Codebook for the Military Activity Events Dataset

This codebook provides detail regarding each of the variables coded in the Arctic Military Activity Events Dataset. A lengthier document that provides additional details regarding the data collection methods and data production procedures is available upon request from the author.

Missing Data

Because not every variable is relevant to a particular event, there are two types of missing data codes used: 1) a variable is coded as NA for an event if it is not applicable to that event (for example, if an event did not include a military exercise, the variable representing how many other states were involved in the military exercise is coded as "NA"); and 2) a variable is coded with a "." if the data could not be found (i.e., it is truly missing). For example, if we know that an event involved ships, but the article gives no indication of how many ships were involved, the number of ships would be coded as "." This is in contrast to a coding of "0," which would indicate that there were no ships involved.

Standard Values

The following values are standard throughout the dataset:

- For binary variables, yes or true is coded as 1 and no or false is coded as 0.
- Dates are coded using the following format: DD-MMM-YY. For example, October 18, 2007, would be coded as 18-Oct-07.

eventid:
The ID number of the event.

countryname:
Name of country taking action.

ccode:
COW Code for the state taking action.

start_date:
This dummy variable indicates whether the end date of the event is an approximation.
1=if date was approximated.
0=if date was not approximated.

sd_approx:
If the start date of the event is approximate, the "approximate" dummy variable is coded as true. Approximate dates should be coded using the standards in Table 1 below:

Table 1 Date Approximations

Timeframe given by source	**Approximate Date**
Only a year (e.g., In 2007…)	January 1 of that year

Spring	May 1
Summer	August 1
Fall/Autumn	November 1
Winter	February 1
Only a month	The 15th of that month
A certain week (e.g., Last week...)	The Wednesday of that week
Earlier this year	January 1 of that year
Several months ago	The date exactly three months prior to the publication of the article
A certain number of months ago (e.g., 2 months ago)	The date exactly the number of months prior to the publication of the article.

Dates are coded using a DAY-MONTH-YEAR format, with the month being the three-letter abbreviation of the month. For example, July 10, 2007, would be coded as 10-Jul-07.

end_date:
The end date of the event. This will often be approximate or missing as the end of such events are rarely reported or recorded publicly. If it is approximated, the "approximate" dummy variable is coded as true. Approximate dates should be coded using the standards in Appendix E. Dates are coded using a DAY-MONTH-YEAR format, with the month being the three-letter abbreviation of the month. For example, July 10, 2007, would be coded as 10-Jul-07.

ed_approx:
This dummy variable indicates whether the end date of the event is an approximation.
1=date is approximated.
0=date is not approximated.

duration:
The duration of the event in number of days. If either the start date or the end date is missing, but an exact or approximated value of one is given and an approximate or exact duration of the event is given, the date that is not given by the article is approximated using the duration of the event. For example, if an article reports an Arctic patrol that began on 6-Jun-07 that lasted for approximately 3 weeks, the end date of the event would be coded as 27-Jun-07 with the *end date approximate* variable being used as the end of the event.

beybord:
This dummy variable indicates whether the military activity event occurred beyond the state's borders.
1=event occurred beyond state's borders.
2=event did not occur beyond state's borders.

withdraw:
This dummy variable indicates whether the event involved withdrawing forces from the Arctic.
1=event involved withdrawal of forces from the Arctic.
0=event did not involve withdrawal of forces from the Arctic.

If a state withdraws forces from the Arctic by either deploying them outside the Arctic region or recalling them from forward-deployed Arctic bases, the event will be coded as a withdrawal of military forces. ***Note that forces returning from an Arctic deployment should not be coded as a withdrawal***. Only the forces that were permanently based in the Arctic region and then withdrawn shall be coded as a withdrawal. If a source reports on forces returning from an Arctic deployment, this should be used to determine the end date of the event.

military:
This dummy variable indicates whether the event involved a deployment of military force.
1=event involved the deployment of military force.
0=event did not involve the deployment of military force.

coastguard:
This dummy variable indicates whether the deployment involved coast guard forces.
1=event involved the deployment of coast guard forces.
0=event did not involve the deployment of coast guard forces.

otherforce:
This dummy variable indicates whether the deployment involved armed forces that are not a part of the state's military or coast guard.

1=involved armed forces that are not a part of the state's military or coast guard.
0=did not involve armed forces that are not a part of the state's military or coast guard.

otherloc:
This dummy variable indicates whether the destination of a deployment was to a location other than the Arctic. This would include deployments that passed through the Arctic to some other location.

1=if the destination of a deployment was to a location other than the Arctic.
0=if the destination of a deployment was to the Arctic.

borders:
This dummy variable indicates whether the event involved forces being deployed to a location just outside of the territorial land borders of another state. The territorial land borders are distinct from a state's airspace. If forces were deployed to another state's airspace, it is coded as "To Another State's Airspace," but not as "To Another State's Borders" in a separate variable described below. This is distinct from a border violation because the forces never cross the other state's borders, but generally remains just outside.
1=if the event involved forces being deployed to another state's borders.
0=if the event did not involve forces being deployed to another state's borders.

bord_state:
This variable records the name of state to the borders of which forces were deployed.

bord_disp:
This dummy variable indicates whether the state to which forces were deployed is a state with which the deploying state has an Arctic EEZ or ECS dispute.

1=if state has an Arctic dispute with the other state.
0=if the state does not have an Arctic dispute with the other state.

airspace:
This dummy variable indicates whether a state's air forces were deployed just outside of another state's airspace. This is separate from a violation of airspace because the forces never cross into the other state's airspace.

1=if the state deployed aircraft to the airspace of another state.
0=if the state did not deploy aircraft to the airspace of another state.

air_disp:
This dummy variable indicates whether the state deployed aircraft to the airspace of another state with which it has an EEZ or ECS dispute.

1=if the state deployed aircraft to the airspace of another state with which it has an EEZ or ECS dispute.
0=if the state did not deploy aircraft to the airspace of another state with which it has an EEZ or ECS dispute.

areaclaimed:
This dummy variable includes whether the event involved forces being deployed to an area claimed by the deploying state. Because specific information about the location of a deployment is often unavailable, a few provisions are needed regarding the coding of this variable. If the article only references a vague area (for example, an article may simply state that a military exercise was conducted in the Arctic Ocean), this variable is coded as missing unless the broad area does not contain any areas that the state claims. If the source suggests that the deployment was made to an area and specifies that the area is one that the state claims, this variable is coded as yes (i.e., 1). If the article gives the specific location of the event, but does not make reference to a claim, the location is checked to determine whether the area of the deployment is an area that was claimed by the deploying state at the time of the event. If it was, then the variable is coded as yes (i.e., 1). If not, then the variable is coded as no (i.e., 0).

1= if the event involved forces being deployed to an area claimed by the deploying state.
0=if the event did not involve forces being deployed to an area claimed by the deploying state
"."=missing if there is not enough information to determine whether deployment occurred in a claimed area.

areadisp:
This dummy variable indicates whether the event involved forces being deployed to an area under dispute by the deploying state and one or more other states.

1=if the event involved forces being deployed to an area under dispute by the deploying state and one or more other states.
0=if the event did not involve forces being deployed to an area under dispute by the deploying state.

areaname:
If an event involved deployment of force to an area claimed, this variable records the name of the claimed area.

mapping:
This dummy variable indicates event-involved mapping activities.

airspacevio:
This dummy variable indicates whether the event involved an air space violation.
1=if the event involved an air space violation.
0=if the event did not involve an air space violation.

airvio_state:
This variable records the name of the state that experienced the air space violation.

airvio_disp:
This dummy variable indicates whether the state that experienced the air space violation is a state that the deploying state has an ECS or EEZ dispute with.

1=if the state that experienced the air space violation is a state that the deploying state has an ECS or EEZ dispute with.
0=if the state that experienced the air space violation is not a state that the deploying state has an ECS or EEZ dispute with.

confront:
This dummy variable indicates whether the deploying state engaged in confrontation behavior such as live fire drills, mock bombing runs, or other similar shows of force in close proximity to the military forces, non-military assets, or borders of another state.

1=if the deploying state did engage in confrontation behavior.
0=if the deploying state did not engage in confrontation behavior.

It is possible that these events include confrontational actions from both states involved. For example, if two ships, one from State A and the other from State B, are in close proximity to each other and both begin to conduct live fire drills over the other, both states would have engaged in a confrontational action. In this case, two events are coded. One is coded with State A as being the deploying state and State B being the state that experienced the confrontation, while the second event is coded with State B being the deploying state and State A being the state that experienced the confrontation. This is done to avoid the necessity of determining the initiator or the aggressor of a confrontation, which allows us to simply code behaviors rather than intentions.

confront_state:
This variable records the name of the state that experienced the confrontation from the deploying state.

confront_disp:
This dummy variable indicates whether the state that experienced the confrontation is a state with which the deploying state has an Arctic ECS or EEZ dispute.

1=the state that experienced the confrontation has an Arctic ECS or EEZ dispute with the deploying state.
0=the states that experienced the confrontation does not have an Arctic ECS or EEZ dispute with the deploying state.

milexercise:
This dummy variable indicates whether the event involved the deploying state conducting military exercises. We code an event as including a military exercise if the article reporting the event calls it an exercise or war game.

1=if the event involved the deploying state conducting military exercises.
0=if the event did not involve the deploying state conducting military exercises.

milexer_otherstate:
This summary variable indicates whether the military exercise was conducted with one or more other states.

1=if the military exercise was conducted with one or more other states.
0=if the military exercise was not conduced with one or more other states.

milexer_states:
This variable lists the names of other state that participated in the military exercise.

livefire:
This dummy variable indicated whether the event involved the deploying state engaging in live fire drills. These may or may not be a component of a military exercise. Live fire drills do not have to be directed toward another state or geopolitical actor to be coded. It is included in the notes of each event what kinds of weapons were fired, but currently no separate indicators will be coded for the types of weaponry used during live fire drills. We only code this indicator as a one if the article specifically mentions live fire drills. Otherwise, it is coded as a zero.

1=if the deploying state engaged in live fire drills.
0=if the deploying state did not engage in live fire drills.

numaircraft:
The number of aircraft involved in the event. If an article gives no indication that aircraft were involved in the event, this is coded as zero.

numships:
The total number of ships involved in the event. If icebreakers or ice-hardened warships were involved in the event, they are included in this total number of ships as well. For example, if an event involved four ships, one of which was an icebreaker and one of which was an ice-hardened warship, the number of ships would be coded as four, the number of icebreakers would be coded as one, and the number of ice-hardened warships would be coded as one. If an article gives no indication that ships were involved in the event, this is coded as zero.

numtroops:
The number of troops involved in the event. This does not include the crews of ships or planes, as we consider them to be a 'component' of the platform itself. The number of troops often lacks specificity in reporting. Instead of attempting to code the exact number of troops, the indicator is coded as an approximation in one of the following five categories:

0: 0
1: [1, 25)
2: [25, 100)
3: [100, 500)
4: Greater than or equal to 500

Coding the number of troops this way follows the convention used in the Social Conflict in Africa Database (Salehyan et al. 2012). If an article gives no indication that troops were involved in an event, this is coded as zero.

numicbr:
The number of icebreakers involved in the event. This number should be included in the Number of Ships variable. If an article gives no indication that icebreakers were involved in an event, this is coded as zero.

numicewar:
The number of ice-hardened warships involved in the event. This number should be included in the Number of Ships variable. If an article gives no indication that ice-hardened warships were involved in an event, this is coded as zero.

numsubs:
The number of submarines involved in the event. This number should be included in the Number of Ships variable. If an article gives no indication that submarines were involved in an event, this is coded as zero.

bordervio:
This dummy variable indicates whether the deploying state violated the territorial borders of another state.

1=the deploying state did violate the territorial borders of another state.
0=the deploying state did not violate the territorial borders of another state.

We adopt the same definition of border violation as the Militarized Interstate Dispute Dataset. A border violation is "a crossing of a territorial land boundary for a period of less than 24 hours by military forces of one state without any significant damage to the territory or population of the violated state" (Little and Gibler, n.d.). As clarified by the MID coding manual, an airspace violation is not a border violation.

bordervio_state:
This variable records the name of the state whose borders were violated.

bordervio_disp
This dummy variable includes whether the state whose borders were violated is a state that the deploying state has an EEZ or ECS dispute with.

1=if the state whose borders were violated has a dispute with the deploying state.
0=if the state whose borders were violated did not have a dispute.

useofforce:
This dummy variable indicated whether the event involved a use of force.
1=the event involved the use of force.
0=the event did not involve the use of force.

We adopt the same definition of use of force as the Militarized Interstate Dispute Dataset. A use of force is any active military operation that has a physical impact on the targeted state (Jones, Bremer, and Singer 1996).

source1tag:
The source tag for the source used to code the event.

research:
This dummy variable indicates whether the deployment was a part of a research mission.
1=if the deployment was a part of a research mission.
0=if the deployment as not a part of a research mission.

intercept:
This dummy variable indicates whether the deploying state intercepted another state's aircraft or ship.

1=if the deploying state intercepted another state's aircraft of ships.
0=if the deploying state did not intercept another state's aircraft of ships.

References

Jones, Daniel M., Stuart A. Bremer, and J. David Singer. 1996. “Militarized Interstate Disputes, 1816-1992: Rationale, Coding Rules, and Empirical Patterns.” *Conflict Management and Peace Science* 15 (2): 163–213.

Little, Erin K, and Douglas M Gibler. n.d. “MID Incident Coding Manual.” http://dmgibler.people.ua.edu/uploads/1/3/8/5/13858910/incident_coding_manual.pdf.

Salehyan, Idean, Cullen S. Hendrix, Jesse Hamner, Christina Case, Christopher Linebarger, Emily Stull, and Jennifer Williams. 2012. “Social Conflict in Africa: A New Database.” *International Interactions* 38 (4): 503–11. https://doi.org/10.1080/03050629.2012.697426.