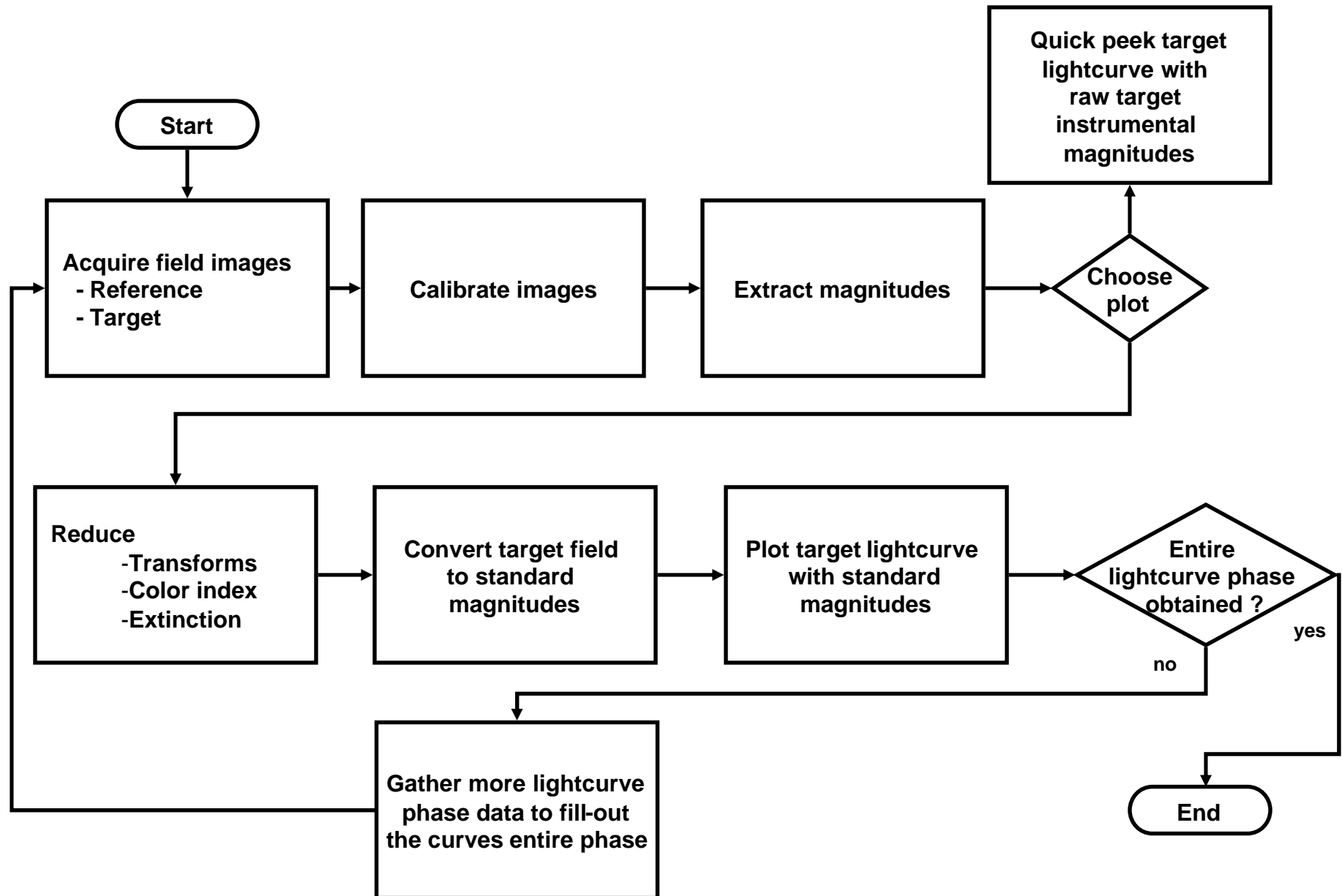
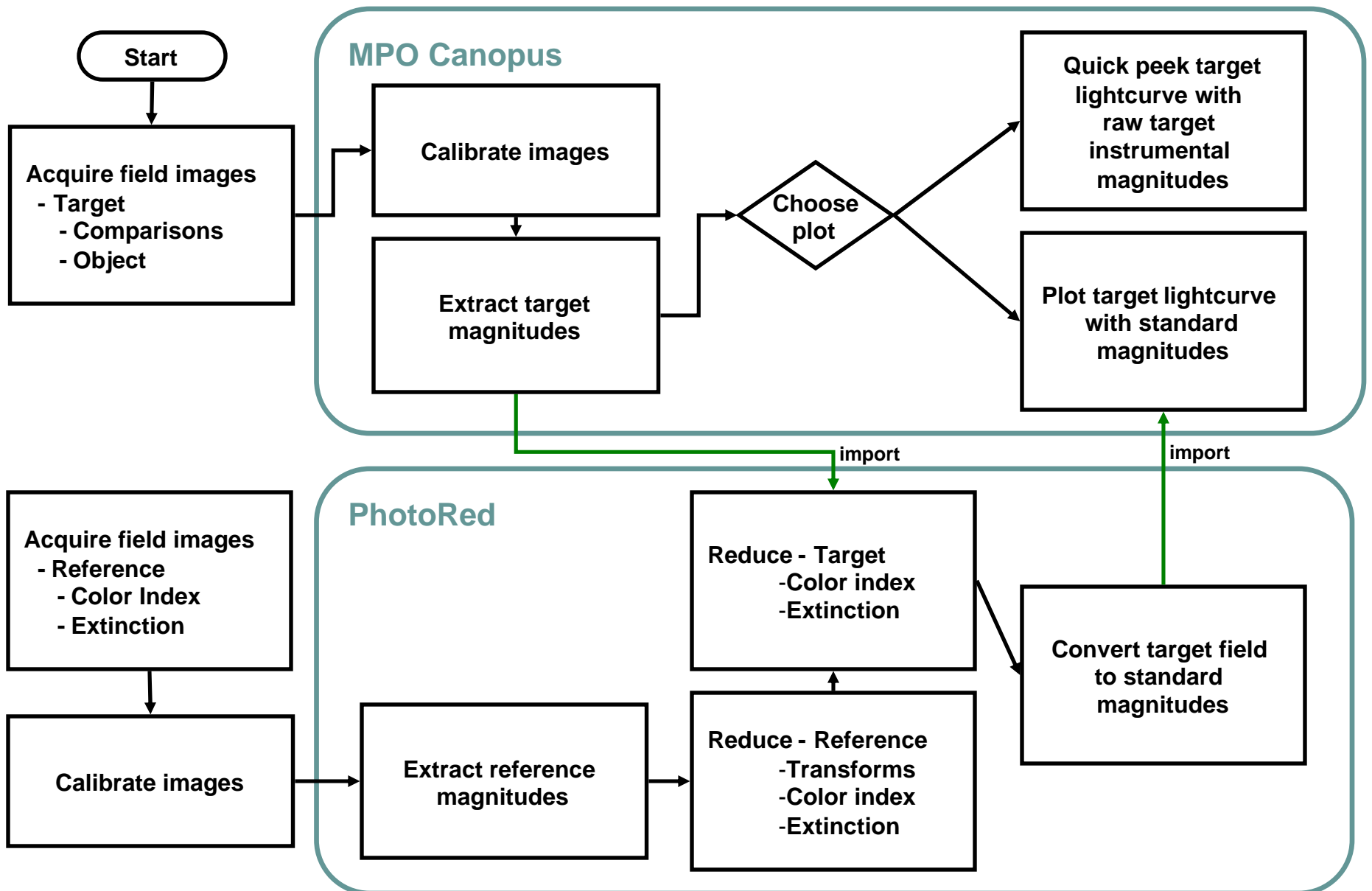


Process overview - abstract

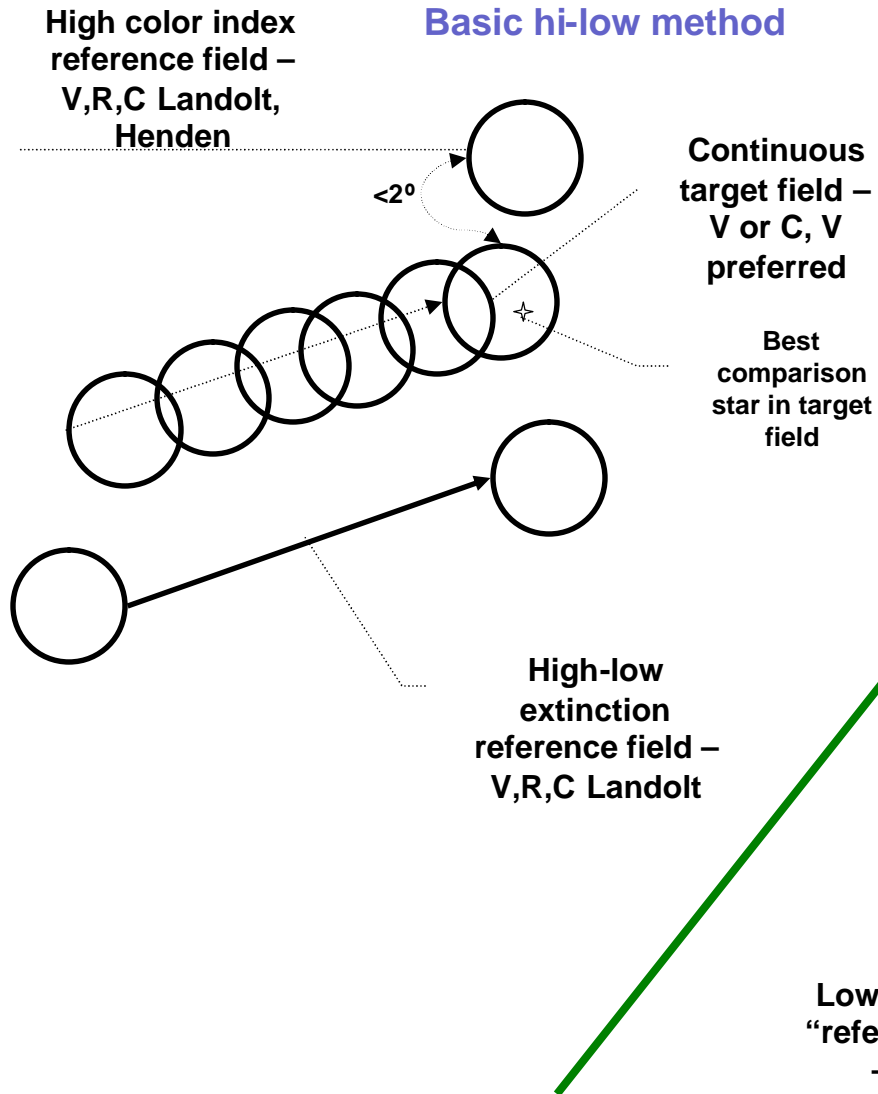


Process overview – package based

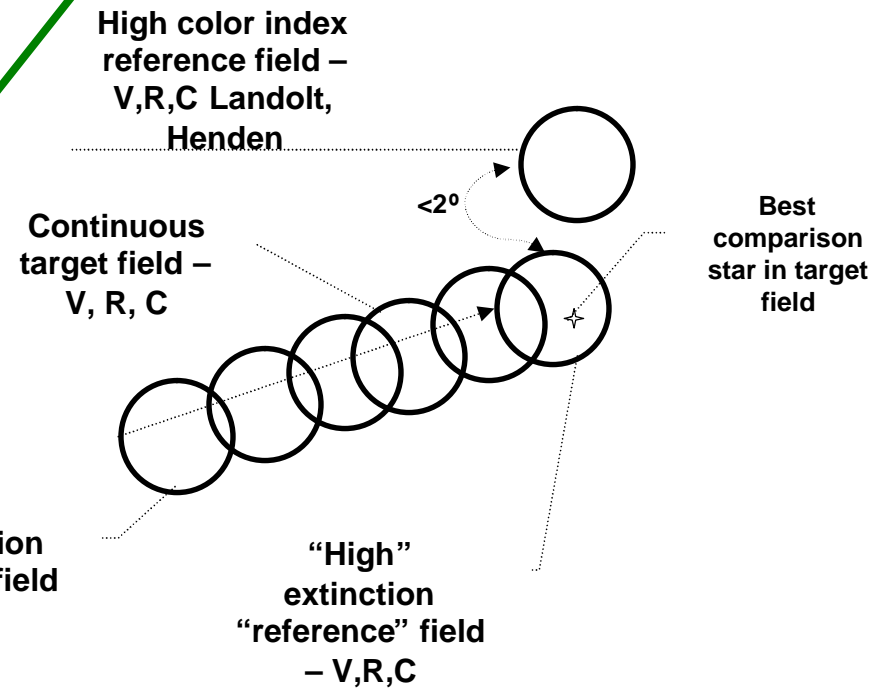


Acquire images – two alternative workflows

Basic hi-low method

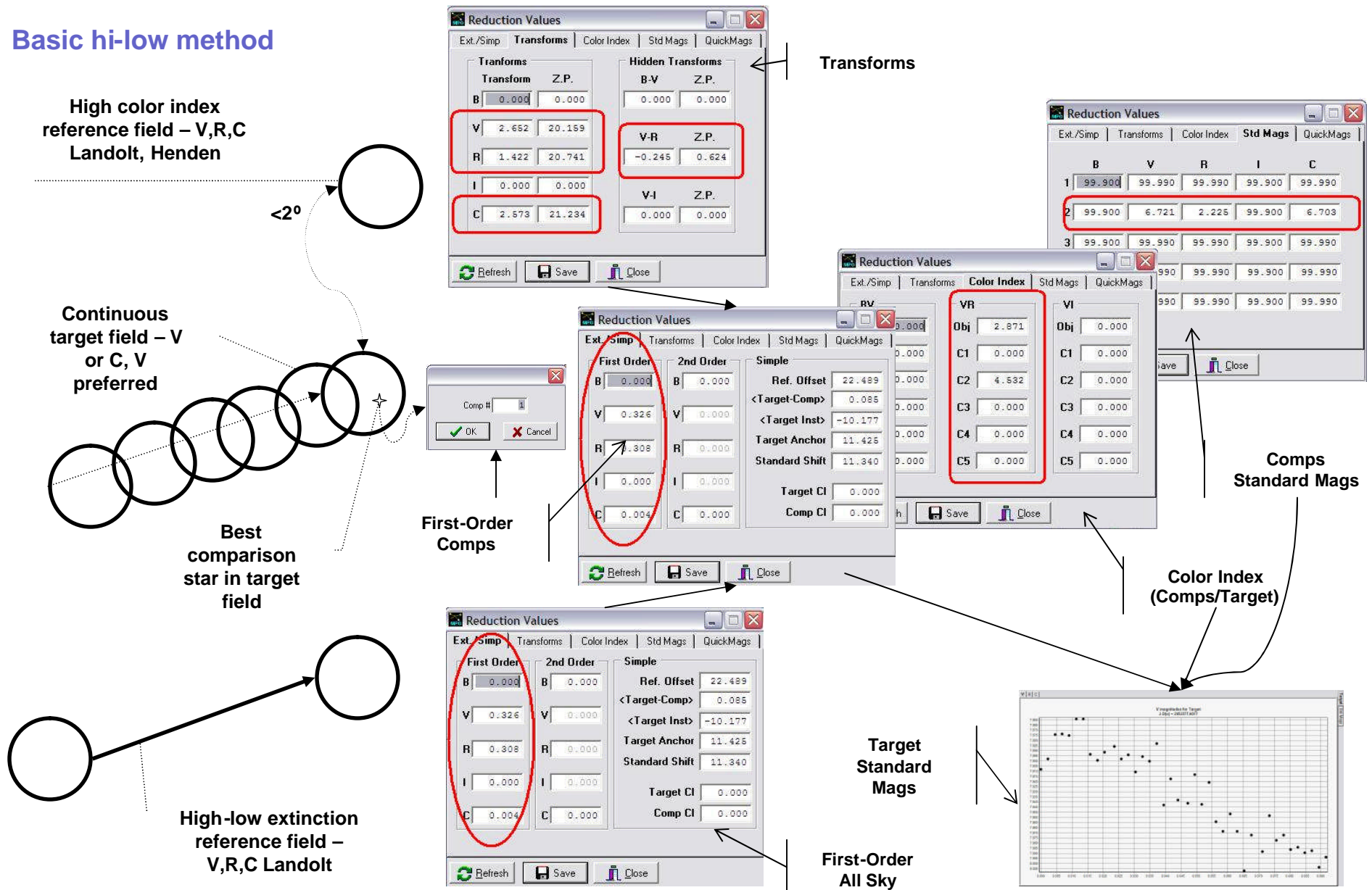


Continuous VRC method



PhotoRed reduction coefficients set from acquired images

Basic hi-low method



PhotoRed reduction coefficients set from acquired images

Continuous VRC method

High color index
reference field – V,R,C
Landolt, Henden

“High” extinction
“reference” field –
V,R,C

Continuous
target field – V,
R, C

Best
comparison
star in target
field

Low extinction
“reference” field –
V,R,C

Transforms

Transform	Z.P.	Hidden Transforms
B	0.000	B-V Z.P. 0.000 0.000
V	2.652	V-R Z.P. -0.245 0.624
R	1.422	V-I Z.P. 0.000 0.000
I	0.000	
C	2.573	

Transforms

	B	V	R	I	C
1	99.900	99.990	99.990	99.900	99.990
2	99.900	6.721	2.225	99.900	6.703
3	99.900	99.990	99.990	99.900	99.990

Comps
Standard Mags

Comp #

OK Cancel

First-Order
Comps

Color Index

VR	VI
Obj 2.871	Obj 0.000
C1 0.000	C1 0.000
C2 4.532	C2 0.000
C3 0.000	C3 0.000
C4 0.000	C4 0.000
C5 0.000	C5 0.000

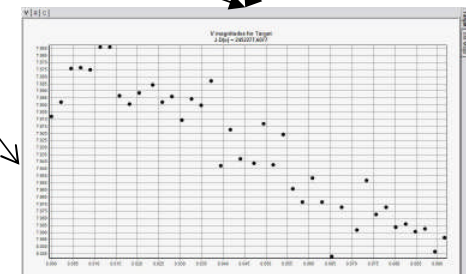
Color Index
(Comps/Target)

First Order

First Order	2nd Order	Simple
B 0.000	B 0.000	Ref. Offset 22.489
V 0.326	V 0.000	<Target-Comp> 0.085
R 0.308	R 0.000	<Target Inst> -10.177
I 0.000	I 0.000	Target Anchor 11.425
C 0.004	C 0.000	Standard Shift 11.340
		Target CI 0.000
		Comp CI 0.000

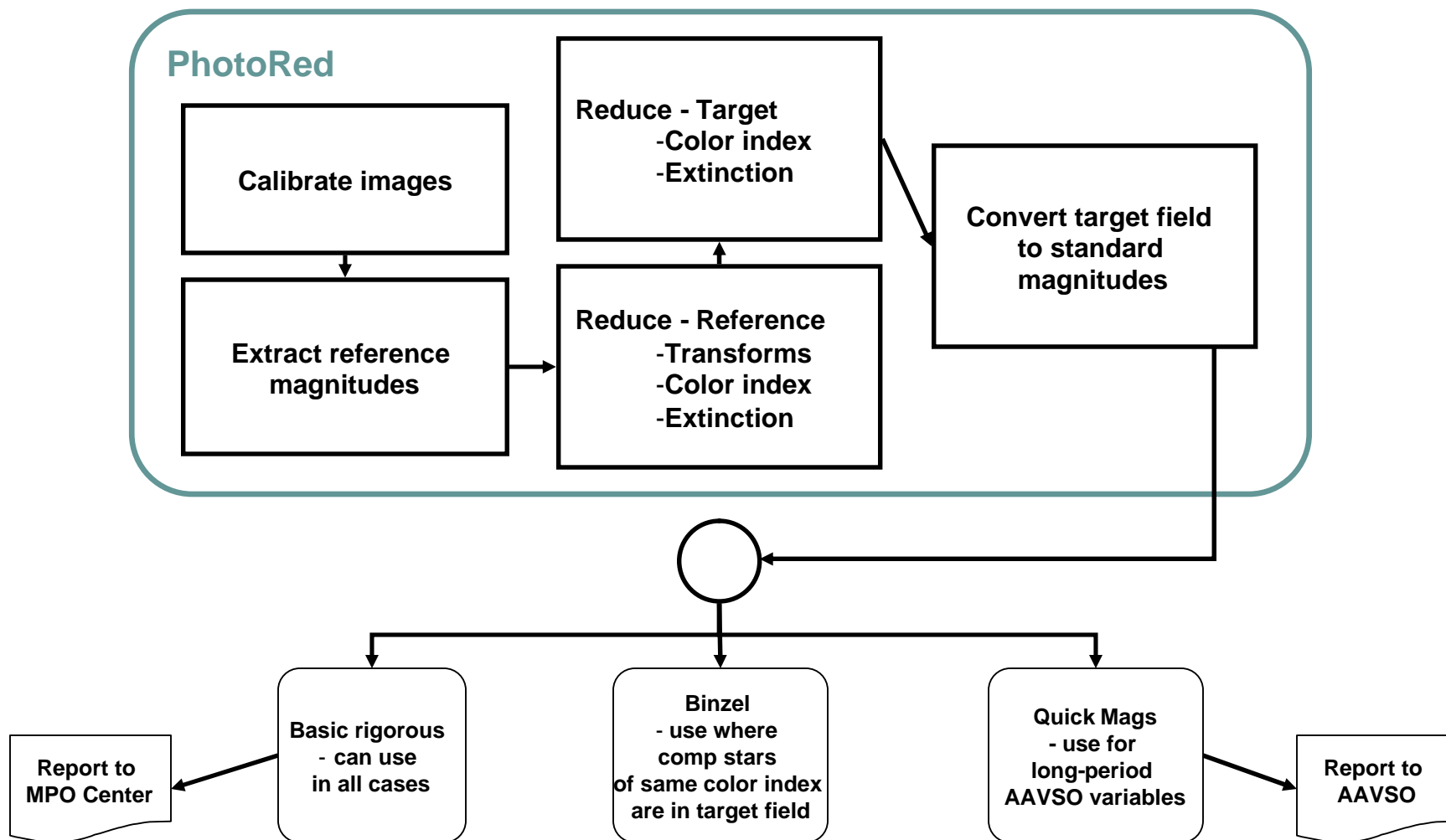
Target
Standard
Mags

First-Order
All Sky

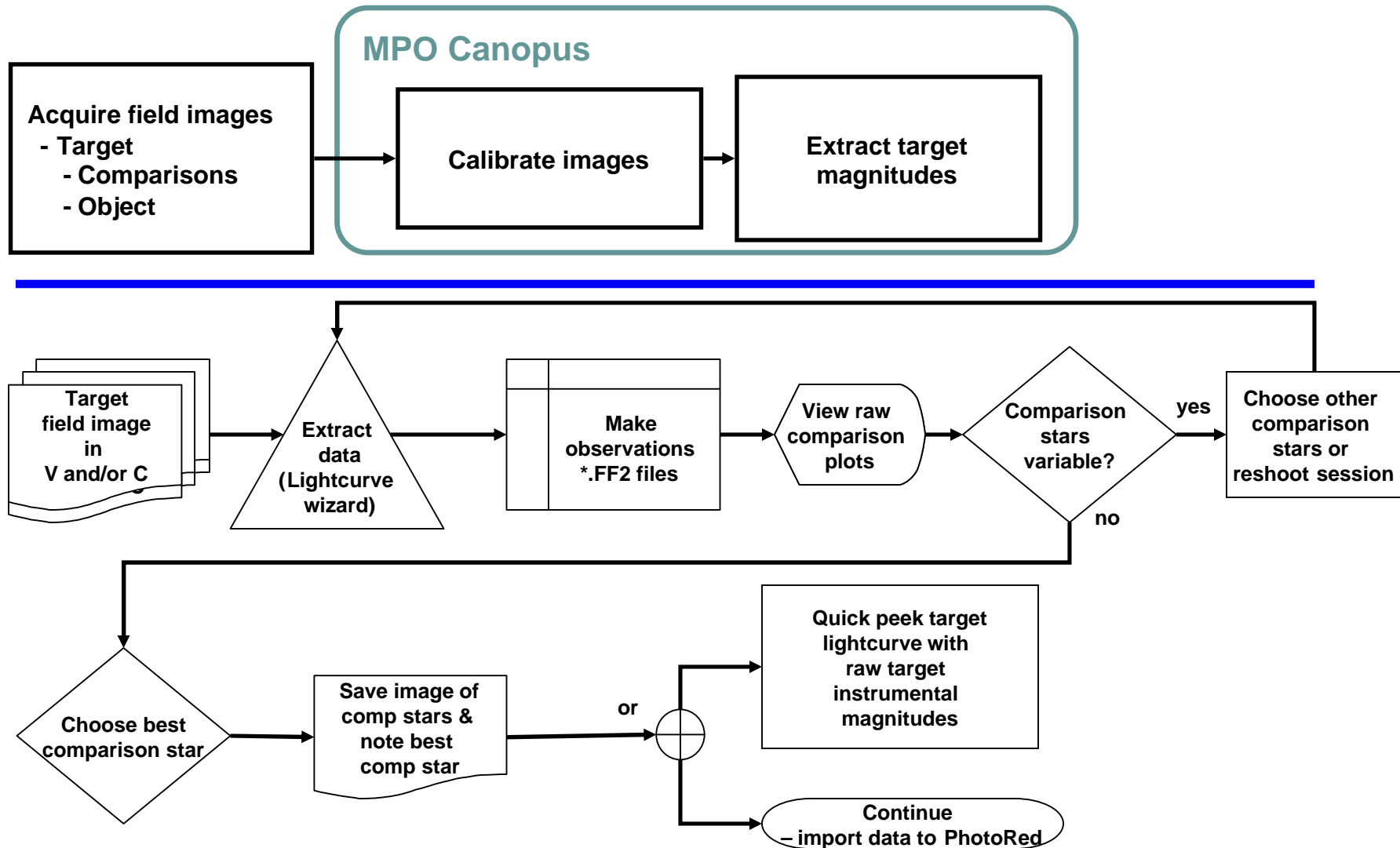


Process – overview – Three methods to convert to standard magnitudes

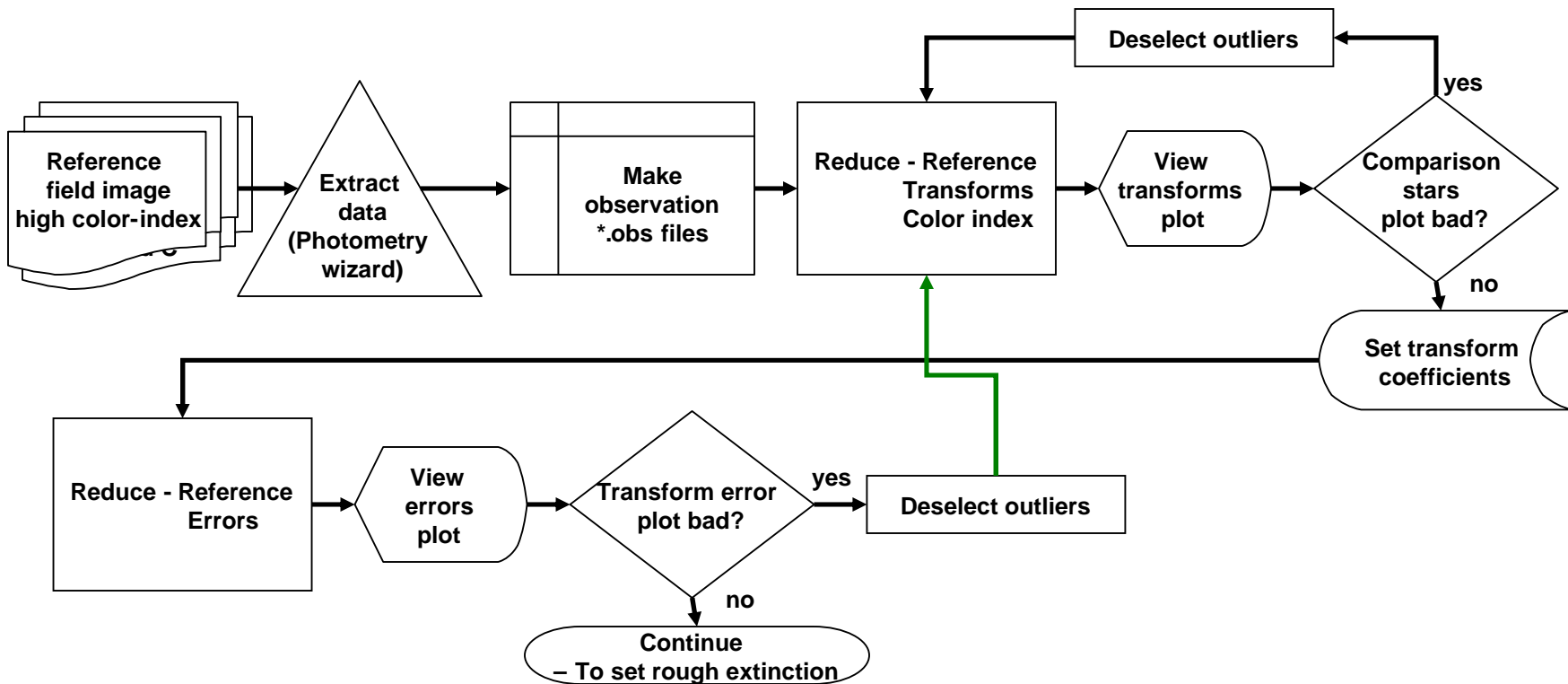
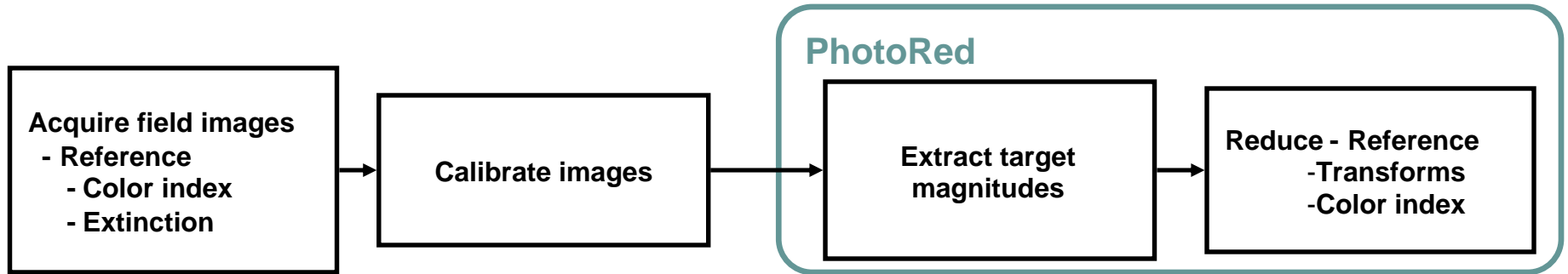
- Only one of the three methods – the basic “rigorous” method is graphed here, using only the basic “high-low” imaging method.



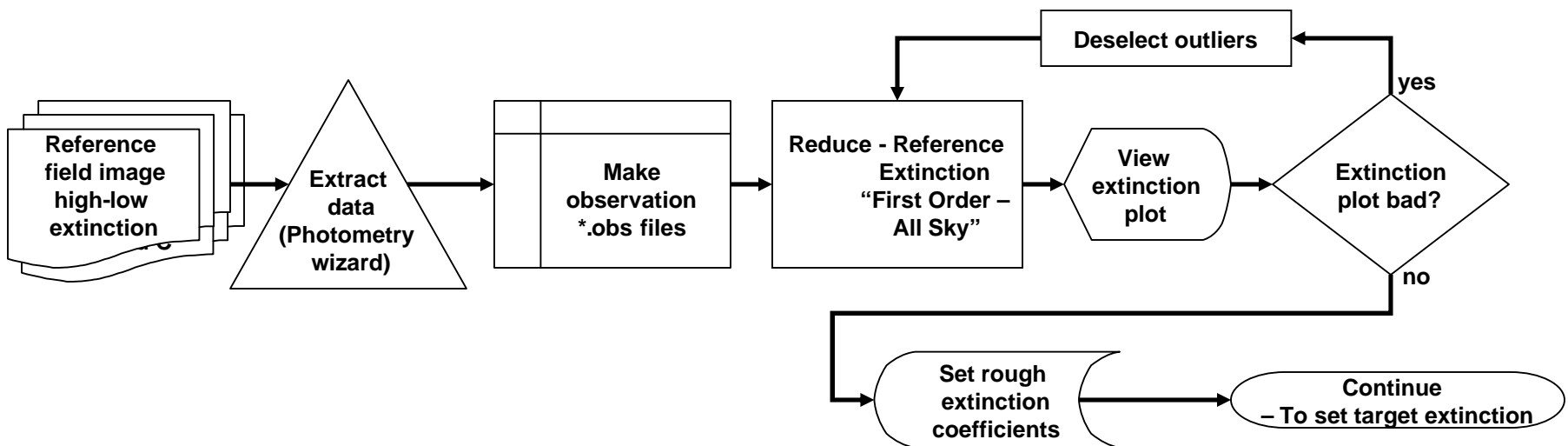
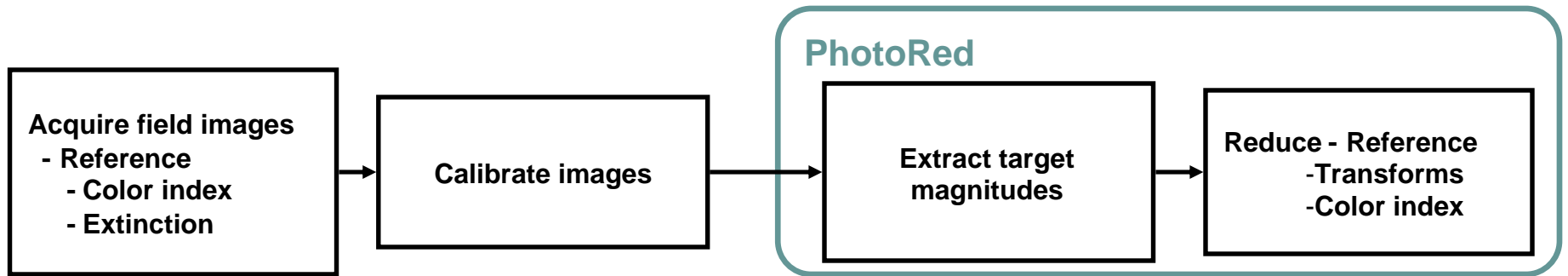
Extract target field image data



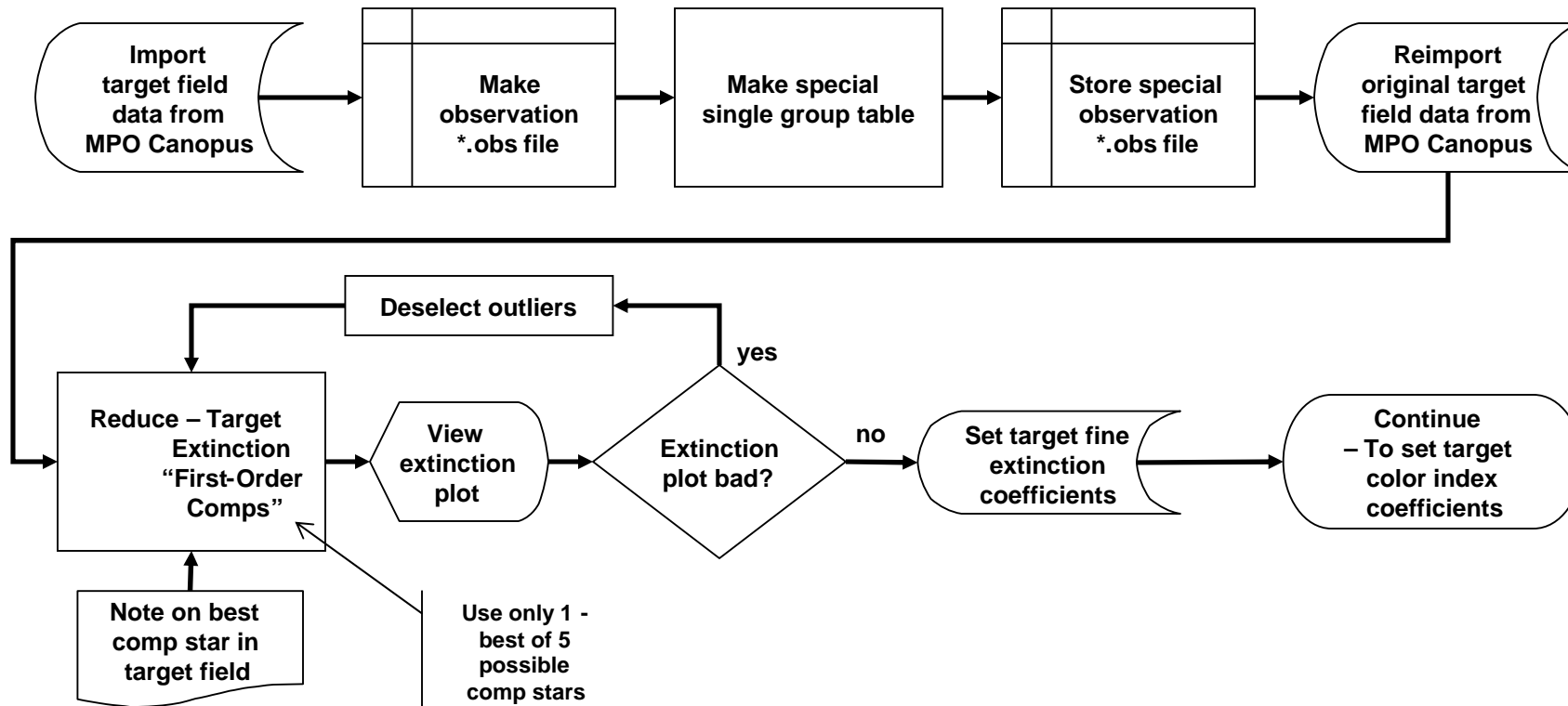
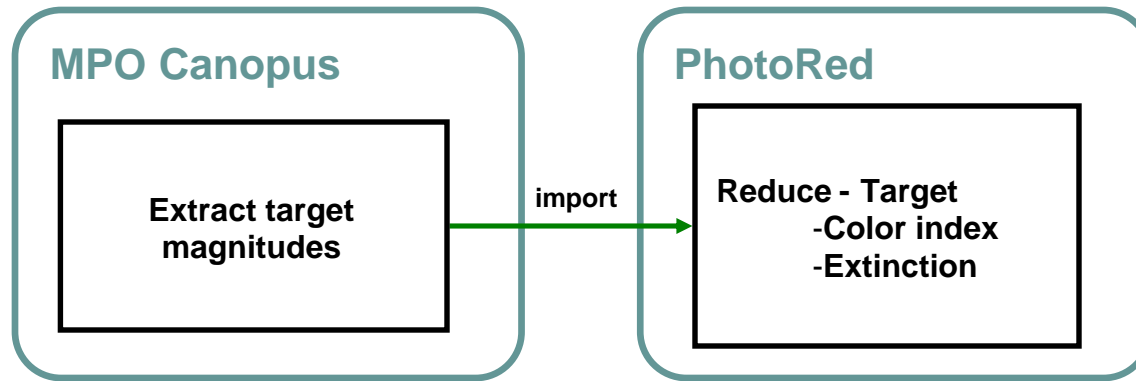
Extract reference field data - reduce transform coefficients



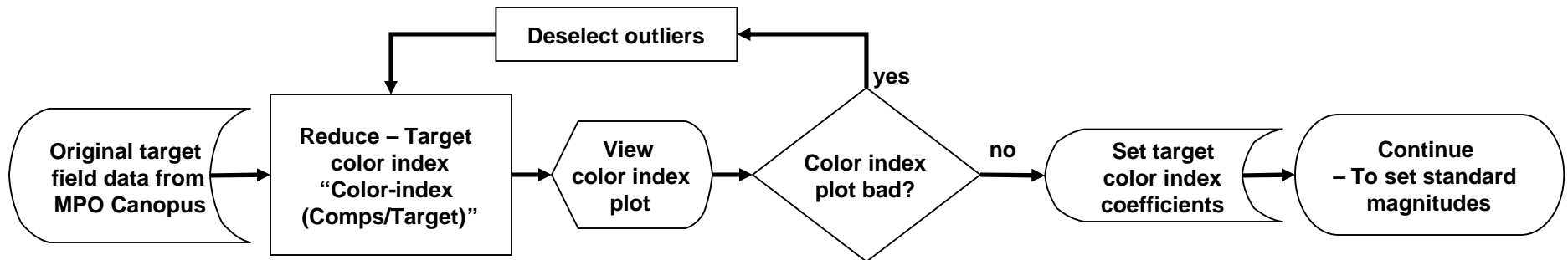
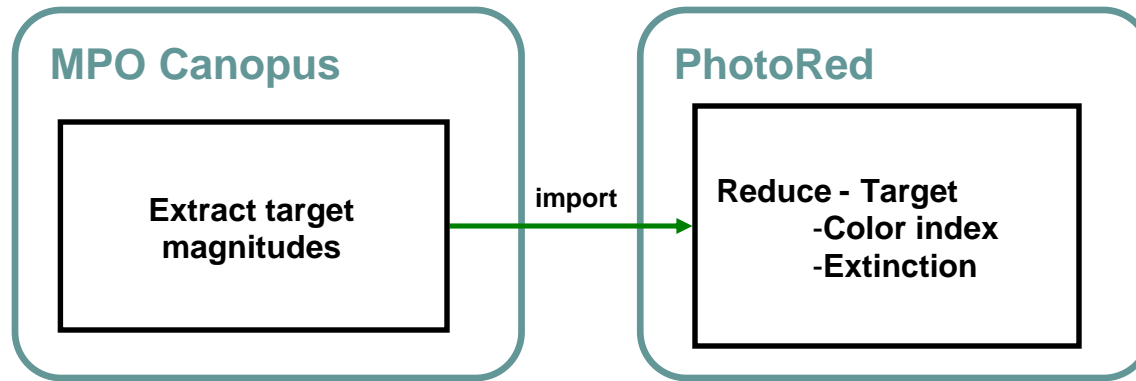
Extract reference field data - reduce rough extinction coefficients



Reduce target field – fine-tune extinction (modified Hardie)

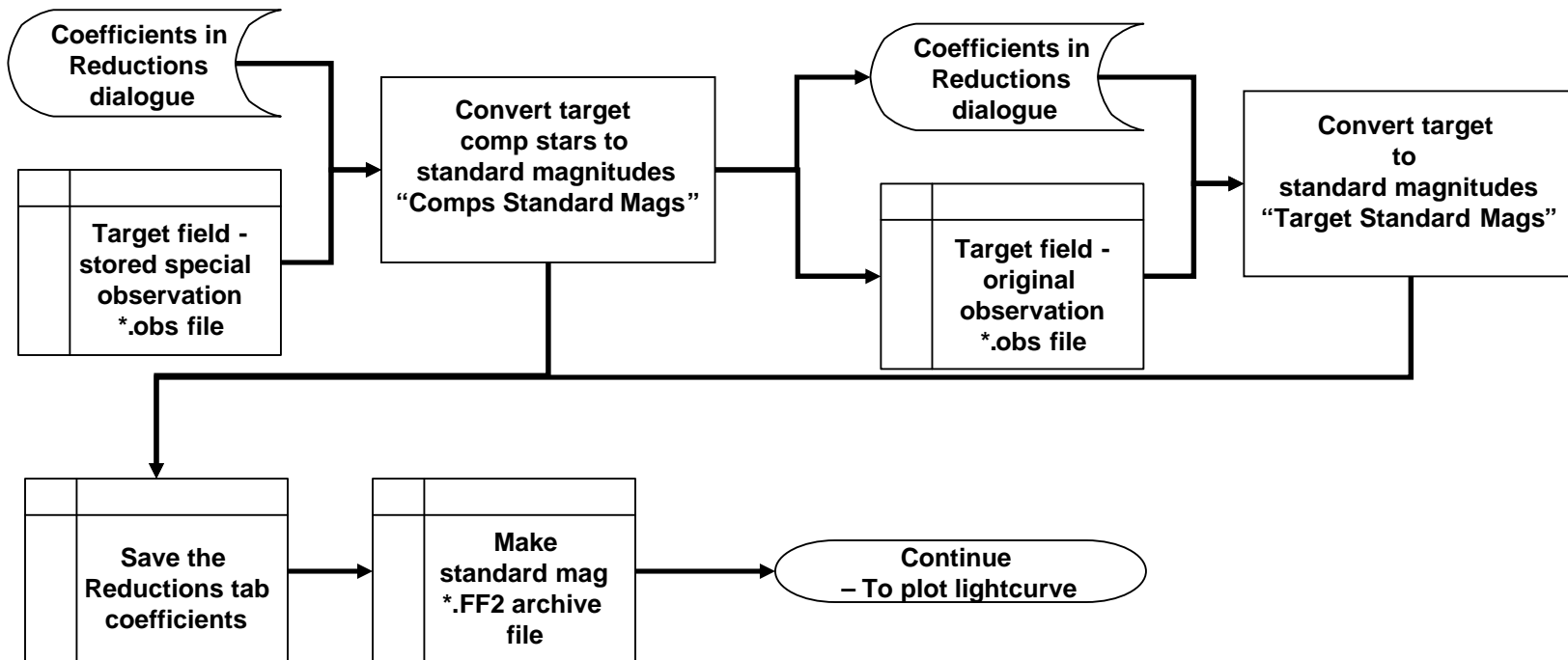
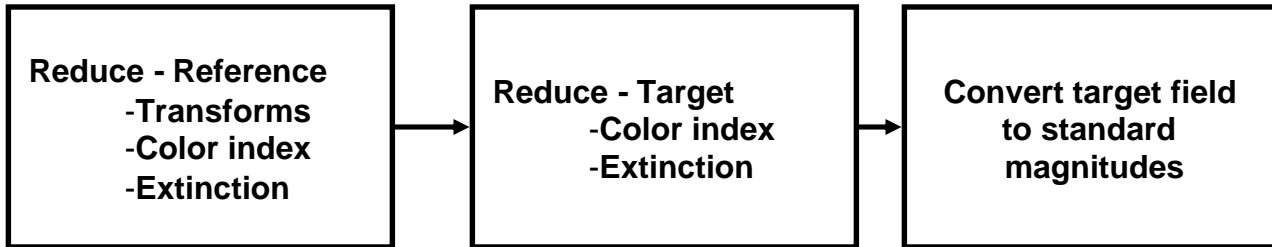


Reduce target field – set color index coefficients

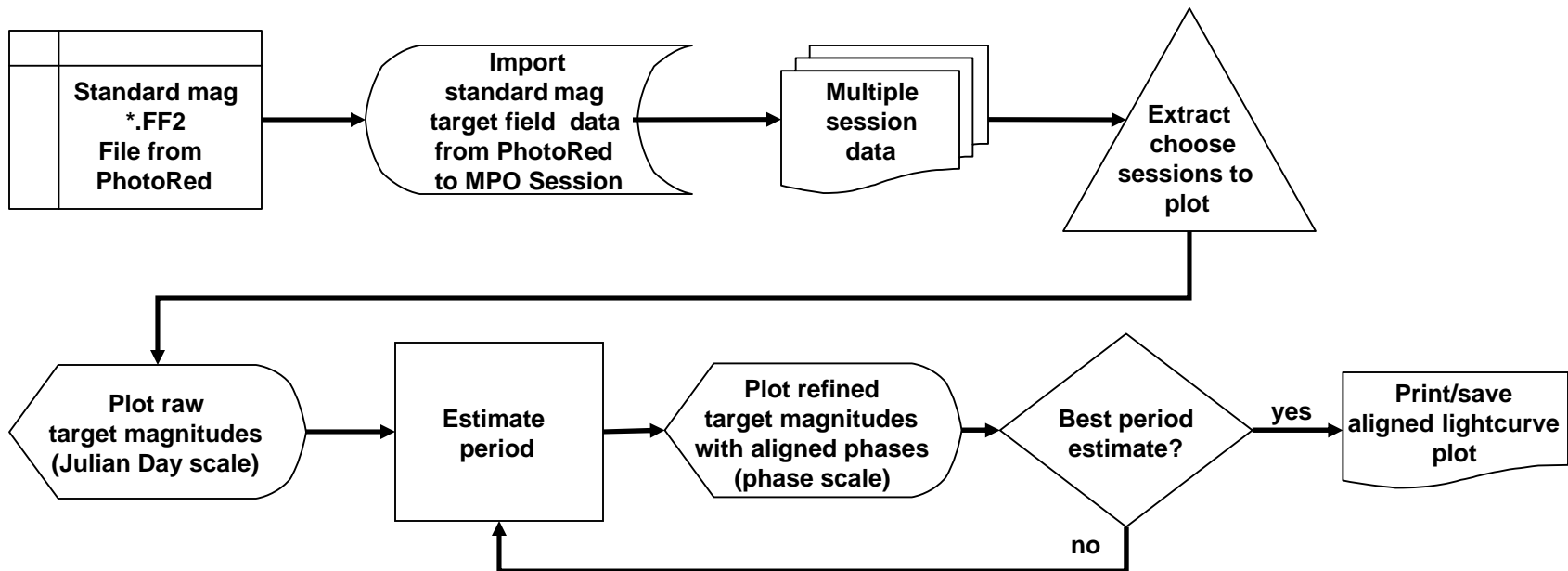
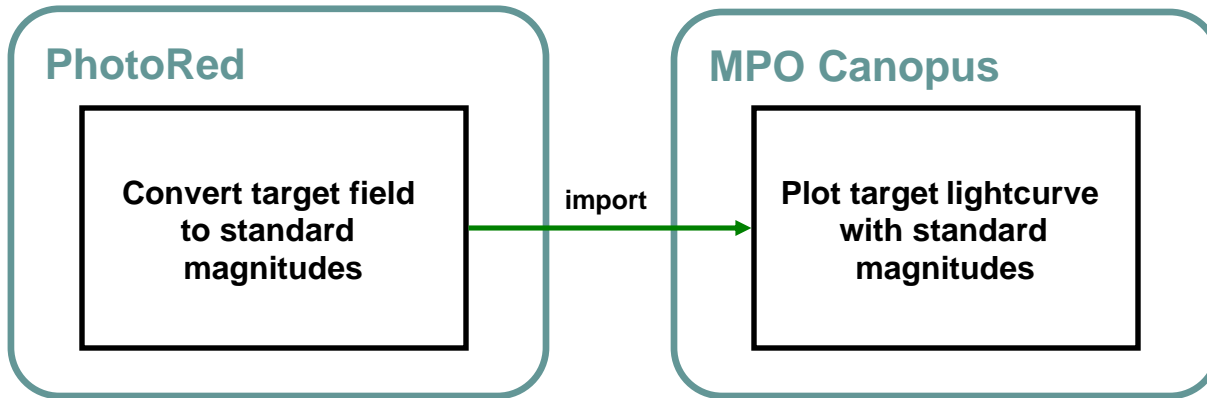


Reduce target field – standard magnitudes of comparison stars

PhotoRed



Plot lightcurve



Acquire more images until lightcurve phase is filled-out

