1st Order Regression

N	9
Σ for i = 1 to N	
ΣT	101.62611
$ΣT^2$	1147.621571
ΣHs	489.6917
$ΣHs^2$	26649.02011
ΣT Hs	5530.118494
$(ΣT)^2$	10327.86646
$(ΣHs)^2$	239797.9284

T	T^2	hs	Hs^2	T Hs
11.14750	124.2667563	53.3367	2844.800011	594.5704917
11.19056	125.2285336	53.6117	2874.210803	599.9443343
11.21528	125.7824556	53.8133	2895.874844	603.5314815
11.25444	126.6625198	54.0800	2924.6464	608.6403556
11.28556	127.3637642	54.3533	2954.284844	613.407563
11.32111	128.1675568	54.6450	2986.076025	618.6421167
11.35583	128.9549507	54.9333	3017.671111	623.8137778
11.41250	130.2451563	55.3650	3065.283225	631.8530625
11.44333	130.9498778	55.5533	3086.172844	635.7153111
0.00000	0	0.0000	0	0

$$\begin{vmatrix} N & ΣT \\ ΣT & ΣT^2 \end{vmatrix}^{-1} \times \begin{vmatrix} ΣHs \\ ΣT\ Hs \end{vmatrix} = \begin{vmatrix} a_0 \\ a_1 \end{vmatrix}$$

$$\begin{vmatrix} 9 & 101.62611 \\ 101.62611 & 1147.621571 \end{vmatrix}^{-1} \times \begin{vmatrix} 489.6917 \\ 5530.118494 \end{vmatrix} = \begin{vmatrix} a_0 \\ a_1 \end{vmatrix}$$

Determinant 1.37423

Inverse ▼

$$\begin{vmatrix} 1577.097958 & -139.65782 \\ -139.65782 & 12.36808542 \end{vmatrix} \times \begin{vmatrix} 489.6917 \\ 5530.1185 \end{vmatrix} = \begin{vmatrix} -32.59227894 \\ 7.704931032 \end{vmatrix}$$

$Hs = a_0 + a_1 T$

a_0 -32.59228

a_1 7.70493 deg/hr