

Supplementary Material

Open samarocene and ytterbocenes and their adducts with *N*-heterocyclic carbene (NHC) and imidazolin-2-thiones

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Supporting Information

for

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1. ^1H NMR Spectra

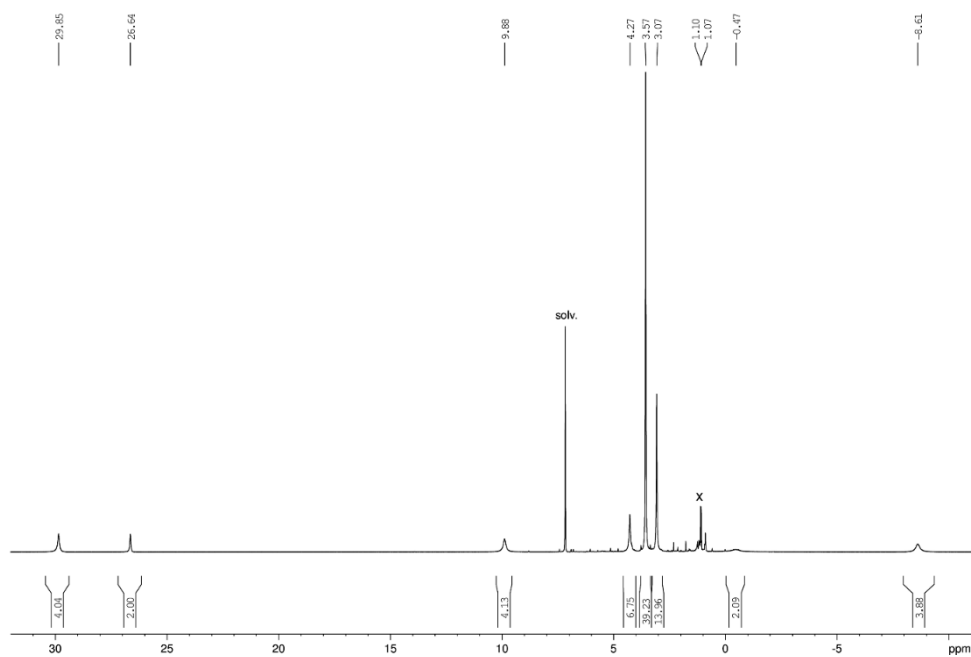


Figure S1. ^1H NMR spectrum for **2-Sm** recorded in C_6D_6 at ambient temperature. Resonances labeled with x indicate small amounts of HpdI' being present.

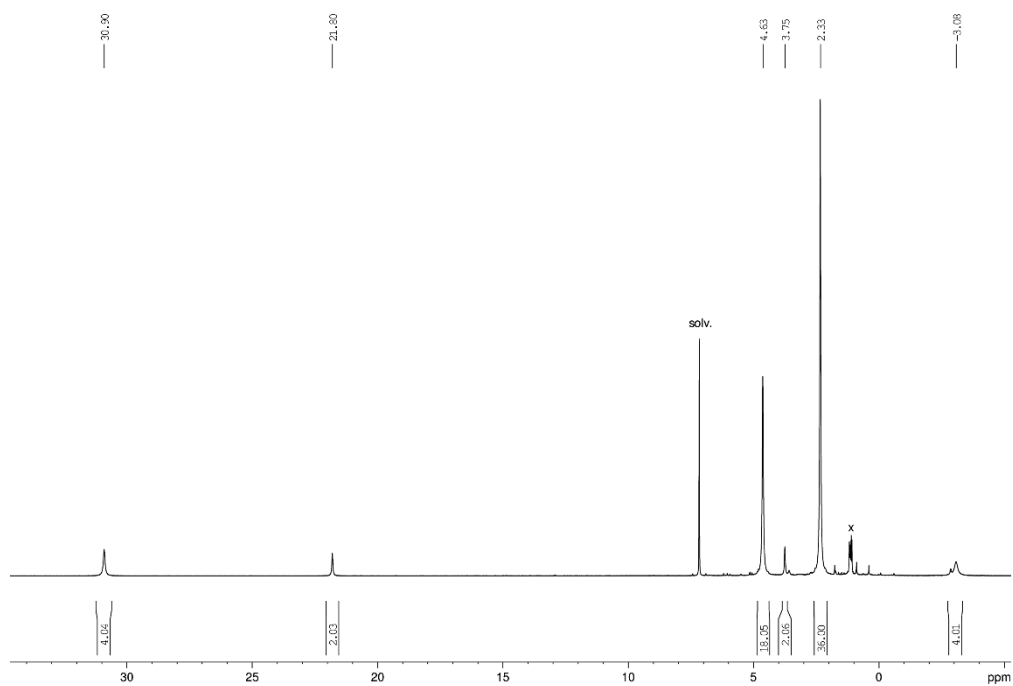


Figure S2. ^1H NMR spectrum for **3-Sm** recorded in C_6D_6 at ambient temperature. Resonances labeled with x indicate small amounts of HpdI' being present.

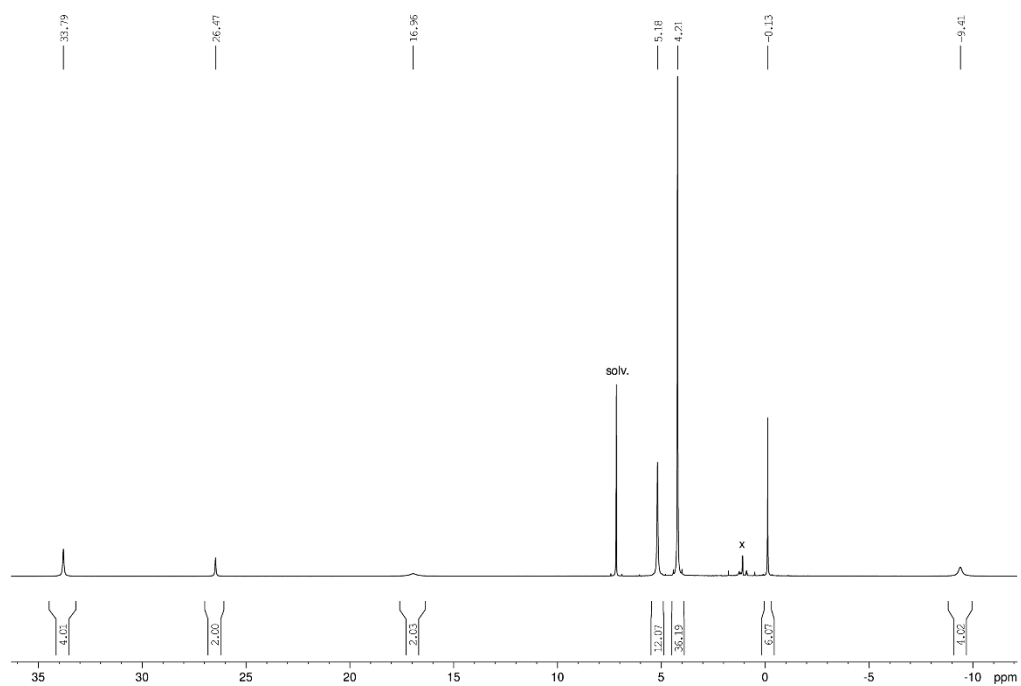


Figure S3. ^1H NMR spectrum for **4-Sm** recorded in C_6D_6 at ambient temperature. Resonances labeled with x indicate small amounts of HpdI' being present.

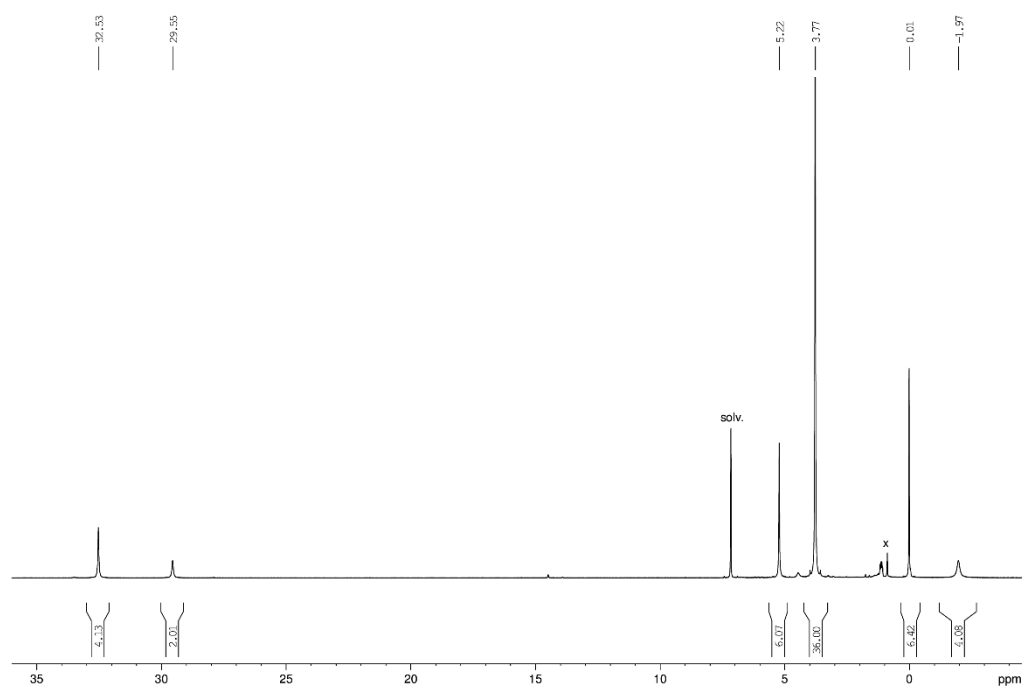


Figure S4. ^1H NMR spectrum for **6-Sm** recorded in C_6D_6 at ambient temperature. Resonances labeled with x indicate small amounts of HpdI' being present.

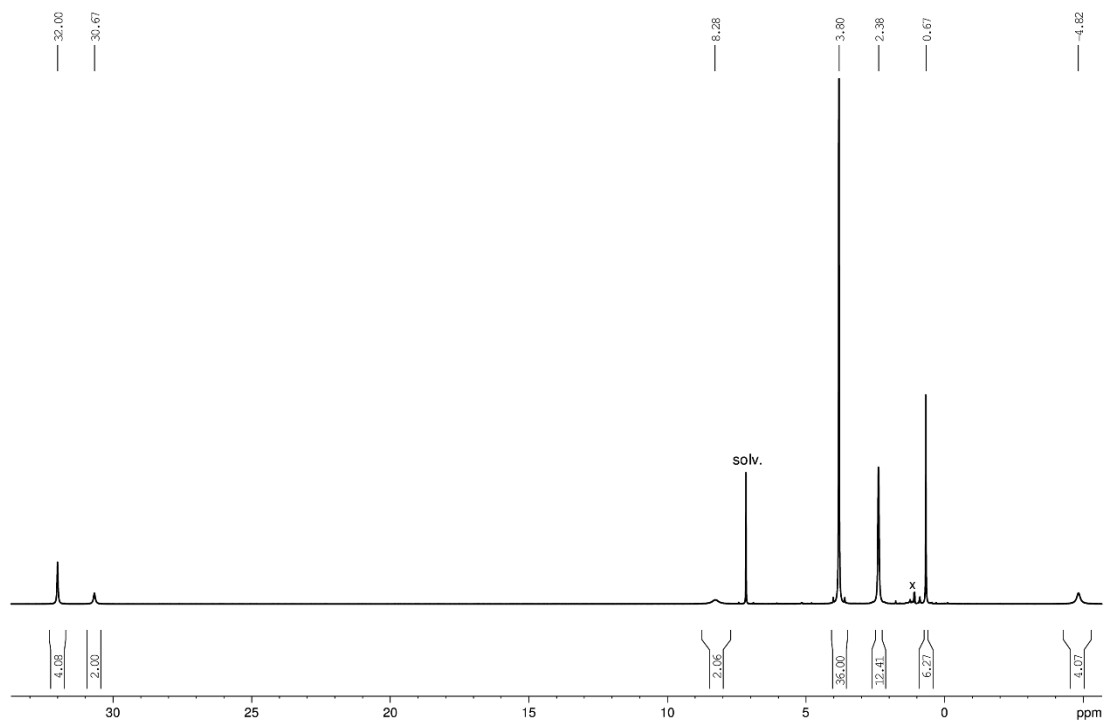


Figure S5. ^1H NMR spectrum for **7-Sm** recorded in C_6D_6 at ambient temperature.

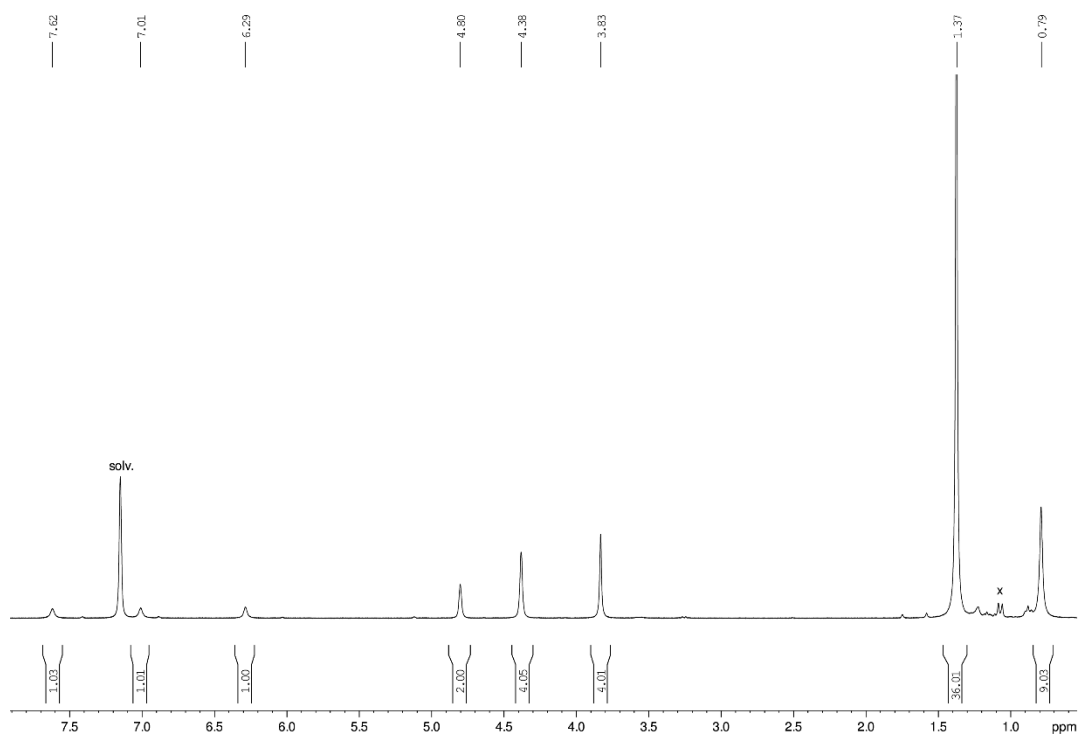


Figure S6. ^1H NMR spectrum for **3'-Yb** recorded in C_6D_6 at ambient temperature. Resonances labeled with x indicate small amounts of HpdI' being present.

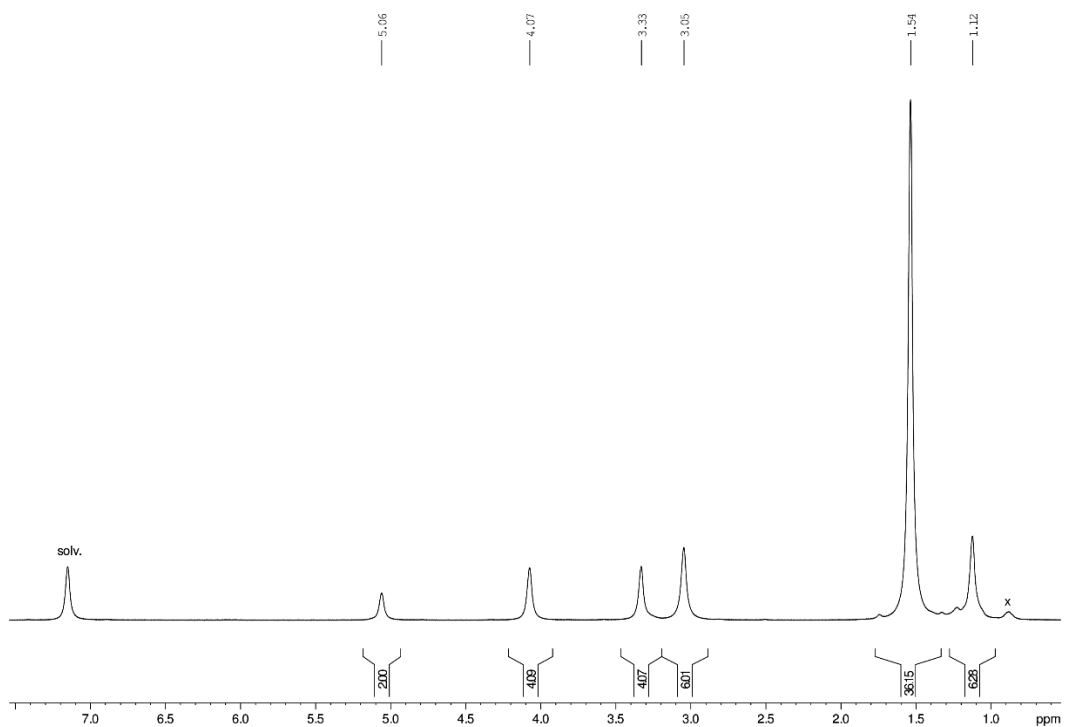


Figure S7. ^1H NMR spectrum for **6-Yb** recorded in C_6D_6 at ambient temperature. Resonances labeled with x indicate small amounts of HpdI' being present.

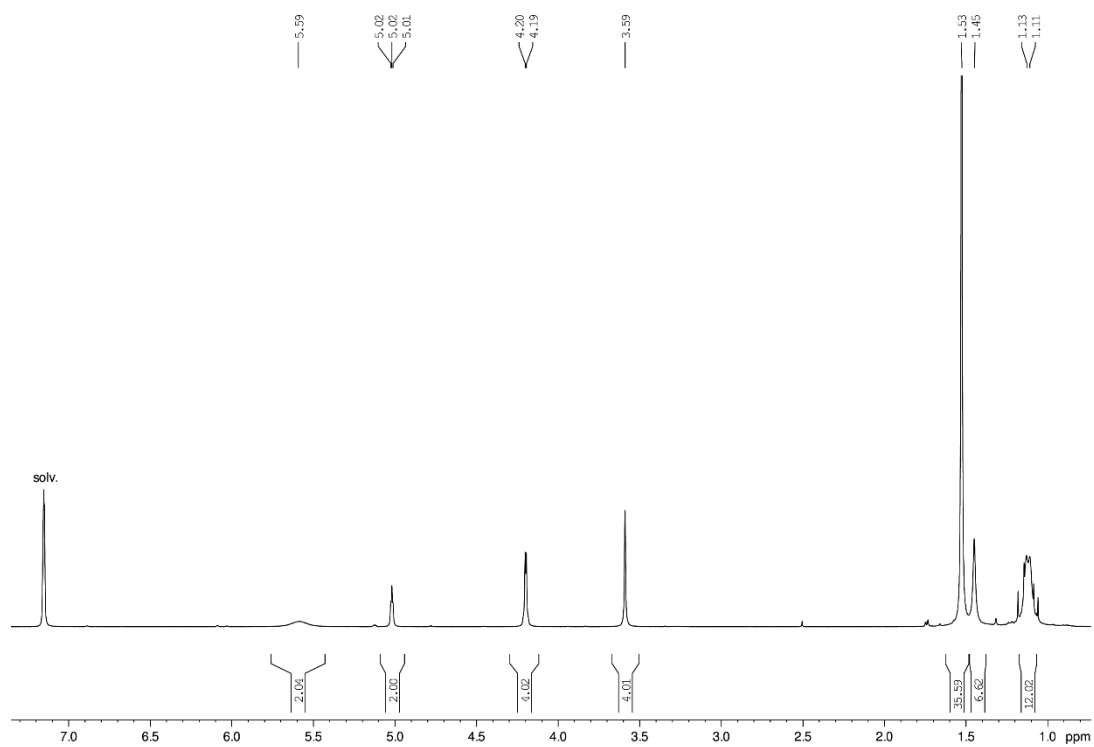


Figure S8. ^1H NMR spectrum for **7-Yb** recorded in C_6D_6 at ambient temperature.

2. Molecular structures

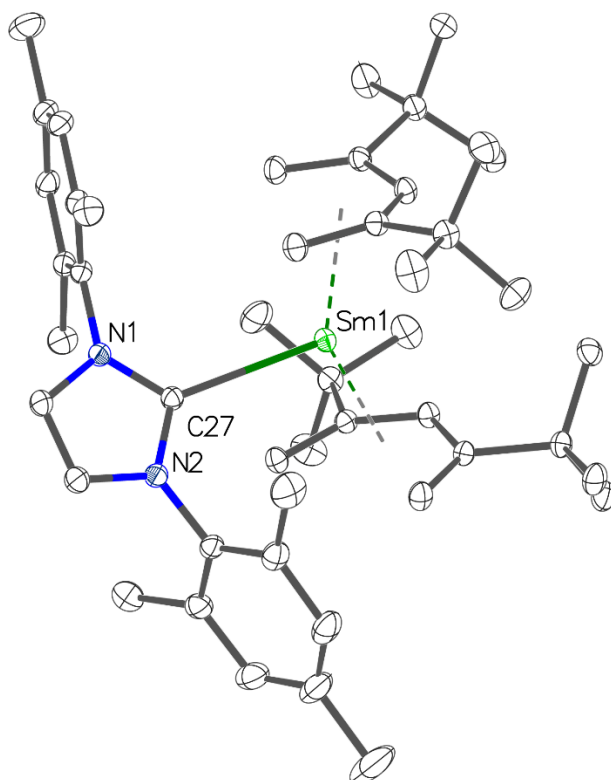


Figure S9. Molecular structure of **2-Sm**. Anisotropic displacement parameters drawn at the 50% probability level. H-Atoms are omitted for clarity.

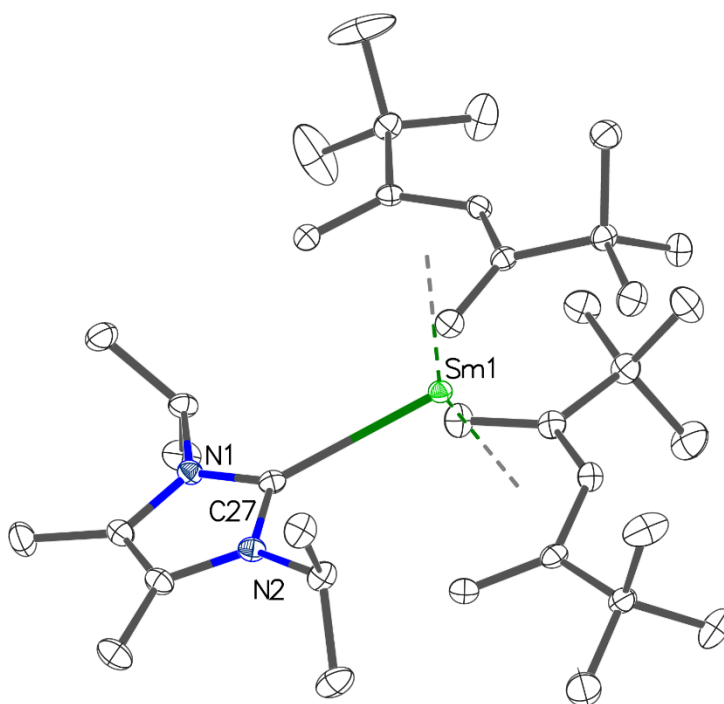


Figure S10. Molecular structure of **4-Sm**. Anisotropic displacement parameters drawn at the 50% probability level. H-Atoms are omitted for clarity.

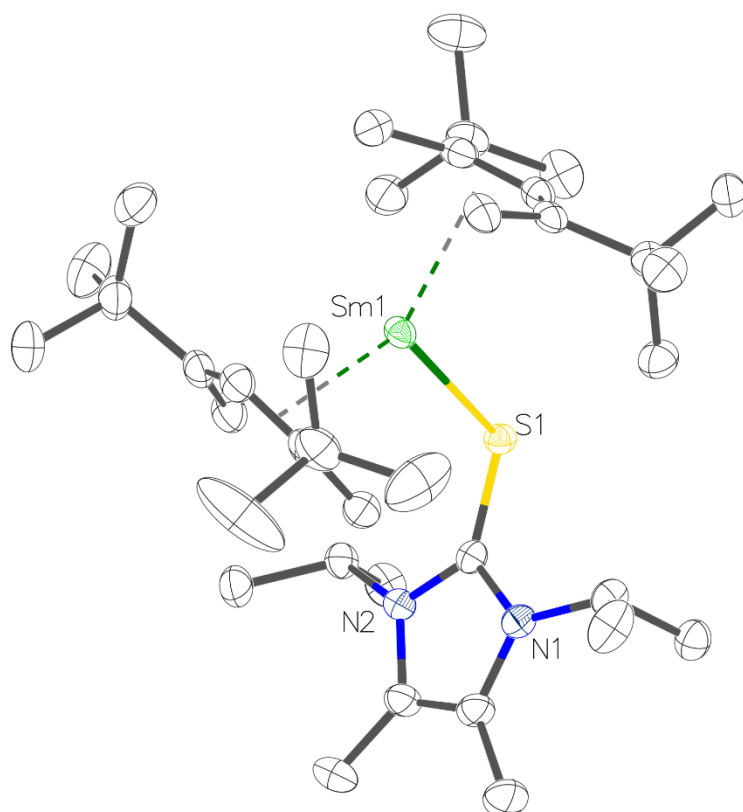


Figure S11. Molecular structure of **7-Sm**. Anisotropic displacement parameters drawn at the 50% probability level. H-Atoms are omitted for clarity.

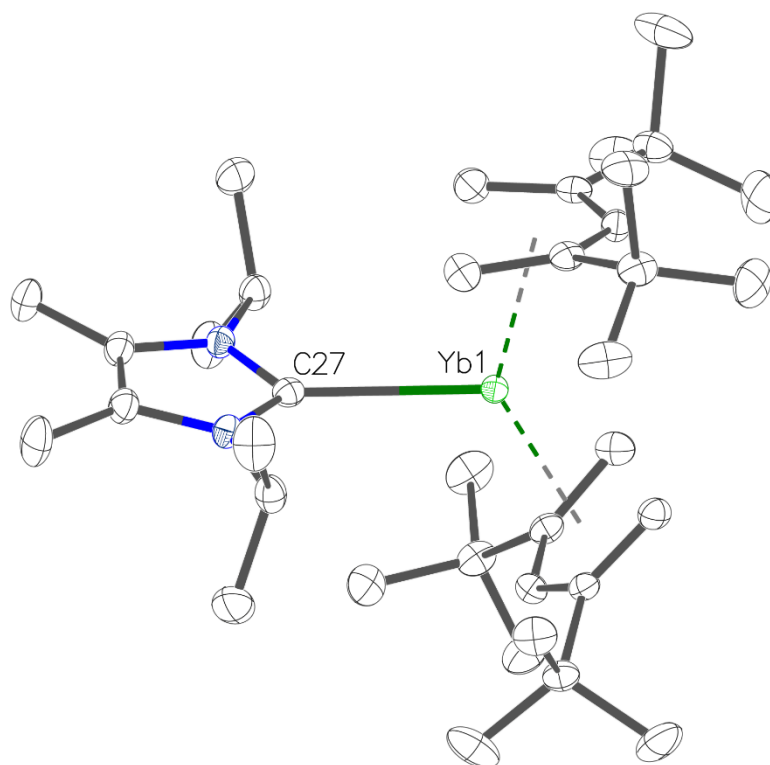


Figure S12. Molecular structure of **4-Yb**. Anisotropic displacement parameters drawn at the 50% probability level. H-Atoms are omitted for clarity.

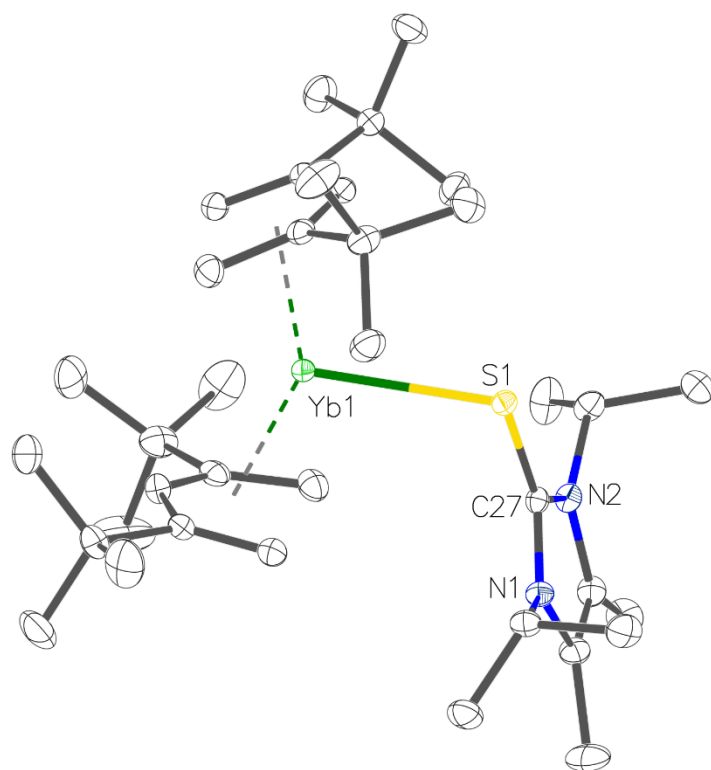


Figure S13. Molecular structure of **7-Yb**. Anisotropic displacement parameters drawn at the 50% probability level. H-Atoms are omitted for clarity.