In the proof of Proposition 1.3, in the section "From $n=2$ to $n$ generic", the matrix $M$ should be defined as $D^{s} u /\left|D^{s} u\right|$. Otherwise the conclusion $\mu^{s}\left(E_{12}\right)$ would not be valid. With the choice above, the conclusion is instead valid, because, by Radon-Nykodim:

$$
D^{s} u=M\left|D^{s} u\right|
$$

Thus the measure $\mu^{s}$ defined later is given by $A\left|D^{s} u\right|$ (where $A$ is the $2 \times 2$ minor given by the first two columns of $M$ ) and the set $E_{12}$ is given by $\{x: \operatorname{det} A(x) \neq 0\}$. Since $\left|D^{s} u\right|\left(E_{12}\right)>0$ and $|A(x)|>0$ for every $x \in E_{12}$, we then conclude

$$
\mu^{s}\left(E_{12}\right)=\int_{E_{12}}|A| d\left|D^{s} u\right|
$$

Thanks to Stephan Heule for pointing out the mistake.

