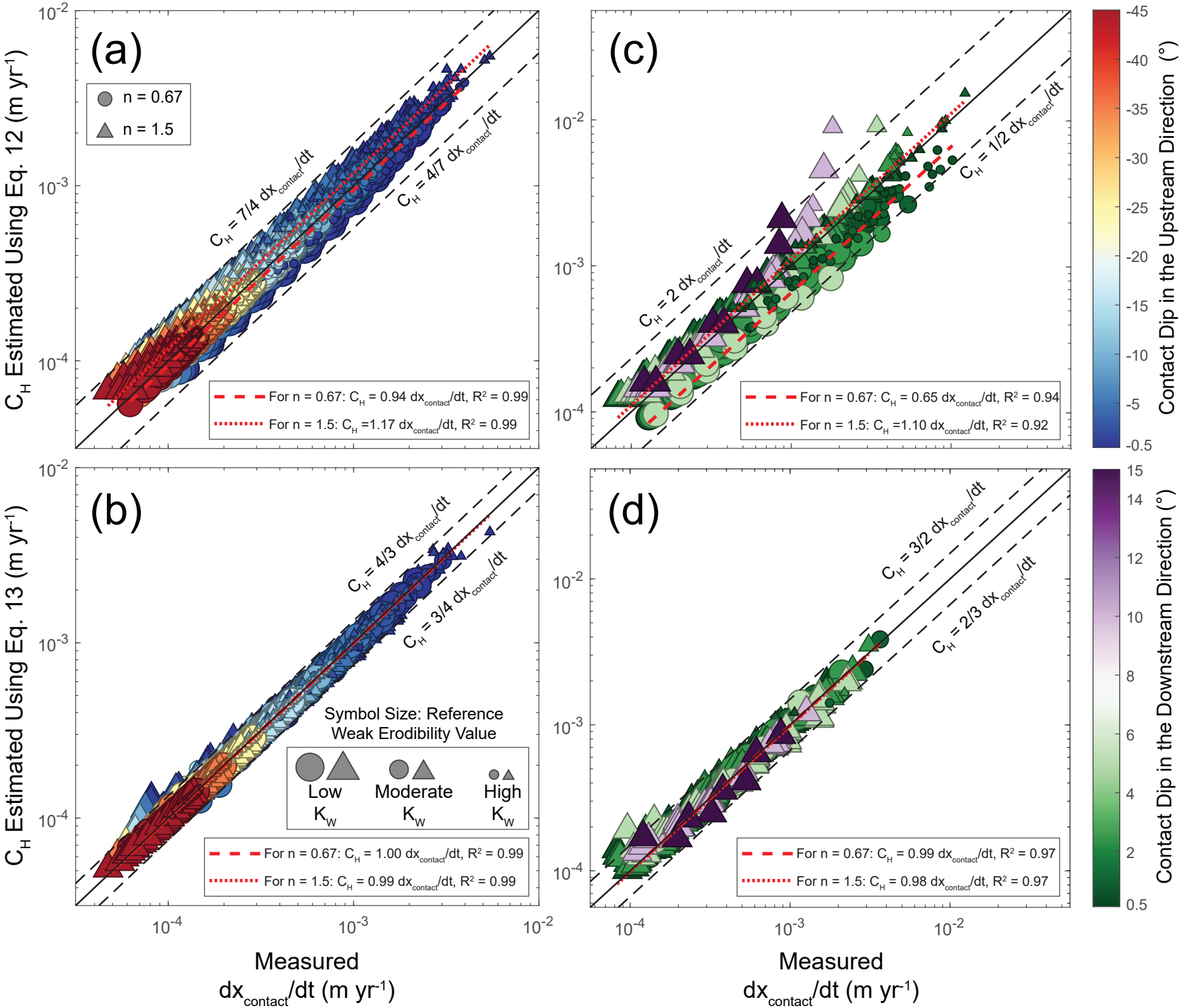
(a)
n = 0.67
n = 1.5
$C_H = 7/4\ dx_{contact}/dt$
$C_H = 4/7\ dx_{contact}/dt$
For n = 0.67: $C_H = 0.94\ dx_{contact}/dt$, $R^2 = 0.99$
For n = 1.5: $C_H = 1.17\ dx_{contact}/dt$, $R^2 = 0.99$
(b)
$C_H = 4/3\ dx_{contact}/dt$
$C_H = 3/4\ dx_{contact}/dt$
Symbol Size: Reference Weak Erodibility Value
Low K_W
Moderate K_W
High K_W
For n = 0.67: $C_H = 1.00\ dx_{contact}/dt$, $R^2 = 0.99$
For n = 1.5: $C_H = 0.99\ dx_{contact}/dt$, $R^2 = 0.99$
(c)
$C_H = 2\ dx_{contact}/dt$
$C_H = 1/2\ dx_{contact}/dt$
For n = 0.67: $C_H = 0.65\ dx_{contact}/dt$, $R^2 = 0.94$
For n = 1.5: $C_H = 1.10\ dx_{contact}/dt$, $R^2 = 0.92$
(d)
$C_H = 3/2\ dx_{contact}/dt$
$C_H = 2/3\ dx_{contact}/dt$
For n = 0.67: $C_H = 0.99\ dx_{contact}/dt$, $R^2 = 0.97$
For n = 1.5: $C_H = 0.98\ dx_{contact}/dt$, $R^2 = 0.97$
C_H Estimated Using Eq. 12 (m yr^{-1})
C_H Estimated Using Eq. 13 (m yr^{-1})
Measured $dx_{contact}/dt$ (m yr^{-1})
Contact Dip in the Upstream Direction (°)
Contact Dip in the Downstream Direction (°)