Fig 3

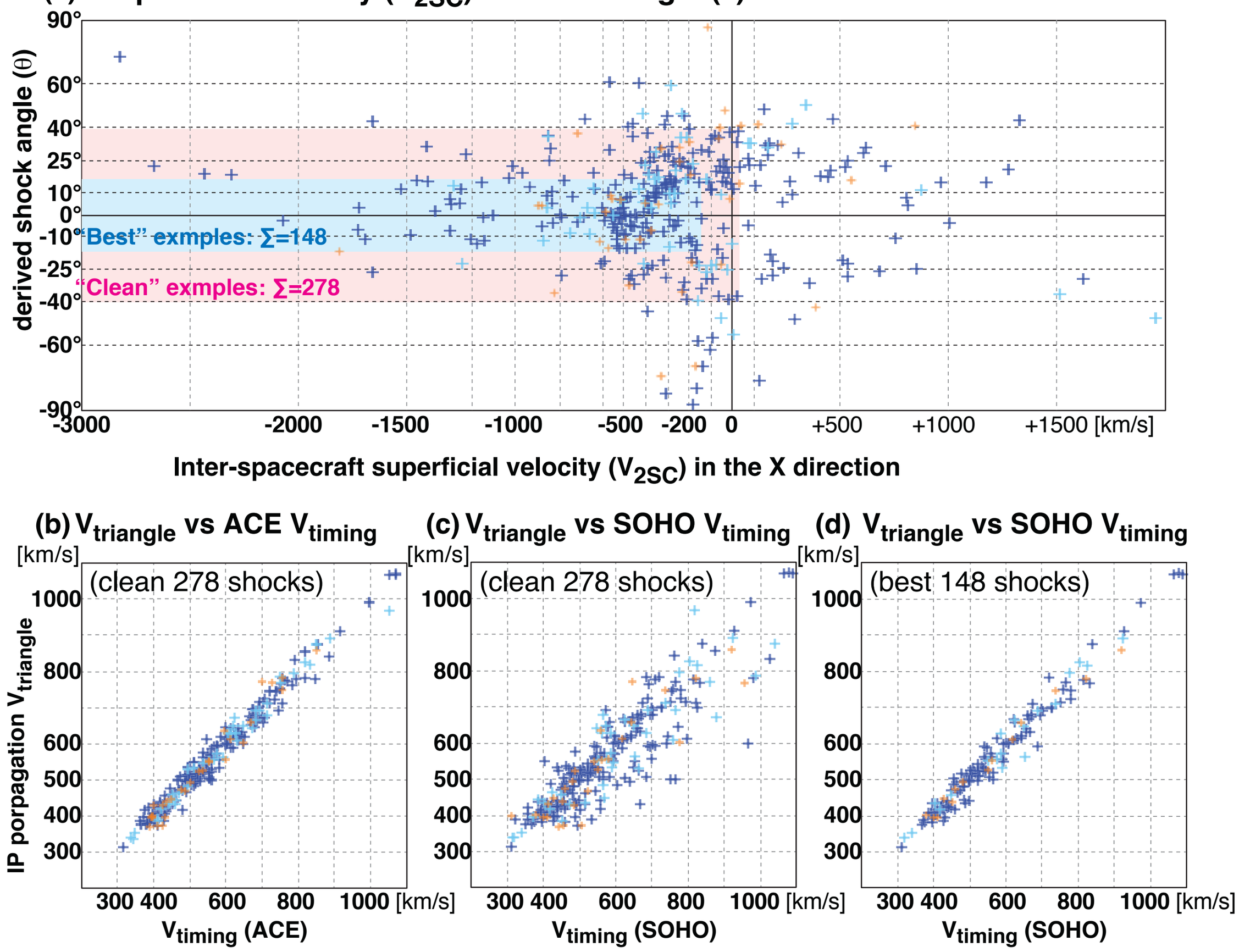
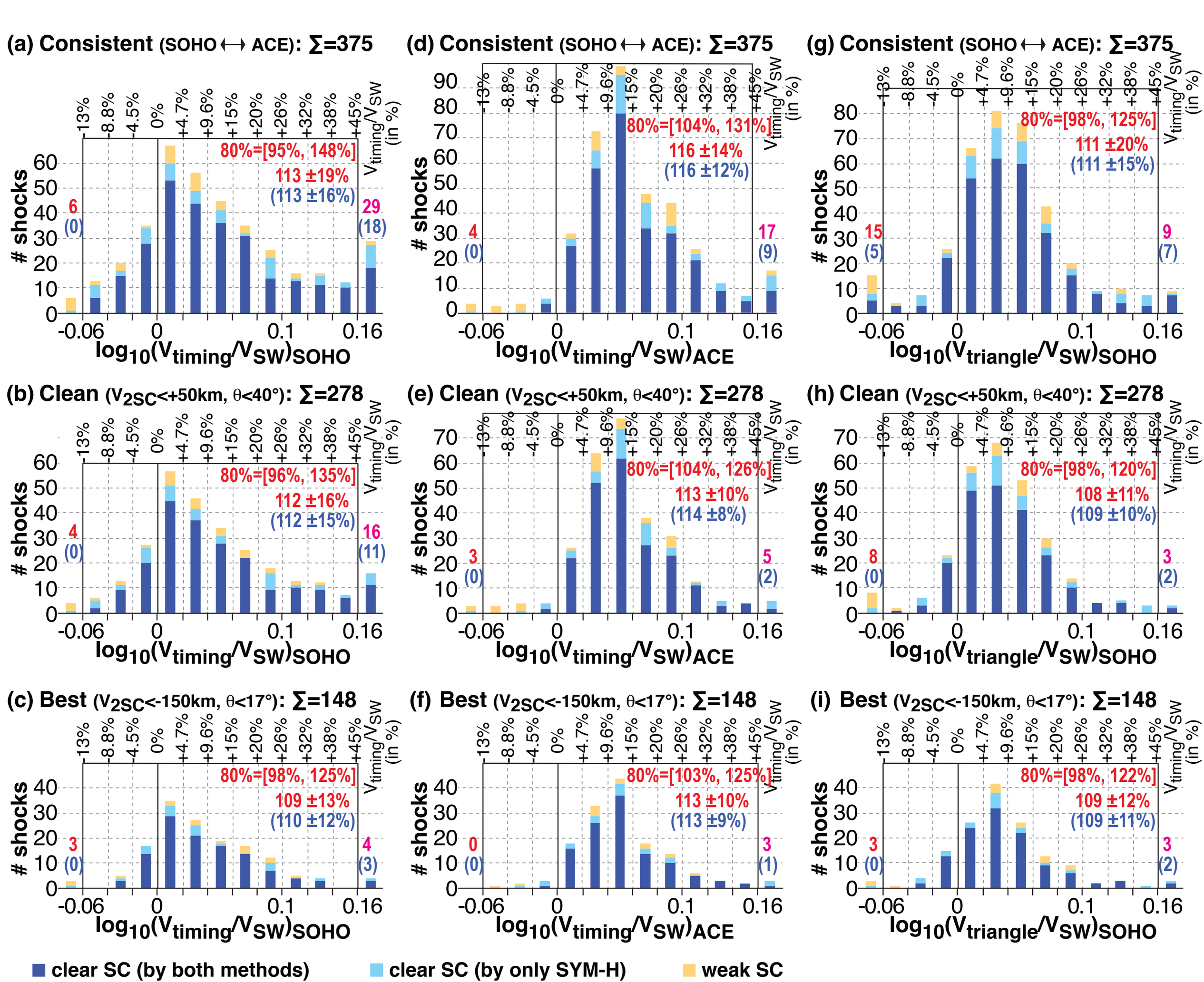

(a) Superficial velocity (V_{2SC}) vs shock angle (θ)
derived shock angle (θ)
90°
60°
40°
25°
10°
0°
-10°
-25°
-40°
-60°
-90°
"Best" exmples: Σ=148
"Clean" exmples: Σ=278
-3000
-2000
-1500
-1000
-500
-200
0
+500
+1000
+1500 [km/s]
Inter-spacecraft superficial velocity (V_{2SC}) in the X direction
(b) $V_{triangle}$ vs ACE V_{timing}
(c) $V_{triangle}$ vs SOHO V_{timing}
(d) $V_{triangle}$ vs SOHO V_{timing}
[km/s]
(clean 278 shocks)
(clean 278 shocks)
(best 148 shocks)
IP porpagation $V_{triangle}$
1000
800
600
500
400
300
300 400 600 800 1000 [km/s]
V_{timing} (ACE)
V_{timing} (SOHO)
V_{timing} (SOHO)
clear SC (by both methods)
clear SC (by only SYM-H)
weak SC

Fig 5


V_{timing}/V_{SW} for SOHO
V_{timing}/V_{SW} for ACE
$V_{triangle}/V_{SW(SOHO)}$
(a) Consistent (SOHO ⟷ ACE): Σ=375
(d) Consistent (SOHO ⟷ ACE): Σ=375
(g) Consistent (SOHO ⟷ ACE): Σ=375
(b) Clean (V_{2SC}<+50km, θ<40°): Σ=278
(e) Clean (V_{2SC}<+50km, θ<40°): Σ=278
(h) Clean (V_{2SC}<+50km, θ<40°): Σ=278
(c) Best (V_{2SC}<-150km, θ<17°): Σ=148
(f) Best (V_{2SC}<-150km, θ<17°): Σ=148
(i) Best (V_{2SC}<-150km, θ<17°): Σ=148
-13% -8.8% -4.5% 0% +4.7% +9.6% +15% +20% +26% +32% +38% +45%
V_{timing}/V_{SW} (in %)
shocks
80%=[95%, 148%]
113 ±19%
(113 ±16%)
6 (0)
29 (18)
80%=[104%, 131%]
116 ±14%
(116 ±12%)
4 (0)
17 (9)
80%=[98%, 125%]
111 ±20%
(111 ±15%)
15 (5)
9 (7)
80%=[96%, 135%]
112 ±16%
(112 ±15%)
4 (0)
16 (11)
80%=[104%, 126%]
113 ±10%
(114 ±8%)
3 (0)
5 (2)
80%=[98%, 120%]
108 ±11%
(109 ±10%)
8 (0)
3 (2)
80%=[98%, 125%]
109 ±13%
(110 ±12%)
3 (0)
4 (3)
80%=[103%, 125%]
113 ±10%
(113 ±9%)
0 (0)
3 (1)
80%=[98%, 122%]
109 ±12%
(109 ±11%)
3 (0)
3 (2)
-0.06 0 0.1 0.16
$\log_{10}(V_{timing}/V_{SW})_{SOHO}$
$\log_{10}(V_{timing}/V_{SW})_{ACE}$
$\log_{10}(V_{triangle}/V_{SW})_{SOHO}$
clear SC (by both methods)
clear SC (by only SYM-H)
weak SC