$$= \frac{n!\,(-1)^{i-1} g\ \bar\partial\rho_1\wedge\cdots\wedge\widehat{\bar\partial\rho_i}\wedge\cdots\wedge\bar\partial\rho_n\wedge dz_1\wedge\cdots\wedge dz_n}{f_1\cdots f_n}.$$

※ I didn't understand the following until now.

$\rho_1\omega \in A^{n,0}(U_{\{1\}^c}) = A^{n,0}(U-(D_2+\cdots+D_n)) = A^{n,0}((U-D_2)\cap\cdots\cap(U-D_n))$. Similarly, $\rho_i\omega\in A^{n,0}(U_{\{i\}^c})$.

$\Rightarrow$ $(\epsilon_i\rho_i\omega)\in C^{n-2}(\underline{U}, \mathcal{A}^{n,0})$, and furthermore

$\delta(\epsilon_i\rho_i\omega) = \epsilon_1\rho_1\omega - \epsilon_2\rho_2\omega + \cdots + (-1)^{n-1}\epsilon_n\rho_n\omega$

$\Rightarrow$ If $\epsilon_1 = 1$, $\epsilon_2 = -1$, $\cdots$ $\epsilon_n = (-1)^{n-1}$, then $\delta(\epsilon_i\rho_i\omega) = \rho_1\omega_1+\cdots+\rho_n\omega = \omega$. $\Rightarrow$ We can set $\xi_{\{i\}^c} = \epsilon_i\rho_i\omega$.

Recall the following diagram again.

$$\begin{tikzcd}
0 \arrow[r] & C^{n-2}(\underline{U}, Z_{\bar\partial}^{n,0}) \arrow[r] \arrow[d, "\delta"] & C^{n-2}(\underline{U}, \mathcal{A}^{n,0}) \arrow[r, "\bar\partial"] \arrow[d, "\delta"] & C^{n-2}(\underline{U}, Z_{\bar\partial}^{n,1}) \arrow[r] \arrow[d, "\delta"] & 0 \\
0 \arrow[r] & C^{n-1}(\underline{U}, Z_{\bar\partial}^{n,0}) \arrow[r] & C^{n-1}(\underline{U}, \mathcal{A}^{n,0}) \arrow[r] & C^{n-1}(\underline{U}, Z_{\bar\partial}^{n,1}) \arrow[r] & 0
\end{tikzcd}$$

$(\epsilon_i\rho_i\omega) \longmapsto \delta(\bar\partial\epsilon_i\rho_i\omega)$

$\omega \longmapsto \omega$

$\Rightarrow$ $\omega_{\{i\}^c} = \epsilon_i\,\bar\partial\rho_i\omega$, since $\bar\partial\omega = 0$

$$\begin{tikzcd}
0 \arrow[r] & C^{n-3}(\underline{U}, Z_{\bar\partial}^{n,1}) \arrow[r] \arrow[d, "\delta"] & C^{n-3}(\underline{U}, \mathcal{A}^{n,1}) \arrow[r] \arrow[d, "\delta"] & C^{n-3}(\underline{U}, Z_{\bar\partial}^{n,2}) \arrow[r] \arrow[d, "\delta"] & 0 \\
0 \arrow[r] & C^{n-2}(\underline{U}, Z_{\bar\partial}^{n,1}) \arrow[r] & C^{n-2}(\underline{U}, \mathcal{A}^{n,1}) \arrow[r] & C^{n-2}(\underline{U}, Z_{\bar\partial}^{n,2}) \arrow[r] & 0
\end{tikzcd}$$

$(\bar\partial\epsilon_i\rho_i\omega) = (\omega_{\{i\}^c}) \longmapsto (\omega_{\{i\}^c})$

Again $\rho_j\,\omega_{\{i\}^c} = \epsilon_i\rho_j\,\bar\partial\rho_i\omega \in A^{n,1}(U_{\{i,j\}^c}) = A^{n,1}(U-(D_1+\cdots+\hat{D}_i+\cdots+\hat{D}_j+\cdots+D_n)) = A^{n,1}((U-D_1)\cap\cdots\widehat{(U-D_i)}\cap\cdots\widehat{(U-D_j)}\cap\cdots(U-D_n))$

According to P42,

$\xi_{\{i,j\}^c} = \xi_{u_1\cap\cdots\cap\hat{u}_i\cap\cdots\cap\hat{u}_j\cap\cdots\cap u_n}$ $\quad i<j$

$\simeq \sum \rho_k\,\omega_{u_k\cap u_1\cap\cdots\cap\hat{u}_i\cap\cdots\cap\hat{u}_j\cap\cdots\cap u_n}$

$= \rho_i\,\omega_{u_i\cap u_1\cap\cdots\cap\hat{u}_i\cap\cdots\cap\hat{u}_j\cap\cdots\cap u_n} + \rho_j\,\omega_{u_j\cap u_1\cap\cdots\cap\hat{u}_i\cap\cdots\cap\hat{u}_j\cap\cdots\cap u_n}$