High-velocity compact clouds (HVCCs) found in the central molecular zone of our Galaxy are a population of molecular clouds, which have compact appearance (δ<10 pc) and large velocity width (ΔV>50 km s⁻¹).

**ANALYSIS**

1. **Pressing method (Sofue 1995)**
   - Original data → \( F_1 \)
   - Smoothing \( F_1 \) only in the \( V_{LSR} \) direction → \( F_2 \)
   - Subtracting \( F_2 \) from \( F_1 \) → \( F_3 \)
   - Smoothing \( F_3 \) only in the Galactic Longitude direction → \( F_4 \)
   - Subtracting \( F_4 \) from \( F_2 \) → \( F_5 \)
   - Smoothing \( F_5 \) only in the \( V_{LSR} \) direction → \( F_6 \)

   Disk gas clouds have been removed?
   - **YES** → End, Results: \( F_5 \)
   - **NO** → Repeat step 2

2. **Unsharp mask**
   - Smoothing \( F_5 \) which is the result of Pressing method in the \( V_{LSR} \) direction → \( F_6 \)
   - Smoothing \( F_6 \) in the Galactic Longitude and Latitude → \( F_7 \)
   - Subtracting \( F_7 \) from \( F_5 \) → \( F_8 \)
   - \( F_8 \) is the result of Unsharp mask

   Compact, broad-velocity-width features became prominent.

3. **Modified CLUMPFIND**
   - We identified HVCCs candidates.
   - Color shows identification numbers.

   **115 HVCC candidates are identified!**

**FUTURE**

With \( ^{12}\text{CO}(J=3-2) \), \( ^{18}\text{O}(J=1-0) \) and \( ^{13}\text{CO}(J=1-0) \), we are going to make a complete HVCC list and perform statistical analysis!