$$
\begin{aligned}
H =& \ldots + A_s(x,y)\,, \\
A_s(x,y) =& \sum_{k,n=0}^{\infty} g_{kn} \frac{\mathtt{K}n + i\mathtt{SK}n}{(n+1)!} (\rho + x)^{1/2-k} \times \frac{(x+iy)^{n+k}}{\sqrt{\rho}}\,, \\
\text{with } g_{kn} \equiv& -\frac{(2k-1)!!(2k-3)!!(n+1)!}{8^k (n+k+1)!k!}\,, \\
\rho \equiv& \frac{\mathtt{L}}{\mathtt{ANGLE}}\,.
\end{aligned}
$$