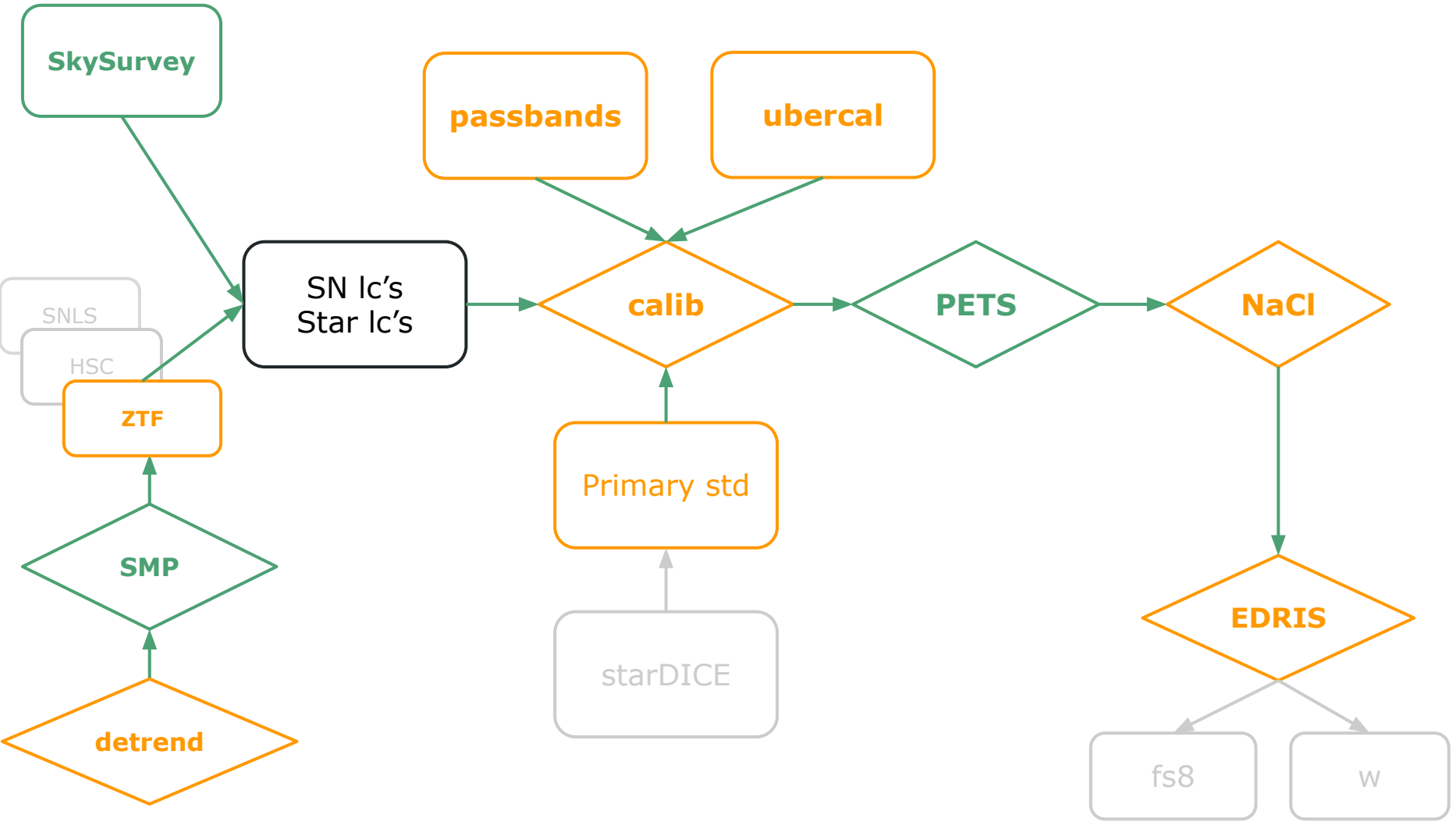
Plans for DR2.5

- Lemaitre pipeline is taking shape
- Goal:
  - Automated infrastructure
  - Running in continuous integration mode
  - -> each time a component in changed, cosmology recomputed
- Most components exist already
  - Different completion stage
  - We are working on interconnecting them
- Goal is to have a working pipeline by mid-Feb
  - Usable by all
  - Fed either by simulations (SkySurvey)
  - And early SN data

Pipeline component status



Goal for mid-February : a fully running pipeline



Conclusion

- In this session, we are going to examine each pipeline component
- And draw plans to have
  - A fully interconnected pipeline by mid-February
  - A working ZTF detrending pipeline by ~ mid-March
  - So that the DR2.5 reprocessing can be done by ~ end of March
- Main issue:
  - Validate pocket effect correction and integrate it into the ztfimg package
  - (this is the subject of the next talk)

14:00 → 18:40 **Plans for DR2.5**

Organizing the work for DR2.5

Président de session: Nicolas Regnault (LPNHE)

14:00 **Plans for DR2.5: overview** 20m
Orateur: Nicolas Regnault (LPNHE)

14:20 **Pocket effect** 20m
Orateur: Nicolas Regnault (LPNHE)

14:40 **Plans for Ubecal DR2 2.5** 20m
Orateur: Benjamin Racine (CPPM/IN2P3/CNRS)

15:00 **ZTF passbands** 30m
Orateur: Philippe Rosnet (Laboratoire de Physique de Clermont, Université Clermont Auvergne & CNRS/IN2P3)

15:30 **Pause** 20m

15:50 **ZTF - DES intercalibration** 20m
Orateur: Brodie Popovic (CNRS)

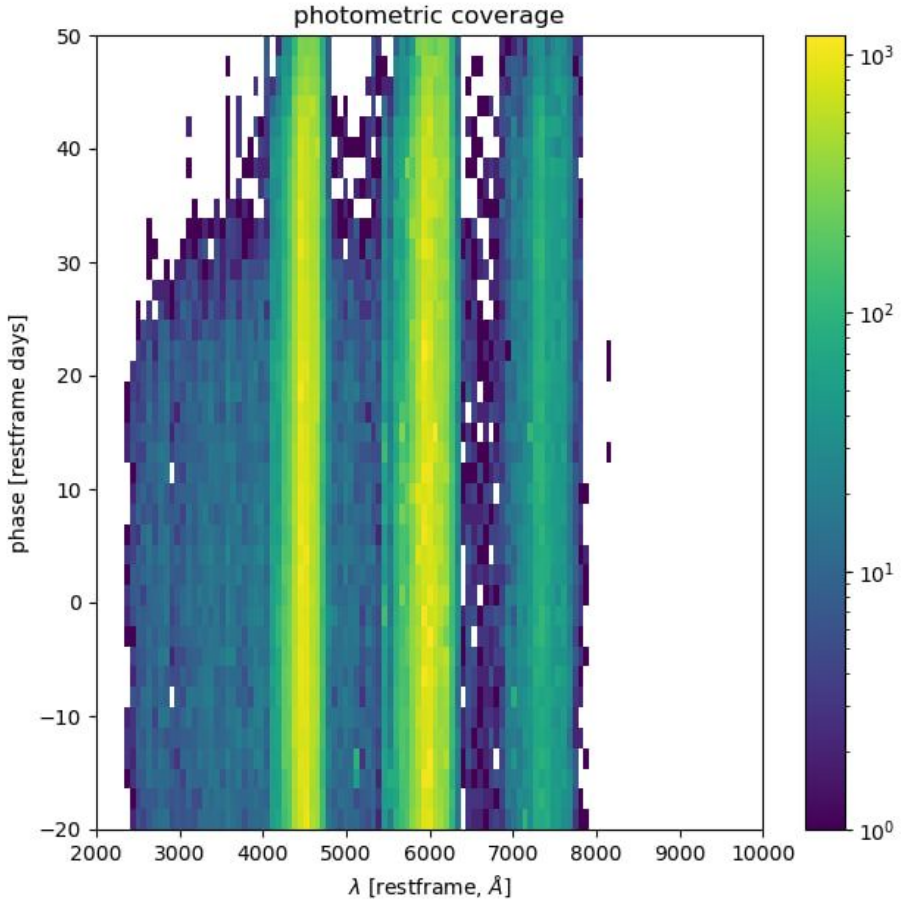
16:10 **Detrending pipeline : plans for DR2.5** 20m
Orateur: Marie Aubert (LPC / CNRS / IN2P3)

16:30 **PETS : building the ZTF cosmology sample** 20m
Orateur: Thomas de Jaeger (LPNHE)

16:50 **NaCl** 20m
Orateur: Mahmoud Ahmed Emam Osman

17:10 **EDRIS : Estimation de distances pour des Releves Incomplets de Supernovae** 20m
Orateur: Dylan KUHN

17:30 **Discussion** 50m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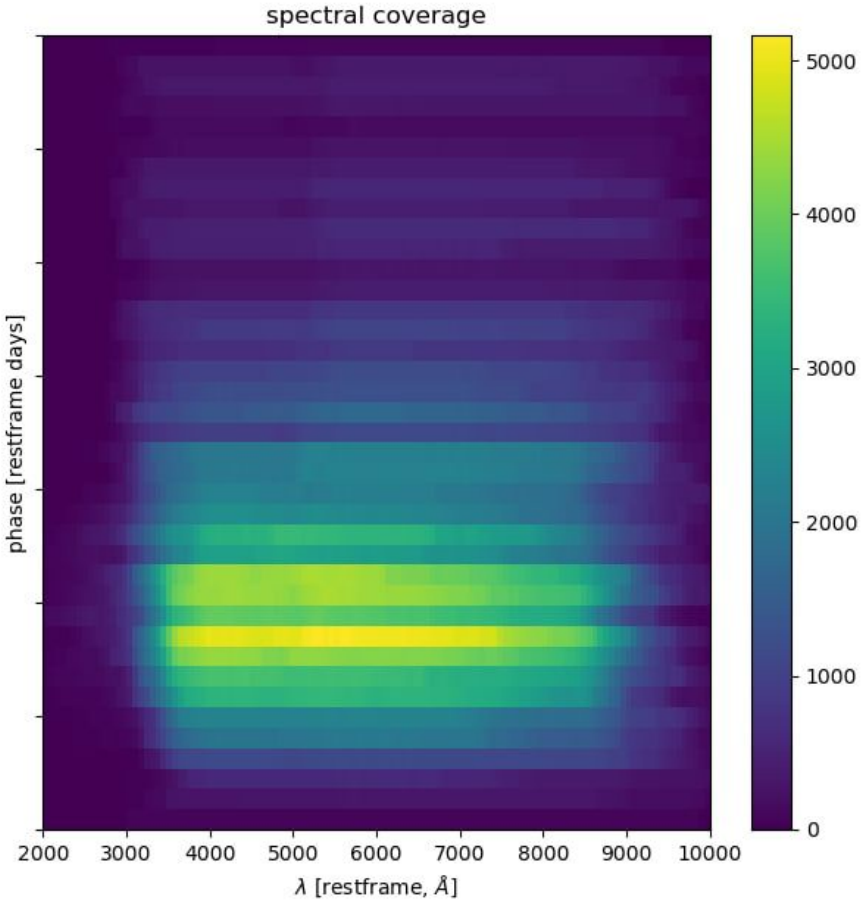
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