3°⇒4°. Suppose $\alpha \in \operatorname{atoms}^{\mathfrak{Z}} \operatorname{Cor}\Omega$. Then $\exists X \in \operatorname{up}\Omega : \alpha \not\sqsubseteq X$. Therefore $\alpha \notin \operatorname{atoms}^{\mathfrak{Z}} \operatorname{Cor}\Omega$. So $\operatorname{atoms}^{\mathfrak{Z}} \operatorname{Cor}\Omega_{1a} = \emptyset$ and thus by atomicity $\operatorname{Cor}\Omega_{1a} = \bot^{\mathfrak{Z}}$.

□

COROLLARY 1437. $\operatorname{Cor}\Omega^{\mathsf{FCD}} = \bot$.

PROPOSITION 1438. The following is an implications tuple:

1°. $(\mathfrak{A}, \mathfrak{Z})$ is a powerset filtrator.
2°. $(\mathfrak{A}, \mathfrak{Z})$ is a primary filtrator over an atomic meet-semilattice with greatest element such that $\forall \alpha \in \operatorname{atoms}^{\mathfrak{Z}} \exists X \in \operatorname{coatoms}^{\mathfrak{Z}} : a \not\sqsubseteq X$.
3°. $\mathfrak{A}$ is a complete lattice, $\forall \alpha \in \operatorname{atoms}^{\mathfrak{Z}} \exists X \in \operatorname{coatoms}^{\mathfrak{Z}} : a \not\sqsubseteq X$ and $(\mathfrak{A}; \mathfrak{Z})$ is a filtered filtrator over an atomic poset.
4°. $\Omega_{1a} = \max\left\{ \frac{\mathcal{X} \in \mathfrak{A}}{\operatorname{Cor}\mathcal{X} = \bot^{\mathfrak{Z}}} \right\}$

PROOF.

1°⇒2°. Obvious.
2°⇒3°. Obvious.
3°⇒4°. Due the last proposition, it is enough to show that $\operatorname{Cor}\mathcal{X} = \bot^{\mathfrak{Z}} \Rightarrow \mathcal{X} \sqsubseteq \Omega_{1a}$ for every $\mathcal{X} \in \mathfrak{A}$.

Let $\operatorname{Cor}\mathcal{X} = \bot^{\mathfrak{Z}}$ for some $\mathcal{X} \in \mathfrak{A}$. Because of our filtrator being filtered, it's enough to show $X \in \operatorname{up}\mathcal{X}$ for every $X \in \operatorname{up}\Omega_{1a}$. $X = a_0 \sqcap \ldots \sqcap a_n$ for a_i being coatoms of $\mathfrak{Z}$. $a_i \sqsupseteq \mathcal{X}$ because otherwise $a_i \not\sqsupseteq \operatorname{Cor}\mathcal{X}$. So $X \in \operatorname{up}\mathcal{X}$.

□

PROPOSITION 1439. The following is an implications tuple:

1°. $(\mathfrak{A}, \mathfrak{Z})$ is a powerset filtrator.
2°. $(\mathfrak{A}, \mathfrak{Z})$ is a primary filtrator over a meet-semilattice.
3°. $\operatorname{up}\Omega_{1a} = \left\{ \frac{\bigsqcap S}{S \in \mathscr{P}_{\text{fin}} \operatorname{coatoms}^{\mathfrak{Z}}} \right\}$

PROOF.

1°⇒2°. Obvious.
2°⇒3°. Because $\left\{ \frac{\bigsqcap S}{S \in \mathscr{P}_{\text{fin}} \operatorname{coatoms}^{\mathfrak{Z}}} \right\}$ is a filter.

□

COROLLARY 1440. $\operatorname{up}\Omega^{\mathsf{FCD}} = \operatorname{up}\Omega^{\mathsf{RLD}}$.

DEFINITION 1441. $\Omega_{1c} = \bigsqcup(\operatorname{atoms}^{\mathfrak{A}} \setminus \mathfrak{Z})$.

PROPOSITION 1442. The following is an implications tuple:

1°. $(\mathfrak{A}; \mathfrak{Z})$ is a powerset filtrator.
2°. $(\mathfrak{A}; \mathfrak{Z})$ is a down-aligned filtered complete lattice filtrator over an atomistic poset and $\forall \alpha \in \operatorname{atoms}^{\mathfrak{Z}} \exists X \in \operatorname{coatoms}^{\mathfrak{Z}} : a \not\sqsubseteq X$.
3°. $\Omega_{1c} = \Omega_{1a}$.

PROOF.

1°⇒2°. Obvious.
2°⇒3°. For $x \in \operatorname{atoms}^{\mathfrak{A}} \setminus \mathfrak{Z}$ we have $\operatorname{Cor} x = \bot$ because otherwise $\bot \neq \operatorname{Cor} x \sqsubset x$. Thus by previous $x \sqsubseteq \Omega_{1a}$ and so $\Omega_{1c} = \bigsqcup(\operatorname{atoms}^{\mathfrak{A}} \setminus \mathfrak{Z}) \sqsubseteq \Omega_{1a}$.

If $x \in \operatorname{atoms}\Omega_{1a}$ then $x \notin \mathfrak{Z}$ because otherwise $\operatorname{Cor} x \neq \bot$. So

$$\Omega_{1a} = \bigsqcup \operatorname{atoms}\Omega_{1a} = \bigsqcup(\operatorname{atoms}\Omega_{1a} \setminus \mathfrak{Z}) \sqsubseteq \bigsqcup(\operatorname{atoms}^{\mathfrak{A}} \setminus \mathfrak{Z}) = \Omega_{1c}.$$

□