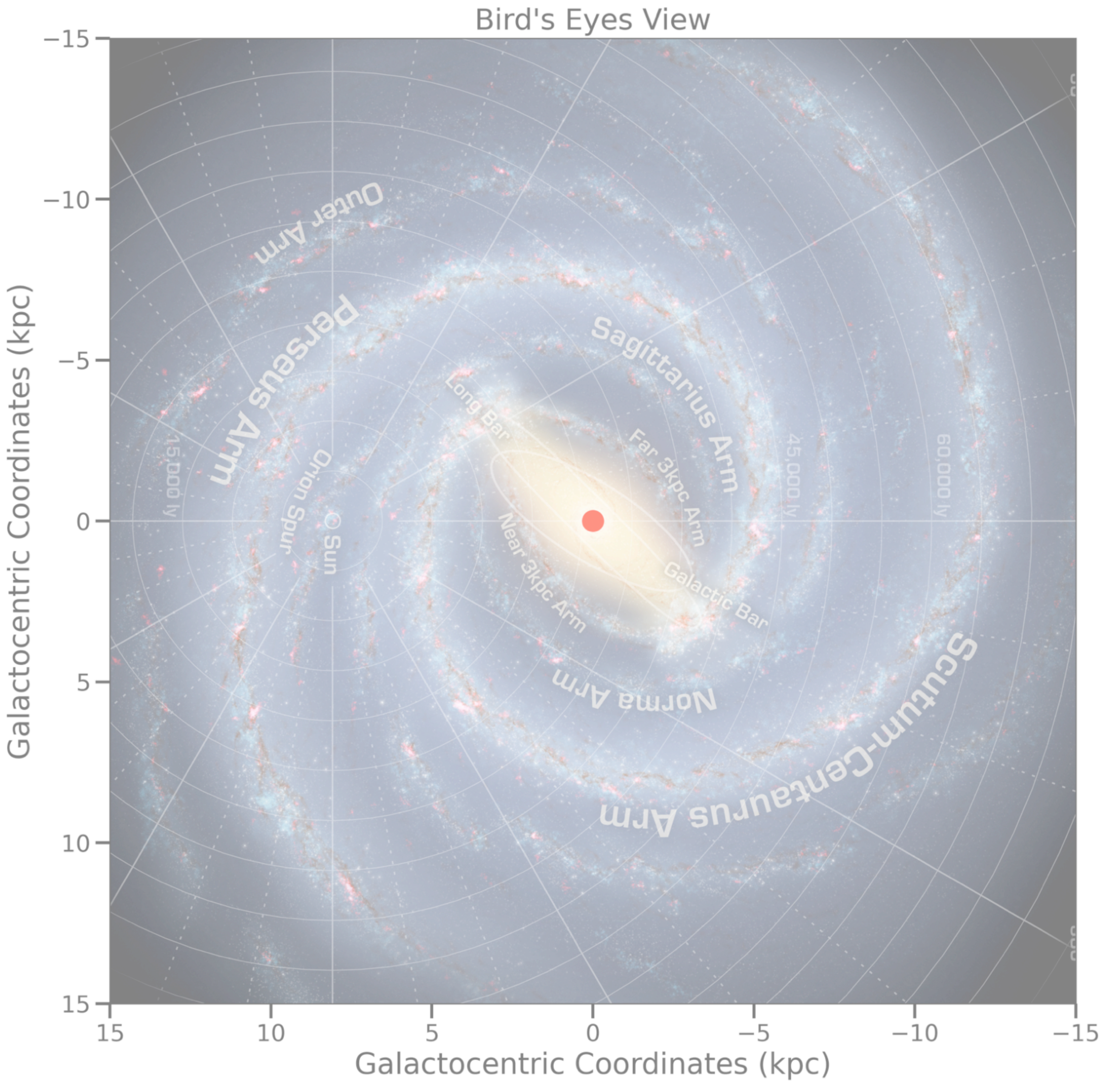
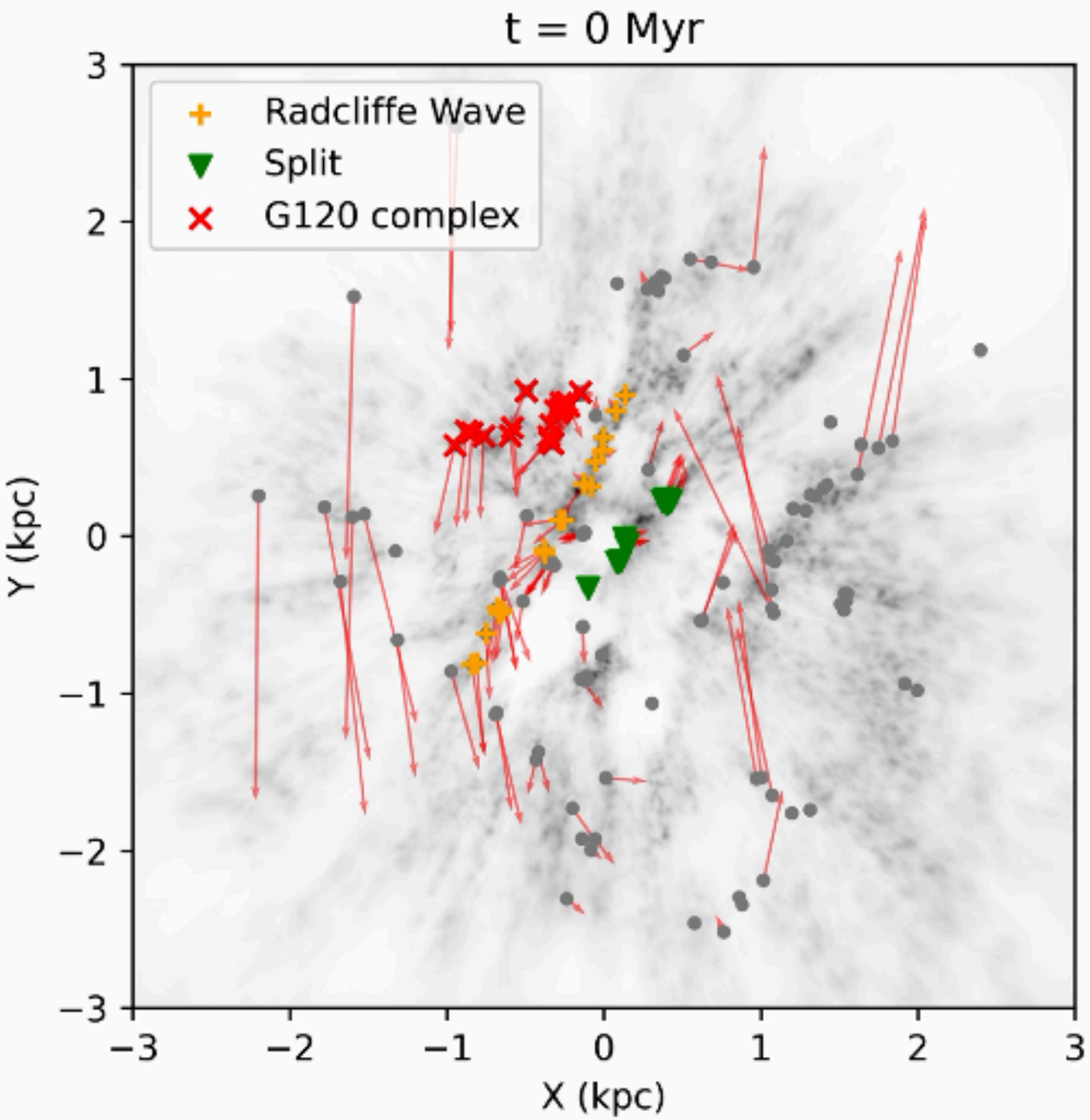
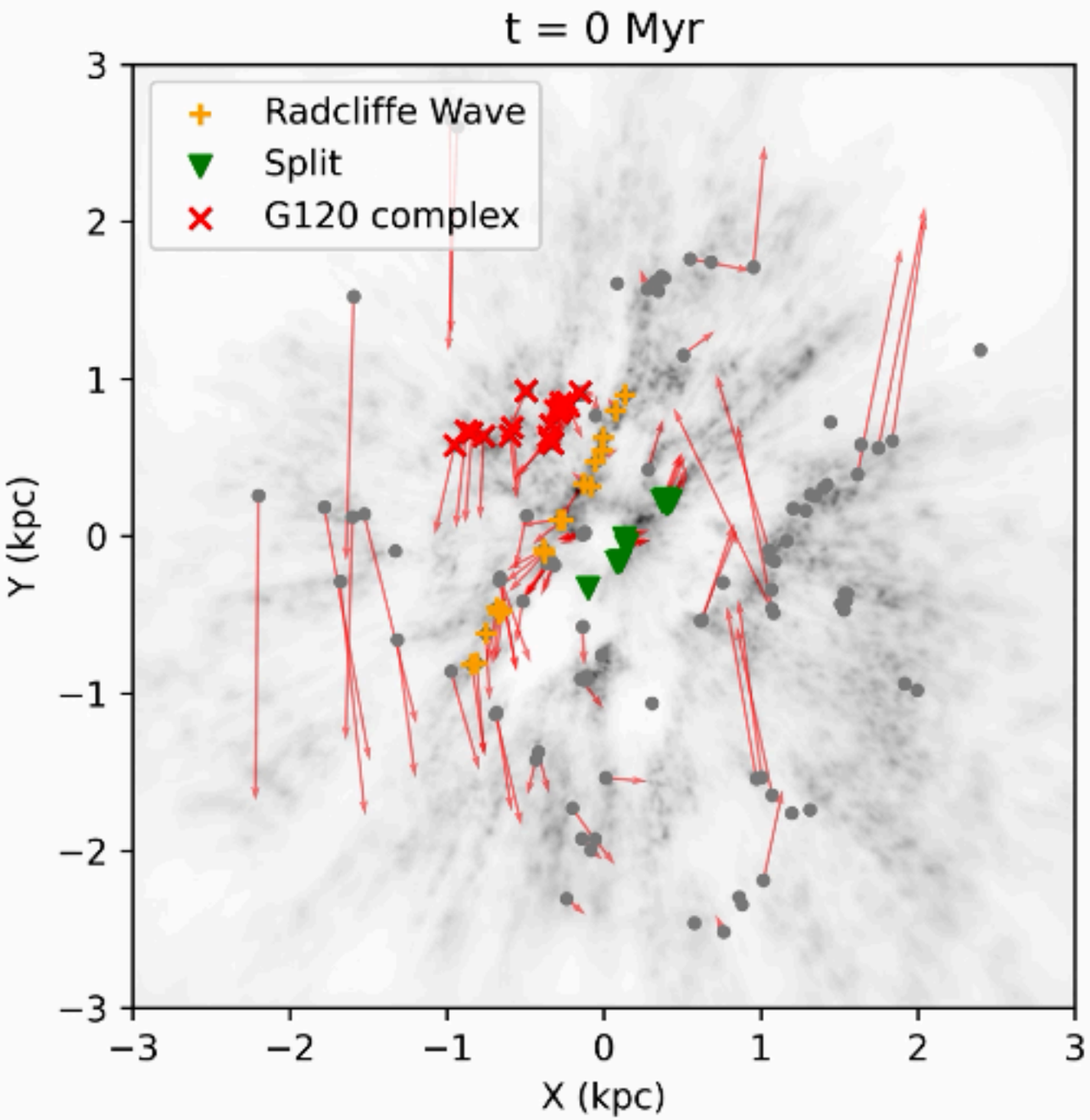

Bird's Eyes View
Galactocentric Coordinates (kpc)
Galactocentric Coordinates (kpc)
−15
−10
−5
0
5
10
15
15
10
5
0
−5
−10
−15
Outer Arm
Perseus Arm
Sagittarius Arm
Long Bar
Far 3kpc Arm
Near 3kpc Arm
Galactic Bar
Orion Spur
Sun
Norma Arm
Scutum-Centaurus Arm
15,000 ly
45,000 ly
60,000 ly

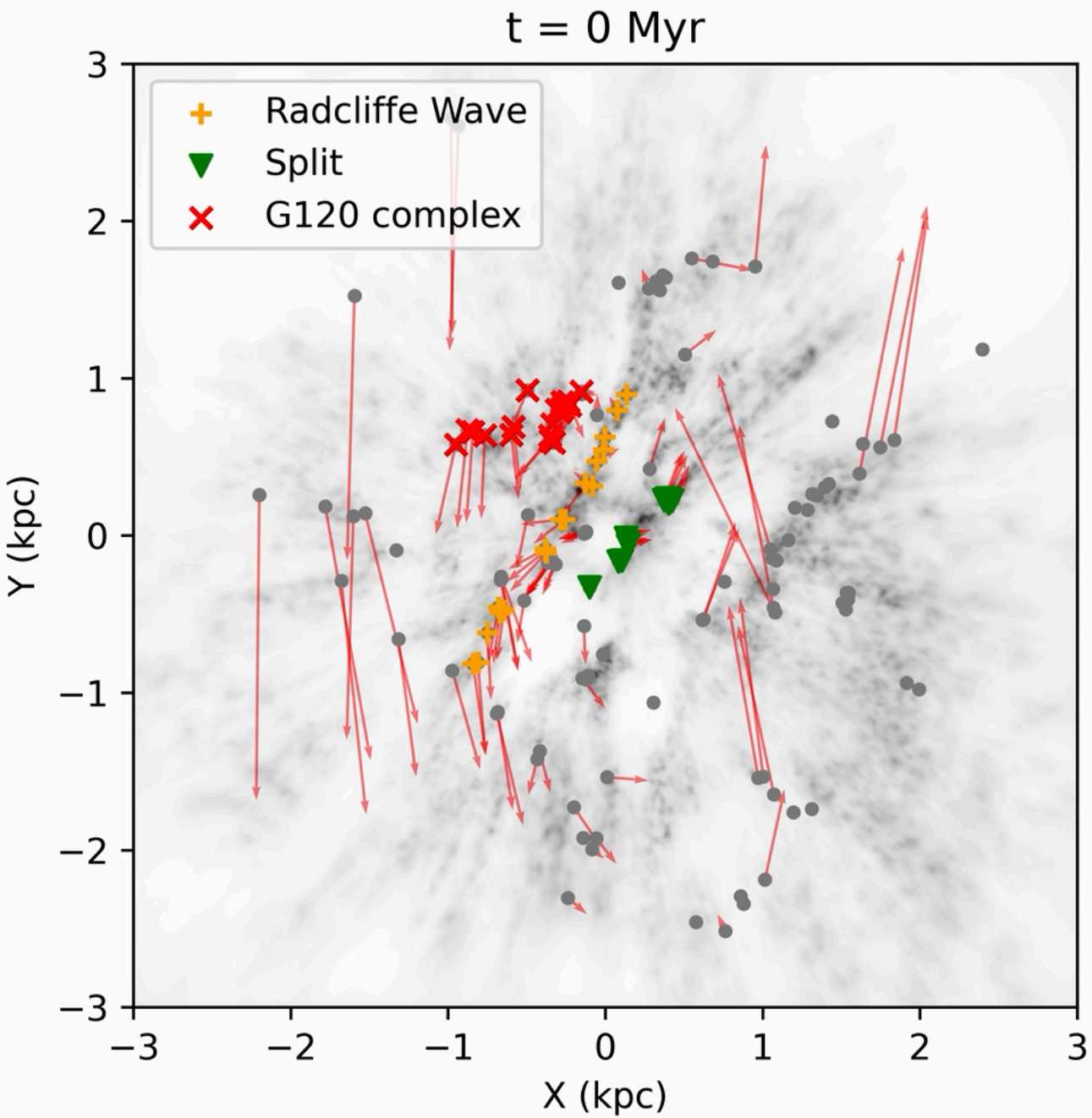

t = 0 Myr
Radcliffe Wave
Split
G120 complex
Y (kpc)
X (kpc)
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3

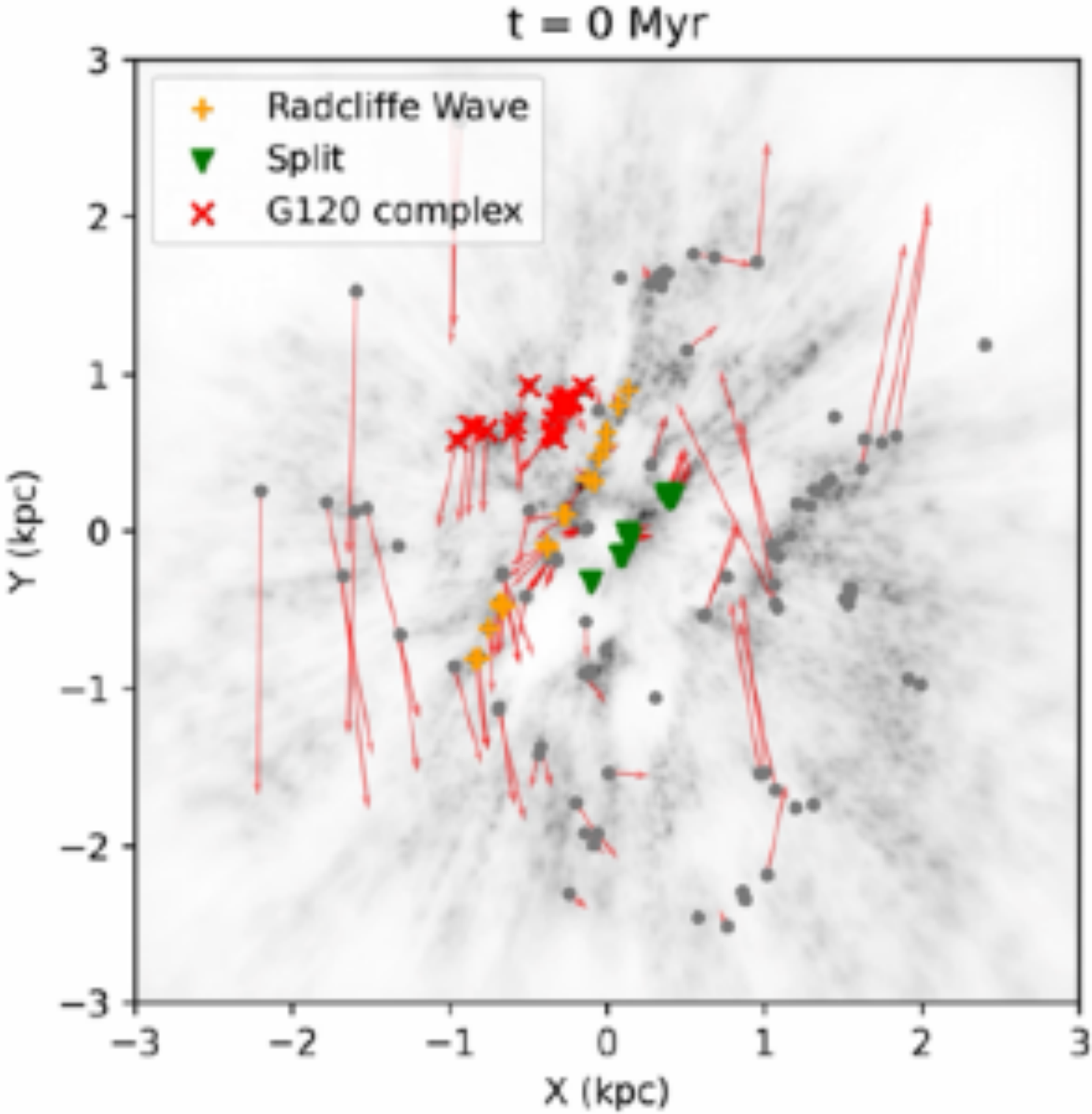
Weather Forecast of the Milky Way: Shear and Stellar feedback determine the lives of Galactic-scale filaments, Li, Zhou & Chen 2022 MNRAS letter

Evolution Forecast reveal the nature of several Galactic-scale structures

Evolution of YSO-GMC complexes under a kinematic approximation

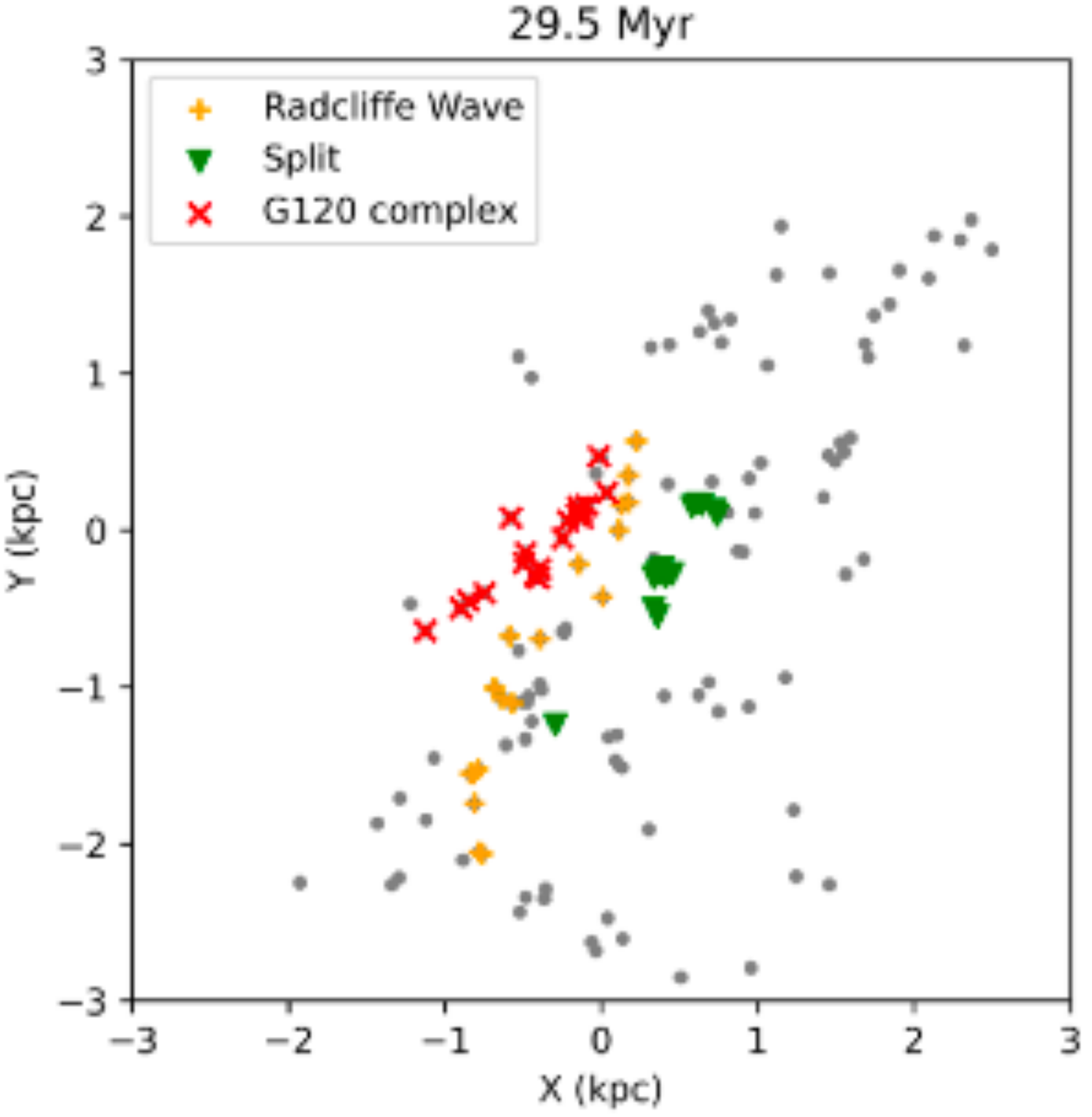
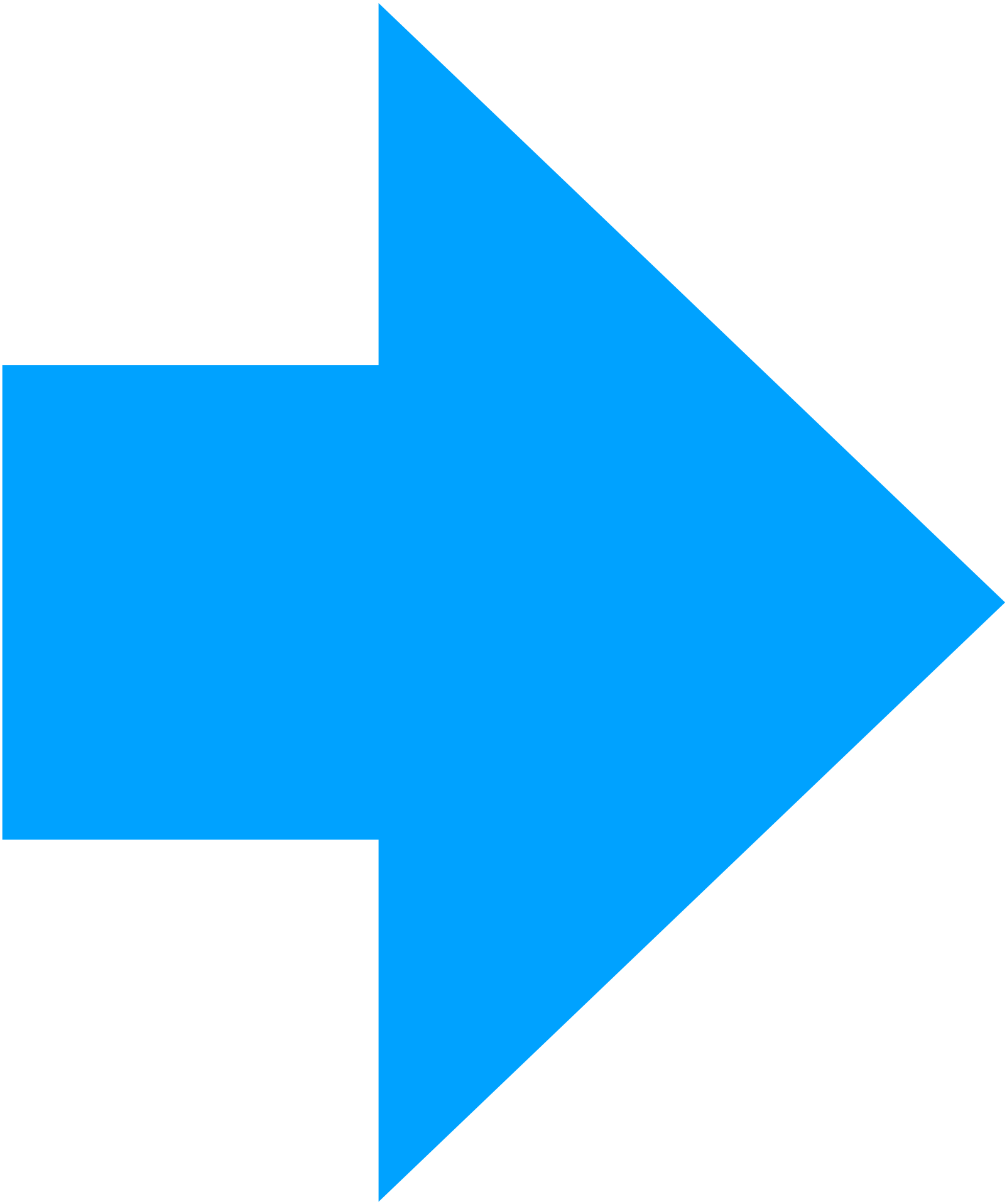

t = 0 Myr
Radcliffe Wave
Split
G120 complex
Y (kpc)
X (kpc)
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3


t = 0 Myr
Radcliffe Wave
Split
G120 complex
Y (kpc)
X (kpc)
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3


t = 0 Myr
Radcliffe Wave
Split
G120 complex
Y (kpc)
X (kpc)
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3

Weather Forecast of the Milky Way: Shear and Stellar feedback determine the lives of

Galactic-scale filaments, Li, Zhou & Chen 2022 MNRAS letter


29.5 Myr
Radcliffe Wave
Split
G120 complex
Y (kpc)
X (kpc)
3
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2
3