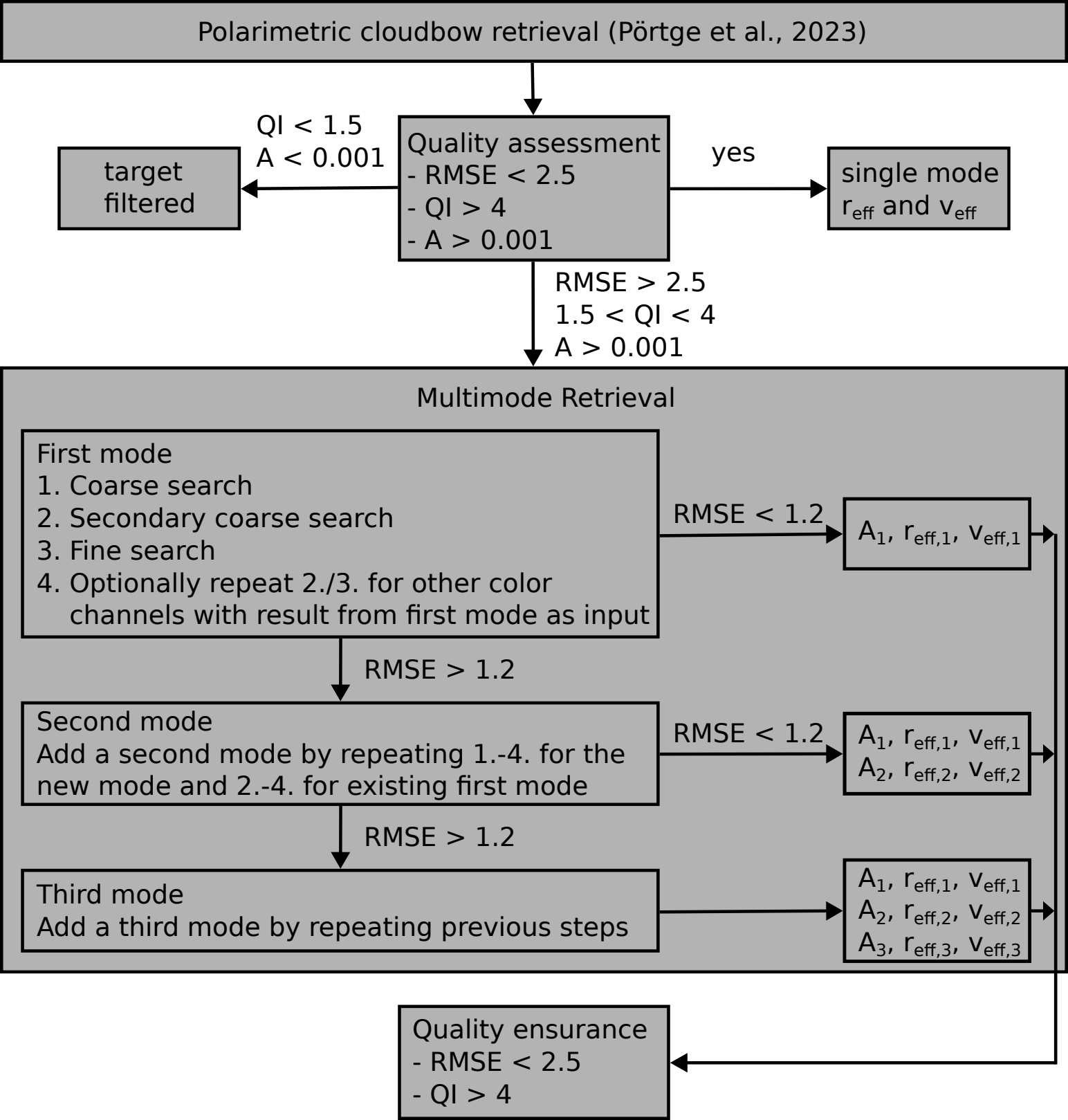

Polarimetric cloudbow retrieval (Pörtge et al., 2023)
Quality assessment
- RMSE < 2.5
- QI > 4
- A > 0.001
QI < 1.5
A < 0.001
target filtered
yes
single mode
r_{eff} and v_{eff}
RMSE > 2.5
1.5 < QI < 4
A > 0.001
Multimode Retrieval
First mode
1. Coarse search
2. Secondary coarse search
3. Fine search
4. Optionally repeat 2./3. for other color channels with result from first mode as input
RMSE < 1.2
A_1, $r_{eff,1}$, $v_{eff,1}$
RMSE > 1.2
Second mode
Add a second mode by repeating 1.-4. for the new mode and 2.-4. for existing first mode
RMSE < 1.2
A_1, $r_{eff,1}$, $v_{eff,1}$
A_2, $r_{eff,2}$, $v_{eff,2}$
RMSE > 1.2
Third mode
Add a third mode by repeating previous steps
A_1, $r_{eff,1}$, $v_{eff,1}$
A_2, $r_{eff,2}$, $v_{eff,2}$
A_3, $r_{eff,3}$, $v_{eff,3}$
Quality ensurance
- RMSE < 2.5
- QI > 4